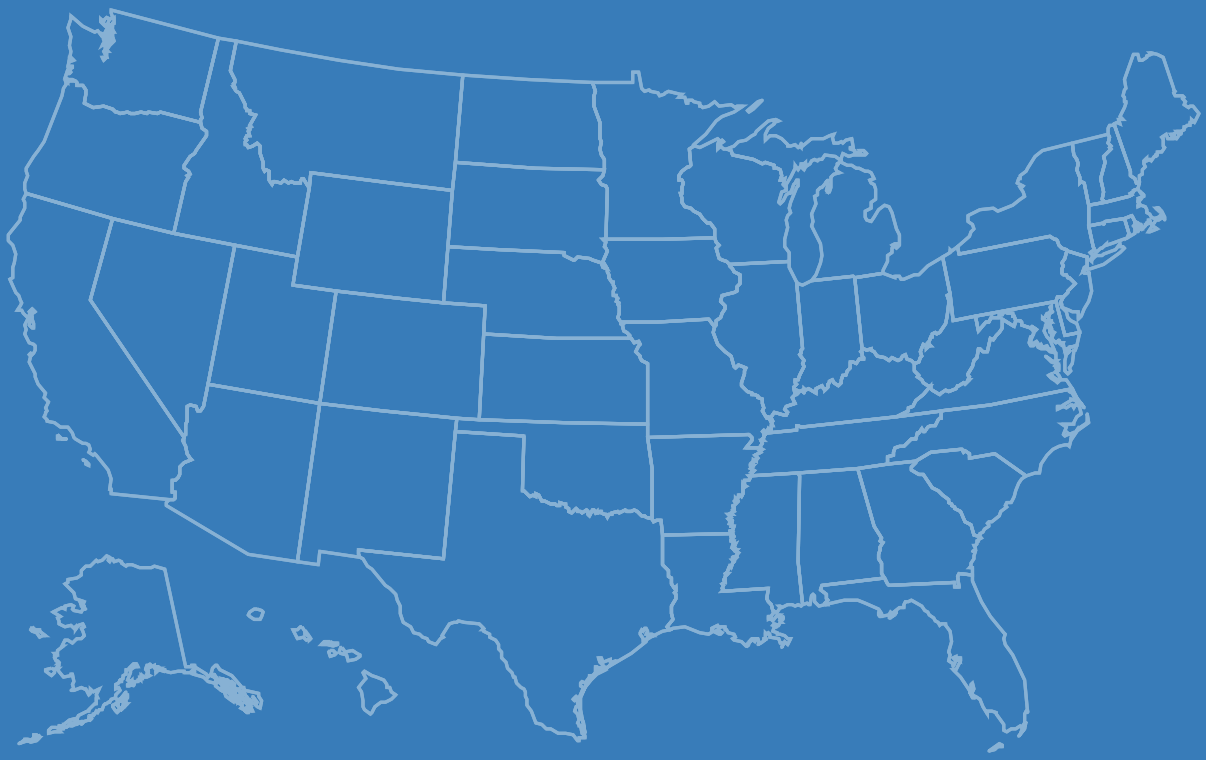
MAX

CENTERS FOR MEDICARE & MEDICAID SERVICES

The Medicaid Analytic eXtract 2012 Chartbook



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Medicaid Analytic eXtract 2012 Chartbook

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Mathematica Policy Research

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1. Introduction

The Medicaid Analytic eXtract (MAX) is a set of annual, person-level data files of Medicaid eligibility, service utilization, and payments that has historically been derived from states' reporting in the Medicaid Statistical Information System (MSIS).[1] MAX was developed and is produced by the Centers for Medicare & Medicaid Services (CMS). This chartbook is based primarily on 2012 MAX data and presents an overview of beneficiary demographic and enrollment characteristics, service utilization, and expenditures at the national and state levels in 2012. This chartbook builds on its predecessors, which used MAX 2002, 2004, 2008, and 2010 data (Wenzlow et al. 2007; Perez et al. 2008; Borck et al. 2012, 2014).

This introduction provides an overview of the Medicaid program and the MAX data. The remaining chapters present figures and tables that characterize the Medicaid population in 2012: Chapters 2 and 3 provide a national profile of Medicaid beneficiaries and total Medicaid expenditures; Chapters 4 through 7 supply detailed information on key Medicaid topics, including service use and expenditure information for services provided on a fee-for-service basis (FFS) by detailed service type (Chapter 4), managed care (Chapter 5), dual Medicare and Medicaid beneficiaries (Chapter 6), and waiver enrollment and utilization (Chapter 7). A separate appendix contains tables that provide more detailed, state-level information for the statistics presented in Chapters 2 through 7.

The Medicaid Program in 2012

Medicaid is a means-tested entitlement program that provides health care coverage to many of the most vulnerable populations in the United States, including low-income children and their parents, and low-income individuals age 65 and older or who qualify based on a disability. The program was enacted in 1965 by Title XIX of the Social Security Act. Medicaid has grown to become the third-largest source of health care spending in the United States, after Medicare and employer-provided health insurance. In MAX, states reported expenditures of about $364 billion on Medicaid services for beneficiaries in 2012. Since the 1990s, Medicaid has served more people annually than Medicare. In 2012, Medicaid covered more than 77 million people—about 25 percent of the U.S. population at some point during the year (United States Census Bureau 2012)—and accounted for about 15 percent of total U.S. health expenditures. Medicaid is also the largest insurer in the nation for nursing home care, covering almost one-third of nursing home costs in 2012 (CMS 2018).

[1] In 2013, CMS replaced MSIS with the Transformed Medicaid Information System (T-MSIS). The first state made the transition from MSIS to T-MSIS with its 2011 data. As a result, starting with 2011 data, MAX incorporates T-MSIS data for those states that had made the transition from MSIS to T-MSIS. They include Colorado (whose T-MSIS data are incorporated into MAX 2011 and 2012), and Kansas and Rhode Island (whose T-MSIS data are incorporated into MAX 2012).

States administer Medicaid under guidelines established by the federal government; the program is financed jointly by federal and state funds. The federal government financed 58 percent of Medicaid expenditures in federal fiscal year (FFY) 2012 (Truffer et al. 2013), reimbursing states between 50 and 74 percent for services used by Medicaid beneficiaries, and at an even higher rate for children enrolled in the Children's Health Insurance Program (CHIP). The federal match rate for Medicaid expenditures, called the Federal Medical Assistance Percentage (FMAP), differs in each state and is calculated based on the average per capita income in a given state in relation to the national average. In FFY 2012, the FMAP ranged from 50 percent in 14 higher-income states to at least 70 percent in 8 lower-income states (Table 1.1).

In 2012, to receive federal matching funds, a state's Medicaid program had to cover basic health services for all individuals in the following mandatory Medicaid eligibility groups:

- *Low-income children:* Children under age 6 with family income at or below 133 percent of the federal poverty level (FPL) and who satisfy certain asset requirements are eligible for Medicaid. Children between ages 6 and 19 in families at or below 100 percent of the FPL (and satisfying similar asset requirements) are also eligible.
- *Low-income pregnant women:* Pregnant women with family income at or below 133 percent of the FPL who satisfy certain asset requirements remain eligible from the time they become pregnant through the month of the 60th day after delivery, regardless of any change in family income.
- *Infants born to Medicaid-eligible pregnant women:* All infants under age 1 are eligible if their mother resides in the same household and was eligible for Medicaid at the time of birth.
- *Limited-income families with dependent children:* As described in Section 1931 of the Social Security Act, individuals who meet the state's Aid to Families with Dependent Children requirements, effective on July 16, 1996, are eligible for Medicaid.[2]
- *Supplemental Security Income (SSI) recipients:* With the exception of some individuals living in 11 so-called Section 209(b) states, everyone receiving SSI is eligible for Medicaid.[3]
- *Low-income Medicare beneficiaries:* Most low-income Medicare beneficiaries are eligible for Medicaid. Those with income below 100 percent of the FPL and assets below 200 percent of SSI asset limits are known as Qualified Medicare Beneficiaries (QMBs) and receive Medicare premiums and cost-sharing payments. Medicare beneficiaries with income between 100 percent and 120 percent of the FPL are known as Specified Low-Income Medicare Beneficiaries (SLMBs), and those with income between 120 percent and 135 percent are known as Qualifying Individuals 1 (QI1s). SLMBs and QI1s qualify for assistance with Medicare premiums but not cost-sharing payments. (Many states also choose to extend full Medicaid benefits to QMBs and some SLMBs.)

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[2] Medicaid has historically been linked to welfare receipt. Although the tie between welfare and Medicaid for children and their parents was severed in 1996 by the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA), some of the mandatory eligibility groups still reflect this history. Although PRWORA replaced Aid to Families with Dependent Children (AFDC) with Temporary Assistance to Needy Families (TANF), 1996 AFDC rules are still used to determine eligibility for Medicaid. Section 1931 refers to the section of the Social Security Act that specifies AFDC-related eligibility after welfare reform. States have some flexibility in changing income and asset limits for Section 1931 coverage.

[3] Section 209(b) of the Social Security Amendments of 1972 permits states to use more restrictive eligibility requirements than those of the SSI program. These requirements cannot be more restrictive than those in place in the state's Medicaid plan as of January 1, 1972. In 2012 there were 11 Section 209(b) states: Connecticut, Hawaii, Illinois, Indiana, Minnesota, Missouri, North Dakota, New Hampshire, Ohio, Oklahoma, and Virginia.

Table 1.1
State Medicaid Program Characteristics in 2012

State	FY 2012 FMAP[a]	CHIP: Medicaid Expansion CHIP[b]	CHIP: Separate CHIP[b]	Medicaid Eligibility for SSI Recipients: Automatic Eligibility[c]	SSI Criteria[c]	Section 209(b)[c]	Medically Needy Eligibility[d]	Full Benefit Poverty-Related Expansion for Aged and Disabled (FPL %)[e]	Special Income Level for Institutionalized[f]
Alabama	68.62	-	♦	♦	-	-	-	-	♦
Alaska	50.00	♦	-	-	♦	-	-	-	♦
Arizona	67.30	-	♦	♦	-	-	-	100	♦
Arkansas	70.71	♦	-	♦	-	-	♦	80	♦
California	50.00	♦	♦	♦	-	-	♦	100	-
Colorado	50.00	-	♦	♦	-	-	-	-	♦
Connecticut	50.00	-	♦	-	-	♦	♦	-	♦
Delaware	54.17	♦	♦	♦	-	-	-	-	♦
District of Columbia	70.00	♦	-	♦	-	-	♦	100	-
Florida	56.04	♦	♦	♦	-	-	♦	88	♦
Georgia	66.16	-	♦	♦	-	-	♦	-	♦
Hawaii	50.48	♦	-	-	-	♦	♦	100	-
Idaho	70.23	♦	♦	-	♦	-	-	-	♦
Illinois	50.00	♦	♦	-	-	♦	♦	100	-
Indiana	66.96	♦	♦	-	-	♦	-	-	-
Iowa	60.71	♦	♦	♦	-	-	♦	-	♦
Kansas	56.91	-	♦	-	♦	-	♦	-	♦
Kentucky	71.18	♦	♦	♦	-	-	♦	-	♦
Louisiana	61.09	♦	♦	♦	-	-	♦	-	♦
Maine	63.27	♦	-	♦	-	-	♦	100	♦
Maryland	50.00	♦	-	♦	-	-	♦	-	♦
Massachusetts	50.00	♦	♦	♦	-	-	♦	100	♦
Michigan	66.14	♦	♦	♦	-	-	♦	100	♦
Minnesota	50.00	♦	♦	-	-	♦	♦	95	-
Mississippi	74.18	-	♦	♦	-	-	-	-	♦
Missouri	63.45	♦	♦	-	-	♦	-	85	-
Montana	66.11	♦	♦	♦	-	-	♦	-	♦
Nebraska	56.64	♦	-	-	♦	-	♦	100	♦
Nevada	56.20	-	♦	-	♦	-	-	-	♦
New Hampshire	50.00	♦	♦	-	-	♦	♦	-	♦
New Jersey	50.00	♦	♦	♦	-	-	♦	100	♦
New Mexico	69.36	♦	-	♦	-	-	-	-	♦
New York	50.00	♦	♦	♦	-	-	♦	-	-
North Carolina	65.28	♦	♦	♦	-	-	♦	100	-
North Dakota	55.40	♦	♦	-	-	♦	♦	-	-
Ohio	64.15	♦	-	-	-	♦	-	-	-
Oklahoma	63.88	♦	-	-	-	♦	-	100	♦
Oregon	62.91	-	♦	-	♦	-	-	-	♦
Pennsylvania	55.07	-	♦	♦	-	-	♦	100	♦
Rhode Island	52.12	♦	-	♦	-	-	♦	100	♦
South Carolina	70.24	♦	-	♦	-	-	-	100	♦
South Dakota	59.13	♦	♦	♦	-	-	-	-	♦
Tennessee	66.36	♦	♦	♦	-	-	♦	-	♦
Texas	58.22	-	♦	♦	-	-	♦	-	♦
Utah	70.99	-	♦	-	♦	-	♦	100	♦
Vermont	57.58	-	♦	♦	-	-	♦	-	♦
Virginia	50.00	♦	♦	-	-	♦	♦	80	♦
Washington	50.00	-	♦	♦	-	-	♦	-	♦
West Virginia	72.62	-	♦	♦	-	-	♦	-	♦
Wisconsin	60.53	♦	♦	♦	-	-	♦	84	♦
Wyoming	50.00	-	♦	♦	-	-	-	-	♦

Source: Medicaid Analytic Extract Anomalies 2012, unless otherwise noted below.

[a] FY 2012 FMAP in Federal Register Vol. 75, No. 217, 2010 pp. 69082-69084.

[b] All states receive enhanced federal matching funds to extend health care coverage to uninsured low-income children under the Children's Health Insurance Program (CHIP). Some states have also opted to cover adults under their CHIP programs in 2012. States can use CHIP funding to expand Medicaid coverage (M-CHIP), to set up separate CHIP (S-CHIP) programs, or to provide both. S-CHIP children and adults, although sometimes reported in MSIS and MAX, are not Medicaid beneficiaries and are not included in the MAX 2012 chartbook.

[c] States have three options with regard to Medicaid eligibility for SSI recipients. In most states, SSI recipients are automatically enrolled in Medicaid without a separate Medicaid application. In SSI criteria states, SSI recipients are eligible for Medicaid but have to apply separately for the program. Section 209(b) states require a separate Medicaid application for SSI recipients and use more restrictive Medicaid eligibility requirements for SSI recipients than those of the SSI program.

[d] States have the option to implement medically needy programs, which extend Medicaid eligibility to additional qualified individuals who have too much income to qualify under the mandatory or optional categorically needy groups. This option allows these individuals to "spend down" to Medicaid eligibility by incurring medical and/or remedial care expenses to offset their excess income.

[e] States have the option to extend full Medicaid benefits to aged and disabled persons whose income does not exceed the FPL. If a state has implemented an expansion for the aged and disabled, the % FPL used for the expansion is noted. Individuals using this eligibility pathway are reported as Poverty-Related eligibles. Income limits are based on a single adult; limits may be higher for couples.

[f] States have the option to set a special income standard at up to 300 percent of the SSI level ($2,094 per month in 2012) for individuals in nursing facilities and other institutions. Individuals using this eligibility pathway are reported as Other beneficiaries.

- *Other:* Several other specified populations—generally small—are mandatorily eligible for Medicaid benefits, including certain working individuals with disabilities; recipients of adoption assistance and foster care; and special protected groups who can keep Medicaid for a period of time, including families who receive 6 to 12 months of Medicaid coverage following loss of eligibility under Section 1931 due to earnings, among others.[4]

In summary, state Medicaid programs are mandated to cover those who have low incomes and few resources; they include people 65 and older, people with disabilities, children, pregnant women, or adults with dependent children. For these groups, Medicaid must cover all "mandatory services," which include but are not limited to inpatient and outpatient hospital services, physician services, laboratory and X-ray services, family planning services, early and periodic screening for those under age 21, and nursing facility services for those 21 or older.

States have the option to cover certain people who do not meet the income and resource thresholds set by the federal government for mandatory coverage, as follows:

- *Medically needy.* States may provide coverage to "medically needy" individuals—those who have incurred sufficiently high medical costs to bring their net income below a state-determined level.
- *Pregnant women.* States can cover pregnant women at a higher income threshold than that set for mandatory coverage.
- *Children, including Medicaid expansion CHIP children*. States can cover children at a higher income threshold than that set for mandatory coverage. The enactment of the CHIP in 1997 provided enhanced funding for states to expand Medicaid coverage for children up to 250 percent of the FPL (or higher, in some circumstances).[5]
- *Institutionalized aged and disabled.* States can cover the aged and people with disabilities in nursing homes and other institutions at a higher income threshold, up to 300 percent of the SSI standard.
- *Participants in 1115 waiver demonstrations.* States can apply for demonstration waivers enabled under Section 1115 of the Social Security Act to extend Medicaid coverage to groups that would not otherwise be covered, such as low-income adults or higher-income adults who are parents.[6]

See Table 1.1 for key program characteristics of state Medicaid programs in 2012.

In addition, new options allowing early implementation of the Patient Protection and Affordable Care Act of 2010 (ACA) authorized states to extend Medicaid coverage to low-income adults as early as March 2010 through a state plan amendment, an 1115 waiver, or both. Eight states expanded Medicaid coverage for adults between 2010 and 2012 through one or both of these options (Table 1.2).

States may also choose to cover certain services not required by federal mandate, such as dental care or prescription drugs. As a result, the services offered by Medicaid programs vary greatly between states. In 2012, all states elected to cover optional services, such as prescription drugs, home health, and intermediate care facilities for individuals with intellectual or development disabilities, but they varied in

[4] For more detail, see "Medicaid: Eligibility: Mandatory Eligibility Groups" at https://www.medicaid.gov/

[5] States also have the option to establish separate CHIP programs for children.

[6] Section 1115 waivers are also used to waive certain statutory and regulatory Medicaid provisions for research purposes and Medicaid demonstration projects.

coverage of some optional services, such as personal care, private-duty nursing, and diagnostic screening (Kaiser Family Foundation 2018).

Table 1.2
States that adopted early implementation of the Patient Protection and Affordable Care Act of 2010 (ACA)

State	Effective Date	Coverage Authority
California	November 2010	1115 waiver
Colorado	April 2012	1115 waiver
Connecticut	April 2010	State plan amendment (SPA)
District of Columbia	July 2010 and December 2010	SPA and 1115 waiver
Minnesota	March 2010 and August 2011	SPA and 1115 waiver
Missouri	July 2012	1115 waiver
New Jersey	April 2011	1115 waiver
Washington	January 2011	1115 waiver

Source: Kaiser Family Foundation 2012a

State variation in Medicaid coverage, both regarding eligibility groups and the services covered, can result in differences in enrollment rates and expenditures among states. Other factors—including the age distribution, the rate of poverty, the use of managed care, and the rate of Medicaid reimbursement to providers within a state—also contribute to variation among states in enrollment, service use, and costs. These differences should be kept in mind when interpreting the national- and state-level statistics presented in this chartbook.

Readers should note that this chartbook reflects the Medicaid program as it existed in 2012. The MAX 2012 data reflect some enrollment increases resulting from early implementation of the ACA; in most states, however, the Medicaid program as constituted in 2012 still reflects the program as it existed before the full Medicaid expansions authorized by the ACA for 2014.

The Medicaid Analytic Extract

The MAX data system contains extensive information on the characteristics of Medicaid beneficiaries and the services they use during a calendar year. MAX contains individual-level information on age, race, and ethnicity; monthly enrollment status; eligibility group; managed care and waiver enrollment; and use and costs of services during the year. MAX also includes claims-level records that can be used for detailed analysis of patterns of service utilization, diagnoses, and cost of care among Medicaid beneficiaries.

Annual MAX data include eligibility and claims data for all Medicaid beneficiaries in 50 states and the District of Columbia. The data do not include information about Medicaid beneficiaries in Puerto Rico or other U.S. territories. All Medicaid expansion CHIP beneficiaries—those whose coverage is financed through CHIP but are in a program operated through Medicaid—are included in MAX. However, MAX contains only limited information for beneficiaries in separate CHIP programs, which operate separately from Medicaid.[7] Medicaid expansion CHIP beneficiaries, but not separate CHIP beneficiaries, are included (but not separately reported) in the figures and tables in this chartbook.

Historically, MAX data have comprised research extracts of MSIS. MSIS data, which CMS has collected from states since 1999, contain beneficiary eligibility information and Medicaid claims paid in each quarter of the FFY.[8] In 2013, CMS replaced MSIS with the Transformed Medicaid Statistical

[7] Medicaid is funded under Title XIX of the Social Security Act, whereas states' CHIP programs are funded under Title XXI of the Social Security Act.

[8] MSIS replaced the required state Medicaid reporting in Form HCFA-2082. Before 1999, MSIS data submission by states was optional.

Information System (T-MSIS) to expand on the data that state Medicaid agencies report to CMS while improving data quality and timeliness. T-MSIS differs from MSIS in the following ways: (1) data are submitted by states and retained in a relational database format as opposed to a flat fixed-length format, (2) it requires monthly reporting instead of quarterly, (3) it has new and modified data elements, and (4) it increased the number of files from five to eight. The three new files include data on managed care, Medicaid providers, and third-party liability. The first state (Colorado) made the transition from MSIS to T-MSIS starting with its 2011 data. As a result, the MAX 2012 files have been produced with a combination of MSIS and T-MSIS Valids file data—the latter being T-MSIS data converted to MSIS format for easy incorporation into MAX.[9]

The MAX data system was developed to provide calendar-year utilization and expenditure information. MAX serves as a research tool for examining Medicaid enrollment, service utilization, and expenditures by subgroup and over time. Unlike Medicaid expenditure data reported in Form CMS-64, MAX enables the examination of Medicaid utilization and service expenditures at the beneficiary level. In the construction of MAX, claims from MSIS (or T-MSIS Valids) are merged with person-level enrollment information from MSIS (or T-MSIS Valids) to assemble services utilized by each beneficiary during a calendar year.

The MAX data system differs from MSIS and the T-MSIS Valids in a number of ways:

- Although MSIS and T-MSIS Valids claims files contain separate claim records for initial claims, voided claims, and positive or negative adjustments, such records are combined to reflect final service records in MAX.
- Changes in eligibility that are reported retroactively in MSIS and the T-MSIS Valids files are incorporated into MAX.
- Type-of-service information contained in MSIS and the T-MSIS Valids files is remapped in MAX to reflect further type-of-service detail that may be helpful to researchers.[10]
- Eligibility information in MSIS and the T-MSIS Valids is remapped in MAX to correct coding inconsistencies where possible.
- MAX data have been linked to the Medicare Enrollment Database (EDB) to help identify people dually enrolled in Medicare and Medicaid. Some additional Medicare enrollment information from the EDB is included in MAX.
- MAX prescription drug claims have been linked to codes identifying drug therapeutic classes and groups. However, access to these data is limited to researchers covered under a CMS licensing agreement.

The 2012 MAX data system consists of a person summary (PS) file and four claims files for each state and the District of Columbia. The PS file contains summary demographic and enrollment characteristics and summary claim information for each person enrolled in Medicaid in the state during a given year. Four claims files—inpatient (IP), institutional long-term care (LT), prescription drug (RX), and other services (OT)—contain claim-level detail regarding date of service, expenditures for utilized services, associated diagnostic information, and provider and

[9] MAX 2012 incorporates T-MSIS Valids data for those states that had made the transition from MSIS to T-MSIS—Colorado, Kansas, and Rhode Island.

[10] Although T-MSIS itself contains many more detailed type-of-service categories than MSIS, these categories are aggregated back up to the MSIS categories for the T-MSIS Valids files.

procedure type for all individual-level Medicaid paid services during the year.

Limitations of MAX

There are some limitations to the information contained in the MAX files. Because it includes only Medicaid paid services, MAX does not capture service use or expenditures during periods of non-enrollment, services paid by other payers (including Medicare), or services provided at no charge. Also, as MAX consists of beneficiary-level information only, it does not include prescription drug rebates received by Medicaid, Medicaid payments made to disproportionate share hospitals (hospitals that serve a disproportionate share of low-income patients with special needs), payments made through upper payment limit programs, Medicaid payments to CMS for prescription drug coverage for dual eligibles, and payments to states to cover administrative costs.

In addition, service utilization information in MAX may be missing or incomplete for certain groups, specifically (1) beneficiaries enrolled in both Medicaid and Medicare (dual eligibles), and (2) beneficiaries enrolled in Medicaid prepaid or managed care plans (either comprehensive or partial plans).

Because Medicare is the first payer for services used by dual eligibles that are covered by both Medicare and Medicaid, MAX captures such service use only if additional Medicaid payments are made on behalf of the beneficiary for Medicare cost sharing or for shared services, such as home health. (See Chapter 6 on dual eligibles for further detail.)

For beneficiaries enrolled in managed care plans, information in MAX is restricted to enrollment data, premium payments, and some service-specific utilization information. It does not include service-specific expenditure information. Records reflecting utilization of managed care services in MAX are called "encounter" data. For many years of MAX production, encounter data were incomplete in MAX. However, CMS and states have been working to improve this reporting in recent years, and evidence suggests that the usability and availability of encounter data improved between MAX 2010 and 2012 (Ogunwumiju and Byrd 2018). However, given that they are still incomplete in some states in 2012, we present only limited information based on encounter records.

Beneficiaries enrolled in comprehensive managed care plans, such as health maintenance organizations (HMOs), health insuring organizations (HIOs), and Programs of All-Inclusive Care for the Elderly (PACE), typically have few FFS claims and are thus excluded from all tables and figures describing FFS use by type of service. For this reason, FFS statistics from states with extensive comprehensive managed care enrollment should be interpreted with caution.

Finally, as with all large data sets, MAX contains some anomalous and possibly incomplete or incorrect data elements. Users should consult MAX anomaly tables, available on the MAX website (see Resources for MAX below), for information that may explain unusual patterns in each state's data.

Source Data Used in This Chartbook

The source data used for the chartbook are the MAX 2012 and earlier year PS, IP, OT, LT, and RX files. Most of the statistics presented can be found in the summary tables CMS creates to validate the MAX data system each year. The validation tables and variable construction documentation are available on the MAX website. Excel tables with more detailed enrollment, utilization, and expenditure information, by state, are in an appendix to this chartbook.

Resources for MAX

The figures and tables in this chartbook illustrate a small set of analyses possible when using MAX data. More detailed information about Medicaid prescription drug use and expenditures, for example, is available on the CMS website at the following link to the Medicaid Pharmacy Benefit Use and Reimbursement Statistical Compendium: http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MedicaidDataSources-GenInfo/MedicaidPharmacy.html.

At the time of this writing, MAX data were available for calendar years 1999 through 2012. MAX data are protected under the Privacy Act and require a data use agreement with CMS. Documentation for MAX and information about accessing MAX data for research purposes are available at these websites:

- The MAX website is available at http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MedicaidDataSources-GenInfo/MAXGeneralInformation.html.
- The Research Data Assistance Center (ResDAC) (contains information about how to obtain CMS data) is available at http://www.resdac.org/cms-data.
- Information on CMS privacy-protected data is available at http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/Privacy/index.html.

2. Characteristics of Medicaid Beneficiaries

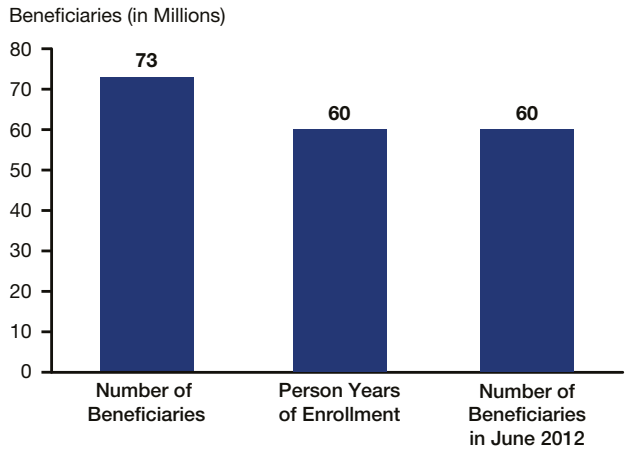
This chapter provides a national profile of Medicaid beneficiaries and their demographic and enrollment characteristics in 2012. The summary measures presented in this chapter reflect eligibility and coverage rules established by states regarding individuals and services covered by the program. National averages can be disproportionately affected by large states and thus can be poor indicators of the characteristics of Medicaid beneficiaries in any individual state. State-to-state differences can be substantial, so some national measures should be interpreted with caution.

State-level variation is driven by multiple factors. The Social Security Act mandates that state Medicaid programs cover both a minimum set of services and a minimum defined population of eligible persons. However, beyond this mandate, states have a great deal of flexibility in determining their Medicaid program's eligibility criteria and benefits (see Chapter 1 for details). Because each state has a distinct Medicaid program, there is significant variation in the composition of Medicaid beneficiaries across states. States also differ in their demographic characteristics and economic status. States with particularly large populations of elderly, individuals with disabilities, and low-income individuals generally have more Medicaid-eligible residents as a share of their total population.

Despite the many factors that affect state Medicaid programs, common federal guidelines and data-reporting systems (MSIS and T-MSIS) make the examination of state-level summary statistics both useful and feasible. The MAX data system, which is derived from MSIS and T-MSIS Valids files, can be used to examine any state's Medicaid population in a national context. (See Chapter 1 for more details about the MSIS and T-MSIS Valids files.)

Although we discuss some of the characteristics that may explain observed differences between states, this examination is by no means comprehensive. The discussions in this chapter are intended only to suggest the complexity of factors that affect states' Medicaid enrollment. When interpreting the statistics presented here, we encourage readers to review the MAX 2012 anomaly tables available on the MAX website. In addition to identifying anomalous data, these tables document unusual aspects of state Medicaid programs that might affect data in MAX in that year.

Figure 2.1
Total Medicaid Enrollment in 2012



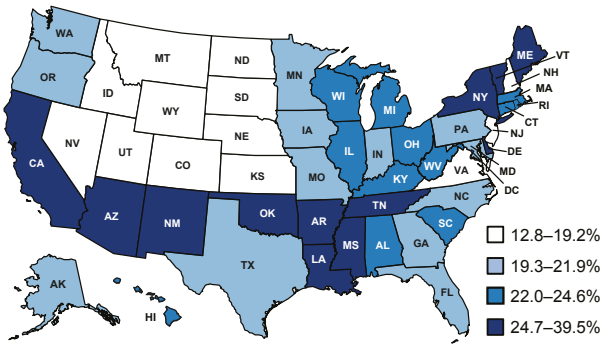
Source: Medicaid Analytic Extract 2012

More than 73 million people—just over 23 percent of the U.S. population—were enrolled in Medicaid at some point in 2012 (Figure 2.1 and Appendix Table A2.1).[11] Because pathways to Medicaid eligibility, such as age, family status, and income, can change over time, Medicaid eligibility can be transitory. About 62 percent of Medicaid beneficiaries in 2012 were enrolled for the entire year, accounting for 60 million person-years of Medicaid enrollment (Table 2.1).[12]

At the state level, Medicaid enrollment in 2012 ranged from fewer than 100,000 beneficiaries in North Dakota and Wyoming to 12.4 million in California (Table 2.1). Beneficiaries in the three most populated states in the United States—California, New York, and Texas—made up about one-third of all Medicaid beneficiaries in 2012.[13]

Medicaid enrollment ranged from less than 13 percent of the population in North Dakota to almost 40 percent in the District of Columbia (Table 2.1). States with the highest percentage of the population in Medicaid often had high rates of poverty. In general, Medicaid enrollment rates were high in southern states with high poverty levels (Figure 2.2).[14] States with more generous state eligibility criteria and large optional programs also have a higher percentage of the population in Medicaid. For example, the District of Columbia, which has the largest percentage of its population in Medicaid, expanded Medicaid coverage to low-income adults in 2010 through a Section 1115 waiver and a state plan amendment (Kaiser Family Foundation 2012a). California, which has the third largest percentage of the state population enrolled in Medicaid, extends restricted benefit family planning coverage to 2.7 million people through its Family Planning, Access, Care, and Treatment Program.

Figure 2.2
Percentage of the Population (in Quartiles) Enrolled in Medicaid in 2012



Sources: Medicaid Analytic Extract 2012; U.S. Census Bureau

Medicaid enrollment increased by about 5 percent from 2010 to 2012, from 22.2 percent of the U.S. population to 23.4 percent. This increase represents a slower rate of growth than the growth experienced between 2008 and 2010, when Medicaid enrollment increased by about 9 percent (Figure 2.3). Because Medicaid is a means-tested program, improved general economic trends, such as the end of the Great Recession, may have contributed to these trends. Overall, the percentage of the population in Medicaid has increased nearly 27 percent over the past 10 years (Appendix Table A2.2). This rate of increase was greatest for adults (38 percent), followed by children (24 percent), individuals with disabilities (24 percent), and aged individuals (18 percent) (Appendix Table A2.8).

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[11] Unless otherwise noted, all national estimates presented in the chartbook are based on total national enrollment counts and expenditures for the United States rather than on averages of state-level estimates.

[12] Because beneficiaries can be in Medicaid for different numbers of months during a year, the person-year estimate provides a standardized estimate of coverage. This statistic sums the total months of enrollment for each person to create total person-years of enrollment.

[13] State population estimates were taken from U.S. Census reports at www.census.gov/geo/www/guidestloc/guide_main.html.

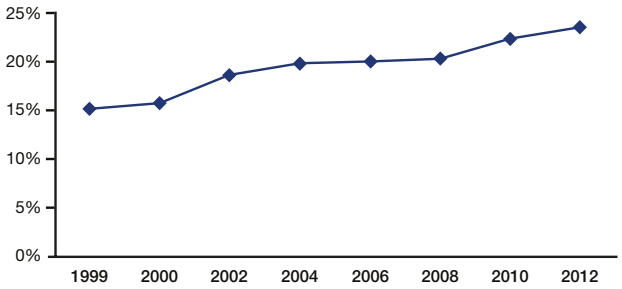
[14] Estimates of the percentage of the population below the FPL are drawn from the U.S. Census Bureau, American Community Survey, 2012, available at http://factfinder2.census.gov.

Table 2.1
Medicaid Enrollment in 2012

States	Number of Beneficiaries	Percentage of State Population	Percentage of Beneficiaries Enrolled All Year	Total Person-Years of Enrollment	Number of Beneficiaries in June 2012
United States	**73,498,564**	**23.4**	**61.5**	**59,989,935**	**59,647,236**
Alabama	1,107,781	23.0	66.3	942,417	939,309
Alaska	153,526	21.0	56.1	122,150	122,005
Arizona	1,719,414	26.3	55.5	1,341,141	1,356,605
Arkansas	788,197	26.7	69.4	673,290	657,256
California	12,351,973	32.5	54.6	9,696,114	9,532,021
Colorado	812,728	15.7	57.2	639,906	649,893
Connecticut	831,504	23.1	68.0	705,498	702,651
Delaware	256,939	28.0	59.5	210,929	210,380
District of Columbia	251,017	39.5	70.7	217,453	216,729
Florida	4,226,409	21.9	57.4	3,289,844	3,279,773
Georgia	1,991,965	20.1	55.0	1,578,036	1,576,189
Hawaii	329,506	23.7	67.3	278,646	275,675
Idaho	301,193	18.9	56.6	236,868	234,899
Illinois	3,163,794	24.6	76.6	2,789,991	2,796,968
Indiana	1,302,881	19.9	61.6	1,070,858	1,067,501
Iowa	649,902	21.1	58.3	522,625	521,509
Kansas	435,100	15.1	60.7	351,472	351,856
Kentucky	984,700	22.5	62.2	813,956	810,363
Louisiana	1,412,708	30.7	75.7	1,245,453	1,244,542
Maine	384,921	29.0	73.8	336,823	334,786
Maryland	1,223,461	20.8	67.2	1,040,041	1,036,650
Massachusetts	1,591,928	23.9	66.6	1,339,260	1,335,399
Michigan	2,287,153	23.1	62.9	1,887,249	1,820,792
Minnesota	1,146,907	21.3	54.9	891,210	891,789
Mississippi	780,867	26.2	63.3	652,992	653,658
Missouri	1,194,685	19.8	62.2	978,940	981,086
Montana	144,910	14.4	60.5	116,318	115,931
Nebraska	307,282	16.6	58.9	244,380	243,011
Nevada	409,415	14.9	49.7	308,538	305,455
New Hampshire	180,084	13.6	59.2	144,669	139,768
New Jersey	1,449,947	16.3	67.4	1,214,845	1,213,512
New Mexico	660,959	31.7	68.7	568,529	567,631
New York	6,062,175	30.9	66.2	5,108,831	5,086,664
North Carolina	2,035,946	20.9	64.4	1,676,106	1,673,525
North Dakota	89,585	12.8	50.0	66,925	66,982
Ohio	2,717,870	23.5	67.0	2,322,785	2,327,730
Oklahoma	1,033,132	27.1	49.9	799,568	795,009
Oregon	758,366	19.5	62.8	621,776	622,975
Pennsylvania	2,559,377	20.0	66.1	2,147,584	2,140,039
Rhode Island	248,497	23.6	60.6	195,458	188,736
South Carolina	1,135,354	24.1	64.0	943,220	924,736
South Dakota	148,166	17.8	58.1	118,677	118,483
Tennessee	1,588,038	24.6	67.9	1,342,527	1,336,325
Texas	5,260,631	20.2	54.2	4,091,470	4,082,884
Utah	387,399	13.6	46.7	282,444	282,322
Vermont	204,295	32.7	58.2	168,405	168,726
Virginia	1,171,419	14.3	62.8	964,323	956,477
Washington	1,413,453	20.5	61.6	1,157,247	1,153,726
West Virginia	434,026	23.4	59.3	354,683	354,082
Wisconsin	1,328,341	23.2	63.9	1,109,023	1,114,925
Wyoming	88,738	15.4	52.7	68,445	67,298

Source: Medicaid Analytic Extract 2012

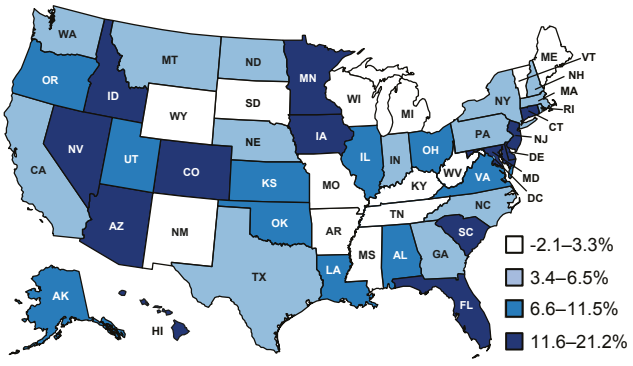
Figure 2.3
Percentage of the Population Enrolled in Medicaid 1999-2012



Sources: Medicaid Analytic Extract 1999-2012; U.S. Census Bureau

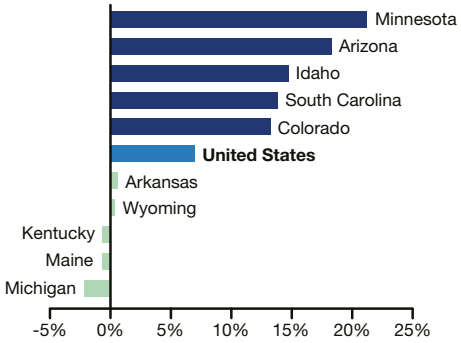
Forty seven states and the District of Columbia reported enrollment increases between 2010 and 2012 with 17 states reporting growth of 10 percent or more (Figure 2.4 and Appendix Table A2.2). The states with the highest rates of growth were Minnesota, Arizona, Idaho, and South Carolina (with reported increases of 21, 18, 15, and 14 percent, respectively) (Figure 2.5). The increase in Minnesota's Medicaid population was driven in part by implementation of an early expansion under the ACA. On the other hand, three states—Michigan, Maine, and Kentucky—reported enrollment declines (Respectively).

Figure 2.4
Growth in Medicaid Enrollment (in Quartiles), 2010-2012



Source: Medicaid Analytic Extract 2010-2012

Figure 2.5
Growth in Medicaid Enrollment, 2010-2012: Top and Bottom 5 States



Source: Medicaid Analytic Extract 2010-2012

Demographic Characteristics of All Medicaid Beneficiaries

In 2012, just over half of all Medicaid beneficiaries were children (Table 2.2): 53 percent of Medicaid beneficiaries were under age 21, including about 3 percent who were infants (under 1 year). In comparison, working-age adults (ages 21 to 64) accounted for 38 percent of Medicaid beneficiaries.

Table 2.2
Characteristics of Medicaid Beneficiaries in 2012

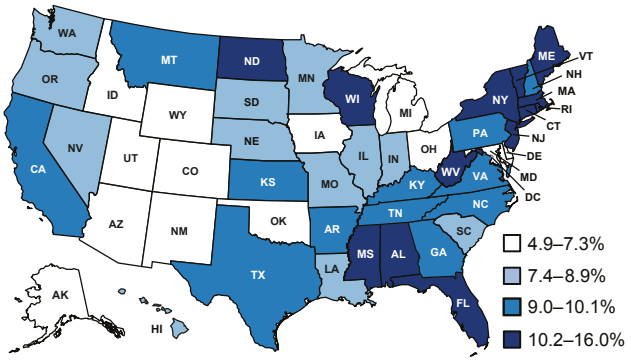
	Number of Beneficiaries	Percentage of Beneficiaries
All Beneficiaries	73,414,682	100.0
Age		
0 years	2,326,753	3.2
1-20 years	36,158,535	49.2
21-64 years	28,079,745	38.2
65 years and older	6,849,649	9.3
Gender		
Male	30,790,547	41.9
Female	42,552,104	58.0
Race		
White	32,056,129	43.7
African American	16,149,933	22.0
Asian	2,536,890	3.5
Native American	1,067,380	1.5
Pacific Islander	735,674	1.0
Unknown	20,442,333	27.8
Ethnicity		
Hispanic or Latino	18,007,606	24.1

Source: Medicaid Analytic Extract 2012

Aged beneficiaries (those age 65 and over) made up only about 9 percent of all Medicaid beneficiaries.

Figure 2.6 shows the percentage of the Medicaid population in each state that was 65 or older in 2012—one indication of the density of higher-cost beneficiaries. States with more aged in their Medicaid populations tended to be those with more aged in their general populations. Florida had the highest proportion of people 65 and over in the state population and the third-highest percentage of Medicaid beneficiaries age 65 and older (almost 13 percent, compared with about 9 percent nationally; see Figure 2.7).[15] Similarly, Maine had the highest percentage of Medicaid beneficiaries age 65 and older (16 percent) and one of the highest rates of people 65 and older in the state population. For example, in 2012, three of the states in the bottom quartile of percentage of Medicaid beneficiaries who were 65 and older (Arizona, Michigan, and New Mexico) had large waiver programs that expanded coverage to children and adults (Appendix Table A2.3).

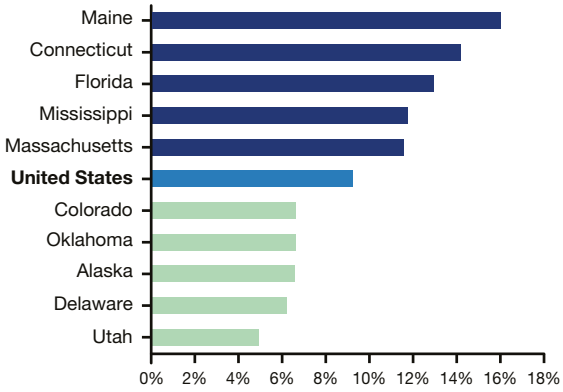
Figure 2.6
Percentage of Medicaid Beneficiaries (in Quartiles) Who Were 65 and Older in 2012



Source: Medicaid Analytic Extract, 2012

Other factors that influence the age distribution of Medicaid beneficiaries in a state are expansions to cover children and adults. For example, in 2012, three of the states with smaller proportions of aged among Medicaid beneficiaries than in their total populations (Arizona, Michigan, and New Mexico) had large waiver programs that expanded coverage to additional children and adults (Figure 2.7).

Figure 2.7
Percentage of Medicaid Beneficiaries Who Were 65 and Older in 2012: Top and Bottom 5 States



Source: Medicaid Analytic Extract 2012

White beneficiaries comprised 44 percent of the Medicaid population and were the largest racial/ethnic group enrolled in Medicaid in 2012 (Table 2.2). An additional 22 percent of beneficiaries were African American. Smaller percentages were Asian (4 percent), Native American (2 percent), and Pacific Islander (1 percent). Twenty four percent of beneficiaries were Hispanic or Latino. The trend for states to identify beneficiaries as "unknown race" continued, with about 28 percent of beneficiaries thus identified in 2012. The trend in "unknown race" is the result of fewer states requiring applicants to self-report race in their Medicaid applications; also, in many states, individuals with Hispanic ethnicity are not asked to report their race separately.

About 58 percent of Medicaid beneficiaries in 2012 were female. The gender disparity was driven largely by the number of women who qualified for Medicaid when they were pregnant and later, to some extent, because they were primary caretakers for children

[15] Estimates of the percentage of the state population 65 and older are drawn from the U.S. Census Bureau, available at http://factfinder2.census.gov.

enrolled in Medicaid (Kaiser Family Foundation 2012b). Moreover, some states operated family planning programs that specifically targeted women of childbearing age.

Additional details about the demographic makeup of state Medicaid populations can be found in the appendix tables. Appendix Tables A2.3, A2.4, and A2.5 show the age distribution, racial and gender composition, and institutional status of state Medicaid beneficiaries, respectively.

Pathways to Medicaid Eligibility

Each Medicaid beneficiary is classified by two eligibility groups—a Basis of Eligibility (BOE) group and a Maintenance Assistance Status (MAS) group. The four BOE groups are as follows:

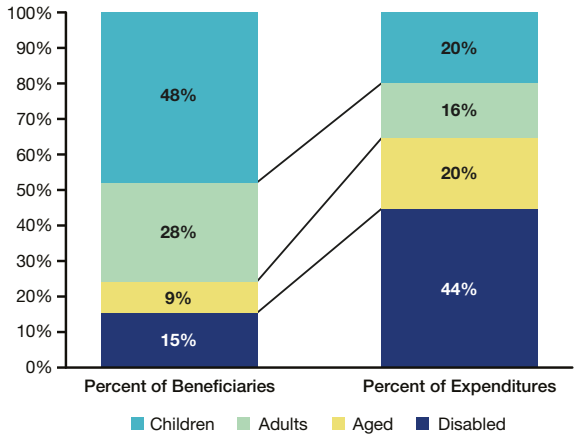
1. *Children:* People under age 18, or up to age 21 in states electing to cover older children
2. *Adults:* Pregnant women and caretaker relatives in families with dependent (minor) children,[16] and—starting in 2010 in states implementing an early ACA expansion—working-age adults
3. *Aged:* People age 65 or older
4. *Disabled:* People (including children) who are unable to engage in substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or has lasted or can be expected to last for a continuous period of not less than 12 months[17]

[16] Most caretaker relatives of dependent children are parents, but that group can also include other family members serving as caretakers, such as aunts or grandparents.

[17] This definition of disability is used in Medicare, Medicaid, and the income security programs with which they are associated, including the SSI and Social Security Disability Insurance (SSDI) programs.

Figure 2.8 shows the composition of Medicaid beneficiaries by BOE in 2012. Children made up about half of all beneficiaries, adults accounted for just over a quarter of Medicaid beneficiaries, and smaller shares were aged (9 percent) and individuals with disabilities (15 percent). Children and adults under 65 who are eligible for Medicaid because of disabilities are reported to the disabled eligibility group. People over 65 with disabilities are usually reported in the aged category, but some states report them in the disabled group.

Figure 2.8
Medicaid Enrollment and Expenditures by Basis of Eligibility in 2012



Source: Medicaid Analytic Extract 2012

Before the ACA was implemented, states could only cover working-age, low-income adults who were not disabled and had no dependent children in Medicaid by receiving a Section 1115 waiver. In 2012, 26 states plus the District of Columbia used an 1115 waiver to expand eligibility to this group (Table 7.1); two of these states used a state plan amendment in combination with the 1115 waiver to expand eligibility. One additional state expanded eligibility outside of an 1115 waiver through a state plan amendment only (See Table 1.2). (See Chapter 7 on Waiver Enrollment and Utilization for more detail on Section 1115 waivers.)

Length of enrollment in Medicaid in 2012 varied substantially by eligibility group. Although Medicaid beneficiaries who were aged or eligible on the basis of disability were the smallest eligibility groups in 2012, more of these beneficiaries tended to be enrolled for the full year (75 and 80 percent, respectively) than children and adults (63 and 44 percent, respectively) (Table 2.3). One explanation for this pattern is that once aged and disabled beneficiaries are eligible, the factors related to Medicaid qualification are unlikely to change. Children and non-disabled adults, however, may be more likely to experience changes in family status and income. In addition, children may age out of eligibility.

Table 2.3
Number and Percentage of Medicaid Beneficiaries Enrolled All Year in 2012

	Number of Beneficiaries	Percentage of Beneficiaries
Total	45,158,656	61.5
Aged	54,818,654	74.7
Disabled	58,927,552	80.3
Children	46,539,139	63.4
Adults	32,385,646	44.1

Source: Medicaid Analytic Extract 2012

There appears to be a strong relationship between service utilization and expenditures among Medicaid beneficiaries by basis of eligibility. Children and non-disabled adults often use only limited services, whereas beneficiaries who are aged or have disabilities tend to use a variety of high-cost acute care and long-term care services. Beneficiaries who were aged or had disabilities constituted less than a quarter of all Medicaid beneficiaries in 2012 but accounted for 64 percent of Medicaid expenditures (Figure 2.8), with 44 percent of expenditures paid on behalf of beneficiaries with disabilities and 20 percent on behalf of the aged. In comparison, children accounted for 20 percent and adults for 16 percent of all Medicaid expenditures in 2012.

At the state level, the makeup of beneficiaries by basis of eligibility depends on the state's demographic composition, eligibility rules, and other factors. Table 2.4 shows the variation across states in the distribution of beneficiaries among eligibility groups. In most states, the largest proportion of beneficiaries comprised children and the smallest was aged, often by a wide margin. The percentage of beneficiaries who were children in 2012 ranged from less than 32 percent in Massachusetts to 65 percent in Wyoming. In six states (Kentucky, Maine, Massachusetts, Mississippi, Pennsylvania, and West Virginia), at least one-third of beneficiaries were aged or eligible on the basis of disability in 2012.

Although BOE represents the population subgroup through which a beneficiary becomes eligible for Medicaid, MAS reflects the primary financial eligibility criteria met by the beneficiary. The five MAS groups are the following:

1. *Section 1931/cash assistance (Section 1931).* People receiving SSI benefits and those covered under Section 1931 of the Social Security Act; Section 1931 requires that states cover children in households with income below the state's 1996 cash assistance eligibility thresholds. These income eligibility levels are below 100 percent of the FPL in all states and well below that level in many states.
2. *Medically needy.* People qualifying through the medically needy provision (a state option) that allows a higher income threshold than required by the cash assistance level; people with income above the threshold can deduct incurred medical expenses from their income and/or assets—or "spend down" their income/assets—to determine financial eligibility.
3. *Poverty-related.* People qualifying through any poverty-related Medicaid expansions that the

Table 2.4
Medicaid Enrollment by Basis of Eligibility (Percentage of Beneficiaries) in 2012

State	Children	Adults	Aged	Disabled	Aged or Disabled
United States	**48.2**	**28.1**	**8.5**	**15.3**	**23.8**
Alabama	51.5	16.9	8.9	22.7	31.7
Alaska	58.0	23.3	5.5	13.2	18.7
Arizona	46.8	36.6	5.7	10.9	16.6
Arkansas	56.5	14.2	9.1	20.2	29.4
California	37.9	44.1	7.5	10.5	18.0
Colorado	58.8	25.2	6.4	9.6	16.0
Connecticut	38.7	37.5	14.0	9.8	23.7
Delaware	39.3	43.8	6.1	10.8	16.8
District of Columbia	36.2	40.0	5.9	17.9	23.8
Florida	49.8	21.7	11.8	16.6	28.5
Georgia	56.5	16.9	8.0	18.6	26.6
Hawaii	46.4	34.4	8.1	11.1	19.2
Idaho	63.7	14.0	6.8	15.6	22.4
Illinois	55.2	26.7	5.5	12.7	18.2
Indiana	56.6	19.4	7.6	16.4	24.0
Iowa	47.5	32.0	6.9	13.6	20.5
Kansas	58.5	13.7	8.9	18.9	27.8
Kentucky	51.1	14.5	10.1	24.3	34.4
Louisiana	54.5	19.8	8.4	17.3	25.7
Maine	36.9	29.3	15.8	18.0	33.9
Maryland	51.6	29.5	6.8	12.2	18.9
Massachusetts	32.2	31.6	11.5	24.7	36.2
Michigan	51.3	24.9	6.7	17.1	23.8
Minnesota	40.6	38.4	8.5	12.5	21.0
Mississippi	51.5	14.6	11.6	22.4	34.0
Missouri	53.3	20.0	8.0	18.7	26.7
Montana	58.9	14.7	9.1	17.3	26.4
Nebraska	61.9	15.9	8.1	14.0	22.2
Nevada	59.4	19.4	7.7	13.6	21.2
New Hampshire	60.2	12.3	9.3	18.2	27.5
New Jersey	49.5	25.9	9.5	15.1	24.6
New Mexico	55.0	27.0	5.4	12.7	18.0
New York	37.2	39.9	9.2	13.8	22.9
North Carolina	53.6	19.7	9.3	17.4	26.7
North Dakota	54.9	20.4	10.5	14.2	24.6
Ohio	48.7	30.1	7.2	13.9	21.1
Oklahoma	56.8	23.9	6.6	12.8	19.3
Oregon	48.6	28.1	8.6	14.7	23.3
Pennsylvania	42.8	19.6	9.9	27.7	37.6
Rhode Island	43.2	28.4	9.1	19.3	28.4
South Carolina	54.3	22.7	6.9	16.1	23.0
South Dakota	61.5	15.7	7.5	15.2	22.7
Tennessee	51.3	20.4	8.2	20.0	28.2
Texas	62.7	14.0	9.3	14.0	23.3
Utah	58.2	24.5	4.2	13.0	17.3
Vermont	33.6	42.4	11.2	12.8	24.0
Virginia	55.6	18.2	8.8	17.4	26.2
Washington	56.4	20.2	7.4	16.0	23.4
West Virginia	46.8	14.3	10.1	28.8	38.8
Wisconsin	41.3	34.8	10.2	13.8	24.0
Wyoming	65.0	14.2	6.9	13.9	20.8

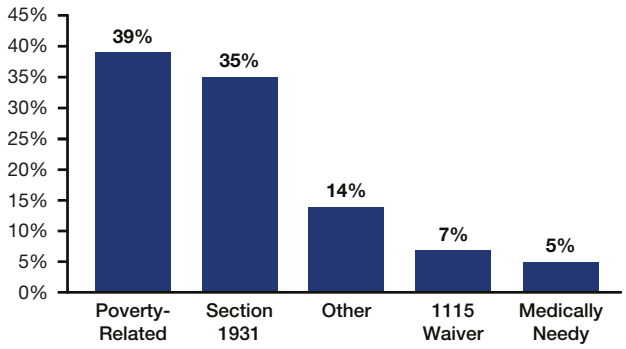
Source: Medicaid Analytic Extract 2012

state enacted from 1988 on; this category includes Medicare cost-sharing dual beneficiaries as well as children and adults covered at levels above the state's Section 1931 and cash assistance levels.

4. *Section 1115 waiver.* People eligible only through a state 1115 waiver program that extends benefits to certain otherwise ineligible groups.
5. *Other.* A mixture of mandatory and optional coverage groups not reported under the MAS groupings listed above, including but not limited to many institutionalized aged and disabled, those qualifying through hospice and home- and community-based services (HCBS) care waivers, and immigrants who qualify for emergency Medicaid benefits only.

People qualifying under poverty-related and Section 1931 rules accounted for the largest portions of the Medicaid population (representing 39 and 35 percent of beneficiaries, respectively) in 2012 (Figure 2.9). Seven percent were eligible under a Section 1115 waiver; 5 percent were medically needy. Fourteen percent qualified under other eligibility criteria.

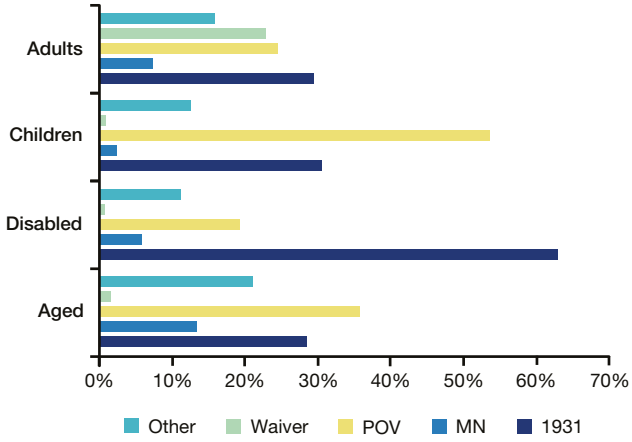
Figure 2.9
Medicaid Enrollment by Maintenance Assistance Status in 2012



Source: Medicaid Analytic Extract 2012
Note: 1115 Waiver category includes individuals who are covered under 1115 demonstration expansion programs.

Rates of enrollment in MAS categories varied by eligibility group (Figure 2.10). Qualification under Section 1931 rules remained the primary route to Medicaid eligibility among beneficiaries eligible on the basis of disability. By comparison, aged beneficiaries were more likely to qualify under poverty-related rules, followed by Section 1931 (36 percent and 28 percent, respectively). Section 1931, poverty-related rules, and state 1115 waiver programs were the most common routes to Medicaid eligibility for adults. More than half of all child beneficiaries qualified for Medicaid through poverty criteria.

Figure 2.10
Maintenance Assistance Status by Basis of Eligibility in 2012



Source: Medicaid Analytic Extract 2012
1931 = Section 1931; MN = medically needy; Pov = Poverty-related eligible; Waiver = 1115 Waiver

These patterns in MAS assignment by eligibility group varied at the state level. Differences in how states used these pathways to eligibility for different BOE groups offer insight into the composition of the state's program—and how states diverge from national patterns. In 46 states and the District of Columbia, Section 1931 rules represented the most common pathway for beneficiaries with disabilities. There was greater diversity in pathways for the aged. In 27 states and the District of Columbia, the most common pathway for aged beneficiaries was poverty-related rules; in 6 states, Section 1931 was the most common pathway. For 12 states, however, other

eligibility criteria were the most common pathway for aged beneficiaries, indicating that these states may have had more generous standards for long-term care, larger HCBS waiver programs, or populations of aged beneficiaries who otherwise differed from the national rates. (See Appendix Tables A2.6 to A2.8 for additional information about basis of eligibility and maintenance assistance status categories by state.)

Overview of Key Medicaid Groups

The following sections in this chapter introduce some key groups of Medicaid beneficiaries. Enrollment and service utilization among beneficiaries enrolled in managed care and beneficiaries dually eligible for Medicaid and Medicare are further explored in Chapters 5 and 6 respectively.

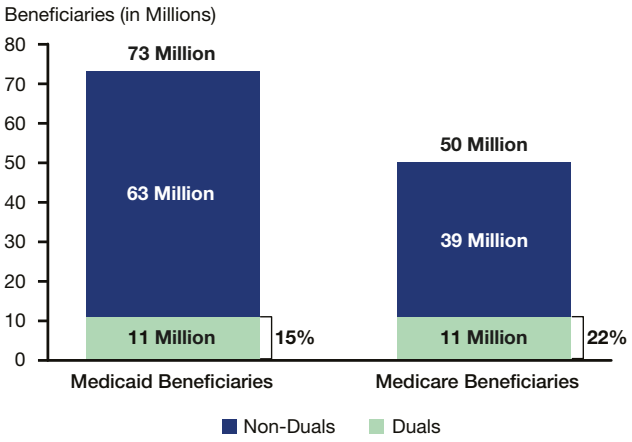
Dual Eligibles

Often Medicaid beneficiaries who are aged or eligible on the basis of disability are also enrolled in Medicare. These beneficiaries are commonly referred to as "dual eligibles" or "duals." Medicare enrollment is identified in MAX by a match to the Medicare EDB. In this chartbook, duals are defined as those in the Medicaid data files with matching records in the EDB, indicating dual enrollment in Medicare and Medicaid for at least one month in 2012.

In total, there were almost 11 million duals in 2012. They represented about 15 percent of all Medicaid beneficiaries (Figure 2.11). Correspondingly, about 22 percent of all Medicare beneficiaries in 2012 were also enrolled in Medicaid. Nationally, almost 93 percent of aged Medicaid beneficiaries and 43 percent of Medicaid beneficiaries eligible on the basis of disability were duals in 2012 (Figure 2.12).

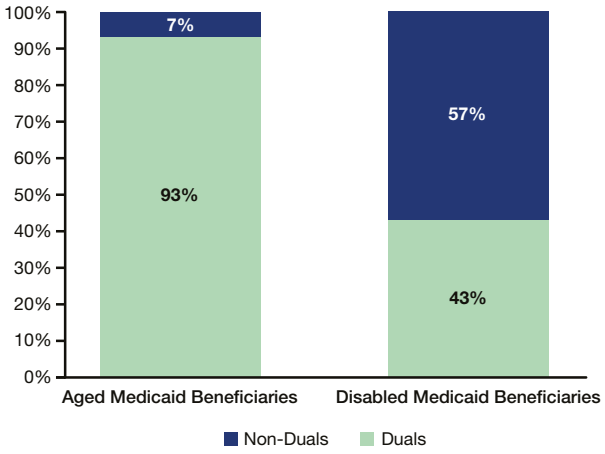
At the state level, the percentage of Medicaid beneficiaries who were duals ranged from about 10 percent in Colorado and Utah to more than 20 percent in

Figure 2.11
Ever Enrolled in Both Medicare and Medicaid in 2012



Source: Medicaid Analytic Extract 2012; Medicare and Medicaid Statistical Supplement
Note: numbers may sum to more than the total due to rounding

Figure 2.12
Percentage Ever Dually Enrolled in Both Medicare and Medicaid in 2012

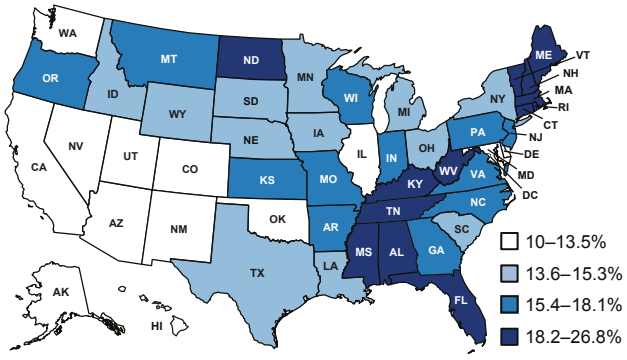


Sources: Medicaid Analytic Extract 2012

Connecticut, Maine, Mississippi, and West Virginia (Figure 2.13). Because such a high percentage of aged beneficiaries were duals, the percentage of Medicaid beneficiaries dually eligible corresponds with the percentage of Medicaid beneficiaries aged 65 or older (Appendix Table A2.9).

In contrast, the percentage of Medicare beneficiaries who are duals in a state partially reflects the portion of Medicare beneficiaries with low income and few

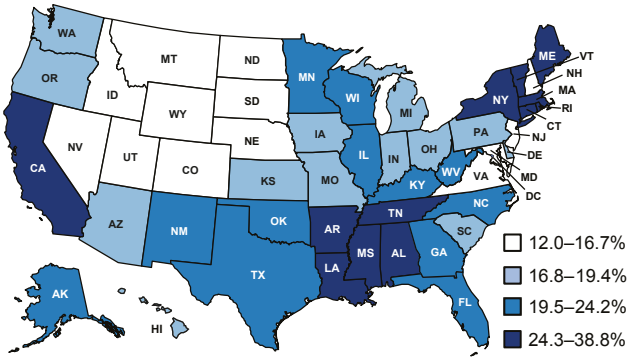
Figure 2.13
Percentage of Medicaid Beneficiaries Who Were Duals in 2012



Source: Medicaid Analytic Extract 2012

assets (Figure 2.14).[18] High dual enrollment among Medicare beneficiaries can also reflect a relatively high Medicaid eligibility income threshold in a state. For example, Vermont has a low poverty rate but a high rate of dual eligibility among Medicare beneficiaries, which can be attributed in part to its 1115 waiver that expanded Medicaid benefits to higher-income individuals who were aged or had disabilities.

Figure 2.14
Percentage of Medicare Beneficiaries Who Were Duals in 2012



Source: Medicaid Analytic Extract 2012; Medicare and Medicaid Statistical Supplement
Dual = ever enrolled in both Medicaid and Medicare in 2012

[18] Estimates of the percentage of the population below the FPL are drawn from the U.S. Census Bureau, American Community Survey, 2012, available at http://factfinder2.census.gov.

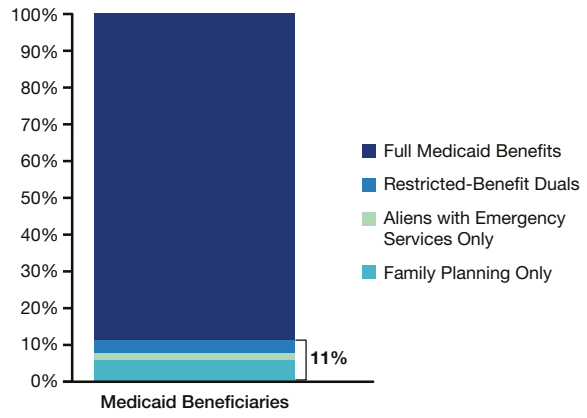
Because duals are among the most vulnerable and costly Medicaid beneficiaries, Chapter 6 examines their enrollment characteristics, service use, and expenditures in more detail. In reviewing information presented on duals in this and subsequent chapters, readers should bear in mind that Medicare covers most acute-care services for duals. Medicaid utilization and expenditures thus understate their overall use and the cost of those services. Among duals, Medicaid utilization and expenditure statistics for Medicare-covered services represent payments for Medicare cost sharing only. For other services, such as long-term care, Medicare provides only limited coverage. Thus, Medicaid utilization and expenditure measures provide a fairly complete picture of overall use of these services by duals, with the exception of out-of-pocket spending for nursing facility services or long-term care insurance payments.

Restricted-Benefit Beneficiaries

Most Medicaid beneficiaries, including duals, qualify for the full range of Medicaid benefits provided in their state. However, a subset of beneficiaries receives only very limited health coverage; they are referred to as "restricted-benefit" beneficiaries. Most restricted-benefit beneficiaries fall into three categories (1) aliens eligible for emergency services only, (2) duals receiving coverage only for Medicare premiums and cost sharing, and (3) people receiving only family planning services. These three groups of restricted-benefit beneficiaries accounted for about 11 percent of Medicaid beneficiaries in 2012 (Figure 2.15).[19]

[19] These three restricted-benefit categories represent most restricted benefit beneficiaries, but the list is not exhaustive. In some states there may be a small number of individuals receiving restricted benefits in the "other restricted benefits" category. In 2008, MAX data also started identifying an additional group of Medicaid beneficiaries with restricted benefits: individuals who receive assistance only for purchasing private insurance. These beneficiaries could not be systematically identified in all states in 2012, so they are not presented in this chartbook. However, researchers interested in identifying these beneficiaries can use MAX data to find them in some states, as indicated in the MAX 2012 eligibility anomaly tables.

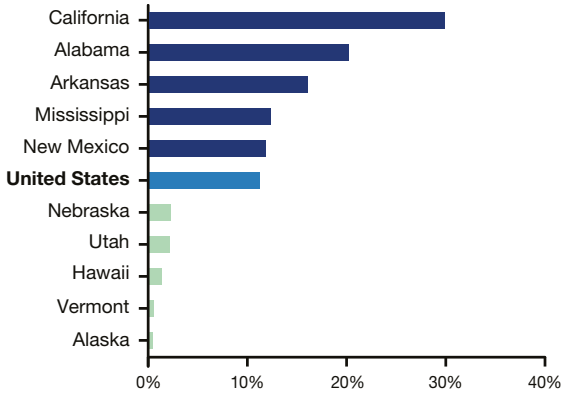
Figure 2.15
Medicaid Beneficiaries Receiving Only Restricted Medicaid Benefits in 2012



Sources: Medicaid Analytic Extract 2012
Dual = Ever enrolled in both Medicare and Medicaid in 2012

The proportion of beneficiaries who received only restricted Medicaid benefits in 2012 ranged from less than 1 percent in Alaska and Vermont to almost 30 percent in California (Figure 2.16). Of the states with the largest percentages of beneficiaries with restricted benefits in 2012, California, Arkansas, and Alabama each had large family planning-only programs. About 22 percent of all beneficiaries in California, 9 percent in Arkansas, and 9 percent in Alabama received only family planning services.

Figure 2.16
Percentage of Beneficiaries Receiving Only Restricted Benefits in 2012: Top and Bottom 5 States

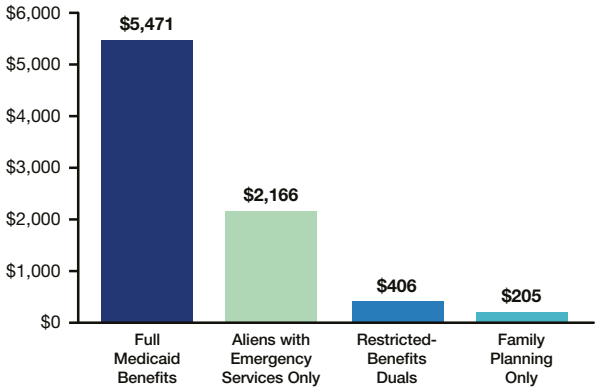


Source: Medicaid Analytic Extract 2012

In addition, 8 percent of beneficiaries in California were aliens eligible only for emergency services, and 11 percent in Alabama were restricted-benefit duals, for whom Medicaid covers only Medicare cost-sharing expenses. By comparison, in 25 states, 7 percent or less of beneficiaries received only restricted benefits. (See Appendix Table A2.10 for additional state-level details.)

The estimates provided thus far in this chapter include all Medicaid beneficiaries. As Figure 2.17 shows, service utilization and expenditures for the beneficiaries with restricted benefits differ notably from full-benefit beneficiaries. Beneficiaries eligible only for restricted benefits are not included in the remainder of the chartbook because they can distort average per capita expenditure estimates, particularly in states with relatively large restricted-benefit populations. Some states also offered somewhat reduced benefits to some Section 1115 waiver enrollees, but these benefits are generally more extensive than the benefits offered to the restricted-benefit beneficiaries. Therefore, Section 1115 waiver enrollees are included in counts of full-benefit beneficiaries.

Figure 2.17
Average Medicaid Expenditures per Beneficiary by Type of Benefits in 2012



Source: Medicaid Analytic Extract 2012

In addition to identifying individuals with benefit restrictions, MAX data also include information about individuals who receive their benefits through several selected programs. In general, the benefits these Medicaid beneficiaries receive are either equivalent to the full range of Medicaid benefits or are substantial enough that these beneficiaries are generally counted as full-benefit beneficiaries.

Table 2.5 shows the additional full-benefit groups that can be identified in MAX in each state. Some of these programs, such as individuals receiving pregnancy-related benefits, are reported with sizeable enrollment in most states. Money Follows the Person enrollment is also reported in 34 states, but enrollment in this program is generally low. Other benefit groups, such as the Alternative Benchmark Plan, Psychiatric Residential Treatment Facility (PRTF) grant (which ended September 30, 2012), and Health Opportunity Account program, are reported in few states and have low national enrollment.

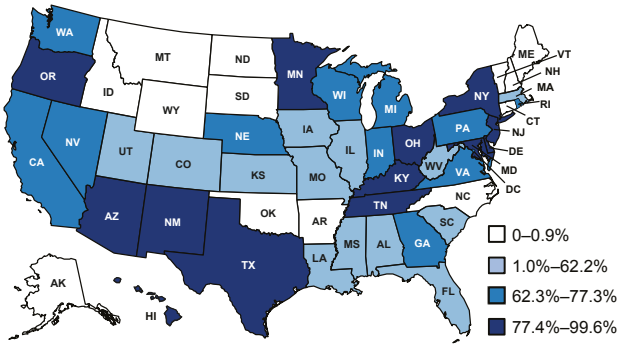
Full-Benefit Beneficiaries Enrolled in Managed Care

Medicaid managed care plans provide a defined bundle of health services in return for a fixed monthly fee from the state Medicaid program. The MAX data system shows enrollment in three basic types of managed care: (1) comprehensive managed care, including HMOs, HIOs, and PACE; (2) prepaid health plans (PHPs); and (3) primary care case management (PCCM) plans.

For the most part, comprehensive managed care plans cover most health services for their enrollees. PHPs typically provide more limited services, and coverage varies greatly by plan. They may, for example, cover only dental care, behavioral health, or non-emergency transportation services. If a beneficiary is enrolled only in a PHP plan, then all other services for the beneficiary are provided on an FFS basis. PCCMs are the least comprehensive managed care type identified in MAX. PCCMs are paid a small premium (often a few dollars per enrollee per month) for case management services only. Even though care provided by PCCMs is reported as managed care in MAX, most of the services provided to these beneficiaries are on an FFS basis unless they are enrolled in an additional managed care plan.

About 60 percent of all full-benefit Medicaid beneficiaries were in comprehensive managed care at some point in 2012 (see Appendix Table A5.1).[20] At the state level, states varied considerably in the percentage of beneficiaries in comprehensive managed care; 13 states covered less than 1 percent of full-benefit beneficiaries in comprehensive managed care plans, 4 states covered between 1 and 10 percent, 17 states covered between 20 and 74 percent, and the remaining 17 states covered more than 75 percent of full-benefit beneficiaries (Figure 2.18 and Appendix Table A5.1). This coverage represents an increase in the percentage of full-benefit beneficiaries in com-

Figure 2.18
Percentage Ever Enrolled in Comprehensive Managed Care in 2012



Source: Medicaid Analytic Extract 2012

[20] Because restricted-benefit beneficiaries receive such limited Medicaid services and are typically not eligible to join Medicaid managed care plans, they are not included in the analyses of managed care in this chartbook.

Table 2.5
Benefit Categories for Full-Benefit Medicaid Beneficiaries in 2012

State	Pregnancy Related Benefits	Alternative Benchmark Plan	Money Follows the Person	PRTF Grant	Health Opportunity Account	Other
Alabama	48,681	0	0	0	0	0
Alaska	102	0	0	89	0	0
Arizona	0	0	0	0	0	0
Arkansas	0	0	198	0	0	0
California	76,078	0	811	0	0	40,592
Colorado	0	189	11	13	0	2,421
Connecticut	0	0	802	0	0	0
Delaware	0	0	46	0	0	0
District of Columbia	749	0	48	0	0	0
Florida	31,279	0	0	0	0	344,326
Georgia	4,047	0	781	556	0	1,601
Hawaii	0	0	71	0	0	0
Idaho	12,764	278,932	75	0	0	0
Illinois	9,061	0	444	0	0	0
Indiana	44,536	0	578	940	55,708	22,926
Iowa	1,608	0	183	0	0	0
Kansas	0	293	428	335	0	0
Kentucky	7,512	NR	216	0	0	0
Louisiana	61,042	0	309	0	0	72,072
Maine	65	0	NR	0	0	0
Maryland	0	0	693	209	0	100,286
Massachusetts	2,024	0	315	0	0	197,643
Michigan	0	0	634	0	0	44,977
Minnesota	20	0	0	0	0	131,757
Mississippi	35,404	0	57	17	0	3,754
Missouri	5,006	0	219	0	0	0
Montana	0	0	0	97	0	14,155
Nebraska	1,163	0	117	0	0	0
Nevada	9,317	0	NR	0	0	11
New Hampshire	0	0	93	0	0	0
New Jersey	10,641	0	429	0	0	189,453
New Mexico	19,260	0	0	0	0	42,608
New York	23,945	0	494	0	0	930,302
North Carolina	82,122	0	135	0	0	72,418
North Dakota	0	0	75	0	0	0
Ohio	53	0	2,041	0	0	0
Oklahoma	52	0	196	0	0	11
Oregon	0	0	11	0	0	93,598
Pennsylvania	1,411	0	545	0	0	67,291
Rhode Island	5,732	0	0	0	0	14,743
South Carolina	0	0	0	93	11	0
South Dakota	5,299	0	0	0	0	0
Tennessee	16,030	0	NR	0	0	0
Texas	90	0	2,877	0	0	74,177
Utah	0	0	0	0	0	19,694
Vermont	0	0	NR	0	0	27,519
Virginia	0	0	332	41	0	14,422
Washington	0	0	1,411	0	0	24,858
West Virginia	0	195,525	0	0	0	0
Wisconsin	5,710	8,443	251	0	0	505
Wyoming	4,203	0	0	0	0	68
States Reporting Program Enrollment	**32**	**5**	**34**	**10**	**2**	**28**
Total NR or 0	**19**	**46**	**17**	**41**	**49**	**23**

Source: Medicaid Analytic Extract 2012

Notes: NR = not reported

To protect privacy, state counts representing fewer than 11 people were recoded to 11 for the state count, and the denominator was used to calculate an average measure. If only one state had a count of less than 11, a value of 11 was used to contribute to the U.S. total.

Most full-benefit beneficiaries in each state are assigned to the category of full Medicaid benefits. Table 2.2 shows enrollment in additional full-benefit equivalent categories in MAX 2012. See the MAX 2012 anomaly tables for more information about the benefits provided in the "Other" category in each state and for more information about benefit package reporting in MAX.

prehensive managed care plans since 2010. Medicaid managed care enrollment trends are discussed in more detail in Chapter 5.

Variation across states in enrollment in comprehensive managed care has implications for Medicaid utilization and expenditure analyses using MAX. Records of capitated services, called encounter data, have historically been incomplete in MAX. Because most care for people enrolled in comprehensive managed care is typically covered under a capitated payment, only limited information about service use may be available for these beneficiaries in MAX. Although the availability and usability of MAX encounter data have improved since 2010 (Ogunwumiju and Byrd 2018), given the inconsistency in encounter data reporting, most of the data in this chartbook focus on FFS claims. The next chapter provides an overview of Medicaid expenditures and service utilization for key populations of Medicaid beneficiaries nationally and at the state level.

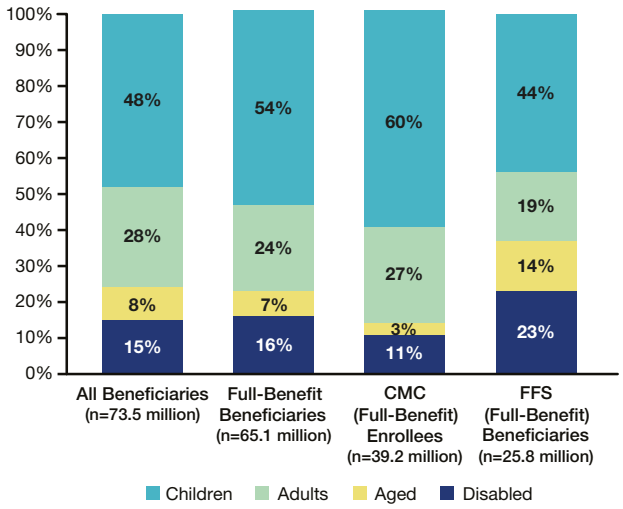
3. Medicaid Expenditures Among Full-Benefit Beneficiaries

This chapter examines Medicaid expenditures nationally and for each state. As noted in Chapter 1, the MAX data set contains person-level information on Medicaid service utilization and expenditures. Information pertaining to Medicaid beneficiary service utilization and expenditures differs by service delivery system. The two primary service delivery systems are fee-for-service and managed care. For beneficiaries who received services through FFS, the utilized services and corresponding Medicaid payments can be found in FFS claims. For beneficiaries who received services through managed care, two types of records contain utilization and expenditure data. Capitation claims contain the monthly per-beneficiary payments made by Medicaid to the managed care plan; encounter records contain information about the services used by the individuals enrolled in the managed care plans. (Note that unlike FFS claims, the encounter records in the MAX data do not contain the amount paid by the managed care organization to the service providers.) It is also worth noting that some beneficiaries may receive certain services on an FFS basis and other services through managed care. Taken together, the three types of records offer a unique overview of Medicaid expenditures for beneficiaries in a given year.

The service utilization and expenditure data in this chapter focus on full-benefit beneficiaries because beneficiaries who only receive restricted benefits have considerably different service and expenditure patterns than those receiving full benefits. First, the chapter shows beneficiary composition and expenditures separately by FFS and managed care. The remainder of the chapter focuses on utilization and expenditures among FFS beneficiaries. Throughout this chapter, individuals categorized as FFS beneficiaries were never enrolled in a comprehensive managed care plan in 2012. Similar utilization and expenditure breakdowns for managed care enrollees can be found in Chapter 5.

The populations of full-benefit and FFS beneficiaries differ somewhat in composition from the population of all Medicaid beneficiaries presented in Chapter 2 because some groups are more likely to be enrolled in comprehensive managed care or receive restricted benefits only. For example, non-disabled adults are more likely to only qualify for restricted-benefits than other populations, and adults and children are more likely to be enrolled in managed care plans than to receive services on an FFS basis. Figure 3.1 shows the composition in 2012 across all Medicaid beneficiaries (73.5 million), full-benefit beneficiaries (65.1 million), full-benefit comprehensive managed care enrollees (39.2 million), and full-benefit FFS beneficiaries (25.8 million). Each group is broken down by the four BOE groups described in Chapter 2: individuals with disabilities, aged, adults, and children. Users of the data should be aware of these different compositions when assessing the utilization and expenditure information provided in this chartbook.

Figure 3.1
Percentage of Beneficiaries in 2012 by Basis of Eligibility and Service Delivery System



Source: Medicaid Analytic Extract 2012

FFS beneficiaries = full-benefit beneficiaries not enrolled in comprehensive managed care (HMO/HIO/PACE) in 2012

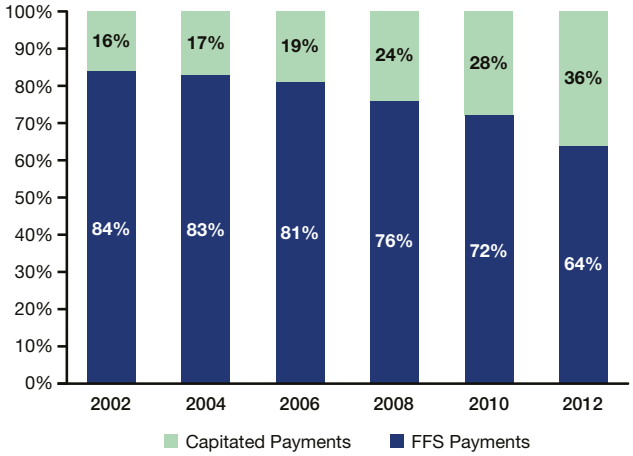
CMC enrollees = comprehensive managed care enrollees in 2012

Note: Percentages may sum over 100% due to rounding.

State-level summaries of Medicaid service utilization and expenditures highlight the variation in both Medicaid coverage and the composition of Medicaid beneficiaries across states. Chapter 2 pointed to the sources of some of these differences, including state demographics and Medicaid eligibility criteria. Another key component is the FMAP—the federal matching percentage—in which lower per capita income states have higher matching rates. As shown in Chapter 1, the FMAP ranged from 50 to 74 percent in 2012. The FMAP can have downstream effects on state-level expenditures because it affects the net cost of Medicaid-covered services to states, which in turn affects the types of services and people states choose to cover in their optional programs. States also differ in their reimbursement rates to medical facilities, physicians, and other practitioners for Medicaid-covered services. Thus, the cost of care and incentives to use certain services varies. All of these factors interact together to produce a diverse picture of Medicaid expenditures across the United States.

In 2012, Medicaid expenditures for full-benefit beneficiaries totaled about $356 billion, or about $5,500 per beneficiary (Appendix Table A3.2),[21] which breaks down into about $7,000 annually in FFS expenditures per FFS beneficiary, $1,200 in FFS expenditures per comprehensive managed care enrollee, and $2,300 in capitation payments per beneficiary in any type of managed care. As a whole, FFS payments accounted for 64 percent of all Medicaid expenditures for full-benefit beneficiaries, and capitation payments accounted for the remaining 36 percent in 2012 (Figure 3.2). Although FFS expenditures are substantially more than capitation payments, they represent a continued decline in the percentage of total expenditures over time, from 84 percent of Medicaid expenditures in 2002 to 72 percent in 2010.

Figure 3.2
Composition of FFS and Capitated Payments Among Full-Benefit Medicaid Beneficiaries, 2002–2012



Source: Medicaid Analytic Extract 2002-2012

[21] For reference, Medicaid spent approximately $364 billion for all beneficiaries in 2012.

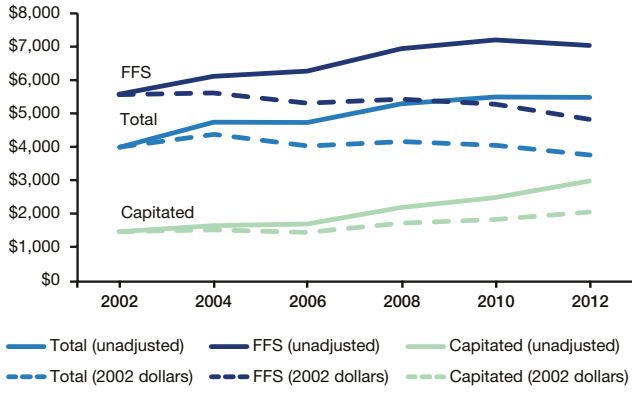
FFS expenditures represented a majority of expenditures in all but nine states: Arizona, Delaware, Hawaii, Kentucky, Michigan, New Mexico, Oregon, Pennsylvania, and Tennessee (Appendix Table A3.2). By far, the three states with the lowest proportion of spending on FFS payments were Tennessee (over 13 percent), Hawaii (14 percent), and Arizona (15 percent). All three states enroll all, or nearly all, Medicaid beneficiaries in mandatory comprehensive managed care. Conversely, there were 12 states in which FFS spending made up 98.5 percent or more of all Medicaid spending for full-benefit beneficiaries. Alaska, Connecticut, Maine, New Hampshire, and Wyoming had 100 percent FFS spending and no capitation payments. These states did not contract with any comprehensive managed care plans in 2012.

Average total expenditures per full-benefit beneficiary increased by about 37 percent from 2002 to 2012 (Appendix Table A3.4). Most of this increase occurred between 2002 and 2008 (33 percent); after a moderate increase in 2010, the average total expenditures in 2010 and 2012 were nearly identical (Figure 3.3). However, when expenditures are adjusted to reflect 2002 dollars, Medicaid expenditures have fluctuated over the years and declined by 9 percent between 2008 and 2012 (Figure 3.3 and Appendix Table A3.3).[22]

Figure 3.3 also shows trends in capitated expenditures for comprehensive managed care enrollees and FFS expenditures for FFS beneficiaries. The trends for FFS expenditures per FFS beneficiary closely mirror the trends for total expenditures.

[22] The following Current Price Index was used to adjust expenditures: U.S. City Average, All Urban Consumer, Medical Care Series Total (CUUR0000SAM) (U.S. Department of Labor, Bureau of Labor Statistics).

Figure 3.3
Per-Beneficiary Expenditure Trends Among Full-Benefit Beneficiaries (in Unadjusted and 2002 Dollars), 2002-2012



Source: Medicaid Analytic Extract 2002–2012
Note: Capitated dollars are per comprehensive managed care enrollee; FFS dollars are per FFS beneficiary. A FFS beneficiary is a full-benefit beneficiary not enrolled in comprehensive managed care (HMO/HIO/PACE) in the year of analysis.

Between 2002 and 2008, unadjusted FFS expenditures per beneficiary increased by 24 percent and, after another moderate increase in 2010, declined by 2 percent between 2010 and 2012. In addition, in 2002 dollars, FFS Medicaid expenditures have also fluctuated over the years and declined by 11 percent between 2008 and 2012. Conversely, the trends in average capitation payments per comprehensive managed care enrollee show an entirely different pattern. In both adjusted and unadjusted dollar amounts, expenditures remained fairly stagnant between 2002 and 2006, followed by large increases from 2006 to 2012 (by 75 percent in unadjusted dollars and 42 percent in adjusted 2002 dollars). These trend differences in average FFS and capitation payments may be explained, at least in part, by the trend toward enrolling increasing percentages of aged and disabled beneficiaries in comprehensive managed care plans (see Appendix Table A5.6 for details). Because these beneficiaries require more costly care, on average, than adults and children, enrolling greater shares of these populations in managed

care plans raises the plans' cost of care and generally raises capitation payments to these plans as well.

Note that because children and adults are still more likely to enroll in managed care than the aged and individuals with disabilities, and typically have lower medical expenditures and shorter periods of enrollment, average expenditures for FFS beneficiaries are not directly comparable to those in comprehensive managed care. In addition, many comprehensive managed care enrollees incur FFS expenditures for certain services not covered by the managed care plan; these expenditures are not shown in Figure 3.3.

Not surprisingly, the states with the most Medicaid beneficiaries also had the highest total Medicaid expenditures—New York, California, and Texas alone accounted for almost one-third of Medicaid expenditures in 2012 for all full-benefit beneficiaries. New York's total Medicaid expenditures exceeded those of all other states ($46.8 billion, Appendix Table A3.2), but Tennessee had the highest Medicaid expenditures per full-benefit beneficiary, at $9,363. The states with the next highest average expenditures were clustered together: North Dakota ($8,889), Alaska ($8,879), and District of Columbia ($8,776). The high expenditures of Alaska and District of Columbia are attributed at least partly to higher expenditures for institutional long-term care services, described in more detail later in this chapter. In contrast, the five states with the lowest average expenditures in 2012 spent approximately $4,000 or less per beneficiary: South Carolina ($4,002), Colorado ($3,880), New Mexico ($3,763), Illinois ($3,745), and Nevada ($3,693). These low costs may be partially explained by the demographics of the Medicaid full-benefit population in these states. All five had higher proportions of children than the national average, and children tend to cost less than other BOE groups. Second, all but South Carolina had lower proportions of the aged and disabled populations than the national average; these two groups typically have high costs.

Medicaid Expenditures for Comprehensive Managed Care Enrollees

Because a person can be enrolled in Medicaid managed care and FFS at different points in a year, Medicaid may make both capitation and FFS payments for managed care enrollees during that year. FFS expenditures for comprehensive managed care enrollees may include services that beneficiaries received during a month when they were not enrolled in comprehensive managed care as well as coverage for services not commonly covered by managed care. For example, behavioral health services and long-term care are not typically covered by comprehensive managed care plans and would be paid on an FFS basis.

Across all states with at least 10 percent of expenditures made for capitation payments in 2012, average capitated payments per enrollee in comprehensive managed care ranged between $1,200 and $8,400, whereas average FFS payments per enrollee in comprehensive managed care ranged from $90 to $2,600 (Appendix Table A3.2). For more information on utilization and expenditures for managed care enrollees, see Chapter 5.

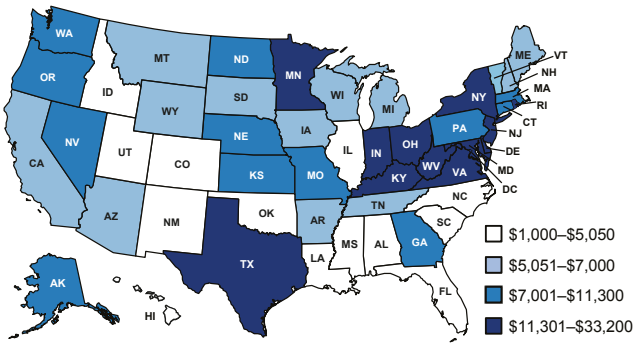
Medicaid FFS Expenditures and Service Utilization Among FFS Beneficiaries

The expenditures and service utilization data in this section cover all FFS claims with a date of service in 2012 for FFS beneficiaries. Readers should keep in

mind the relevant contextual factors when comparing FFS expenditures and utilization across beneficiary populations or states. Specifically, the utilization of various services and the composition of populations using the services included in these FFS claims may depend on the share of beneficiaries in FFS versus managed care in each state, as well as other state-specific program characteristics and data anomalies.

Nationally, state Medicaid programs spent about $7,023 per FFS beneficiary in 2012. Per-beneficiary expenditures varied substantially across states (Figure 3.4), particularly in those with a low FFS population (Appendix Table A3.2). In all of the states in the highest quartile, shown in dark blue in Figure 3.4, FFS beneficiaries made up less than 41 percent of all full-benefit beneficiaries in those states. This finding suggests that the beneficiaries left in FFS in these states may not be typical of the FFS population in other states (Appendix Tables A3.1a-b). Among states with at least 50 percent FFS beneficiaries among all full-benefit beneficiaries, average FFS spending per beneficiary was $5,063 and ranged from $3,522 in Colorado to $8,879 in Alaska.

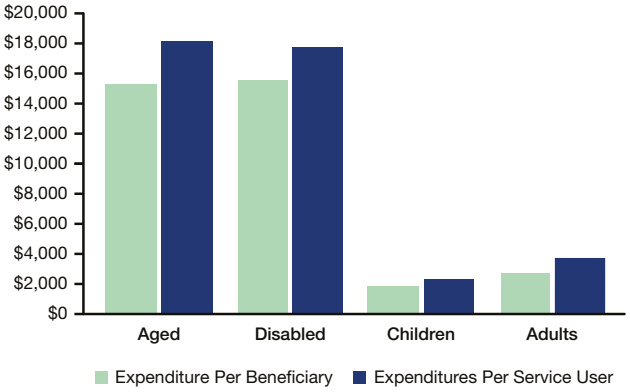
Figure 3.4
Per-Beneficiary FFS Expenditures (in Quartiles) Among FFS Beneficiaries in 2012



Source: Medicaid Analytic Extract 2012
FFS beneficiaries = full-benefit beneficiaries not enrolled in comprehensive managed care (HMO/HIO/PACE) in 2012

As mentioned previously, on average, expenditures for the aged and those eligible on the basis of disability are much higher than those for children and adults. Average FFS expenditures per beneficiary were more than $15,000 for the aged and those eligible on the basis of disability, whereas average expenditures for children and adults were about $1,800 and $2,700, respectively (Figure 3.5 and Appendix Table A3.6). This differential is also evident when comparing annualized FFS expenditures–$17,800 for aged, $17,500 for those eligible on the basis of disability, $2,400 for children, and $4,100 for adults. As noted previously, these differences can be attributed to differences in the frequency and types of services these populations use.

Figure 3.5
FFS Expenditures Among FFS Beneficiaries in 2012, by Basis of Eligibility



Source: Medicaid Analytic Extract 2012
FFS beneficiaries = full-benefit beneficiaries not enrolled in comprehenisve managed care (HMO/HIO or PACE) in 2012

Most FFS beneficiaries (80 percent) used at least one service in 2012 (Appendix Table A3.7). Mirroring expenditure patterns, the highest rates of service use were among beneficiaries who were aged or eligible on the basis of disability, with 84 percent and 88 percent, respectively using at least one Medicaid service in 2012. This finding compares to about 79 percent

of FFS children and 72 percent of FFS adults. Most states followed this general pattern of utilization rates. A few exceptions were Arizona, Minnesota, and New Mexico, where the aged population had less than 30 percent utilization among FFS beneficiaries. Also, in Arizona and New Mexico, less than 30 percent of FFS beneficiaries who were eligible of the basis of disability used a service in 2012. All three states had Managed Long Term Services and Supports (MLTSS) programs, which provide long-term HCBS through managed care organizations (Saucier et al. 2012). Thus, long-term care services are utilized less on an FFS basis in these states. This finding highlights the importance of considering state-specific program characteristics affecting the population of interest when comparing statistics across states.

Medicaid FFS Expenditures and Service Utilization Among FFS Beneficiaries, by Type of Service

Medicaid services are categorized into 30 types of services in MAX. They can be grouped into four general categories that correspond to the four types of claim files available in MAX: inpatient (IP), institutional long-term care (LT), prescription drug (RX), and Other (OT). Although IP and RX files each contain a single type of service, the LT claims are composed of several types of institutional long-term care services, including the following:

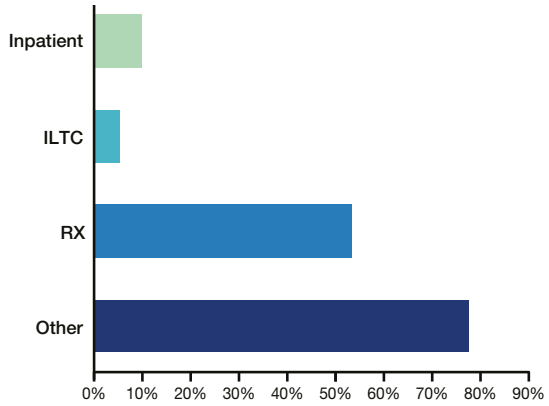
- Mental hospital services for the aged
- Inpatient psychiatric facility services for individuals under age 21
- Intermediate care facilities for individuals with intellectual disabilities (ICF/IID)
- Nursing facility services

Other service claims consist of all claims, primarily those for ambulatory care, not included in the other three groups. They include HCBS, such as private-duty nursing, residential care, and home health; physician and other ambulatory services; and lab, X-ray, supplies, and other wraparound services.

About three-quarters of full-benefit FFS beneficiaries used a service classified as Other in 2012—the most of any service type (Figure 3.6 and Appendix Table A3.9).[23] Other services also made up the largest share of FFS expenditures, at 48 percent (Figure 3.7 and Appendix Table A3.10).

The second most used type of service was prescription drug services, used by just over half of the FFS beneficiaries in 2012. However, despite this relatively high utilization, prescription drug services represented the smallest share of FFS expenditures, at only 8 percent. This relatively low level of expenditures for prescription drugs was partly caused by

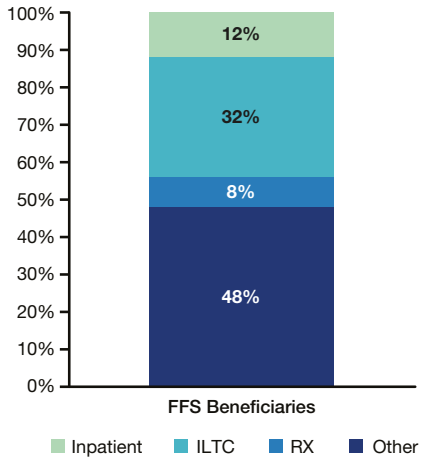
Figure 3.6
Percentage of FFS Beneficiaries Using Services in 2012, by Type of Service



Source: Medicaid Analytic Extract 2012
FFS beneficiaries = full-benefit beneficiaries not enrolled in comprehenisve managed care (HMO/HIO or PACE) in 2012

[23] Certain types of service claims may be found in one of two or more claim type files. For example, although most durable medical equipment claims are in Other files, some may be placed in RX files. See MAX data documentation for details.

Figure 3.7
Composition of Medicaid FFS Expenditures Among FFS Beneficiaries in 2012, by Type of Service



Source: Medicaid Analytic Extract 2012
FFS beneficiaries = full-benefit beneficiaries not enrolled in comprehensive managed care (HMO/HIO or PACE) in 2012

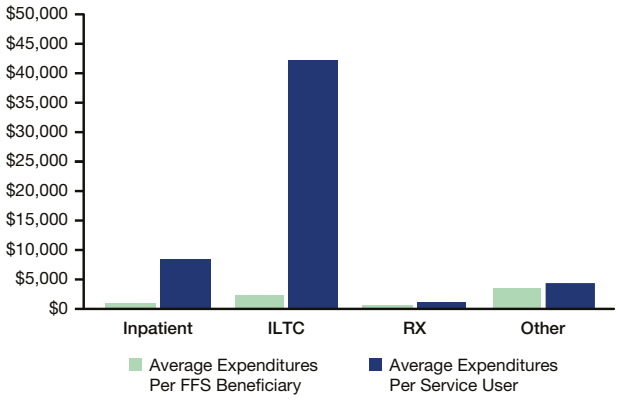
Medicare Part D, which shifted most prescription drug costs for dual eligibles to Medicare.

In 2012, 10 percent of FFS beneficiaries used inpatient hospital services. Correspondingly, inpatient services comprised 12 percent of all FFS expenditures. Of note, Medicare also covers most inpatient services for duals, so Medicaid expenditures for inpatient services do not represent total expenditures for these services.

Institutional long-term care services were used by the smallest portion of full-benefit FFS beneficiaries (5 percent). However, these services accounted for 32 percent of all FFS expenditures—the second-largest share of FFS expenditures.

Because of the varied utilization rates by type of service, examining average expenditures per service user can yield a better understanding of how much Medicaid is spending among those beneficiaries actually using a particular type of service compared to average expenditures per beneficiary. By far, institutional long-term care (ILTC) services cost the most per FFS service user on average, at around $42,200 (Figure 3.8 and Appendix Table 3.10), followed by inpatient hospital services, which cost about $8,300 per user; and other services, which cost about $4,400 per user. Finally, Medicaid spent about $1,100, on average, for each FFS beneficiary who obtained at least one prescription drug.

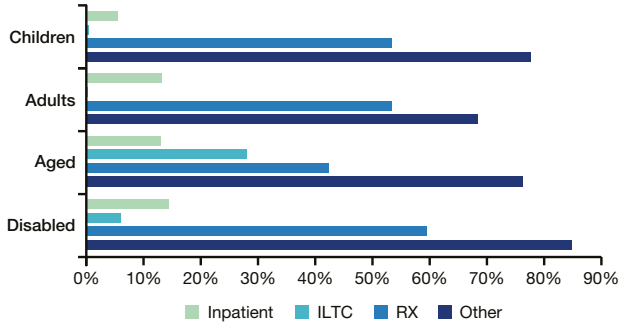
Figure 3.8
Average FFS Expenditures Among FFS Beneficiaries in 2012, by Type of Service



Source: Medicaid Analytic Extract 2012
FFS beneficiaries = full-benefit beneficiaries not enrolled in comprehensive managed care (HMO/HIO or PACE) in 2012

Service utilization by type of service varied to some extent by BOE group among FFS beneficiaries (Figure 3.9). All four groups used Other services at the highest rate, ranging between 68 percent of adults to 85 percent of those eligible on the basis of disability. The aged population used prescription drugs less often than the other groups, possibly because most of these beneficiaries also were eligible for Medicare, which covers prescription drugs. Another difference among groups is that children used inpatient hospital services less often than the other beneficiary groups; 5 percent of children used inpatient hospital services in 2012 vs. 13 percent of adults and aged beneficiaries and 14 percent of disabled beneficiaries. The most variation occurred within institutional long-term services. Twenty-eight percent of aged beneficiaries used these services, compared to

Figure 3.9
Percentage of FFS Beneficiaries Using Services in 2012, by Basis of Eligibility and Type of Service

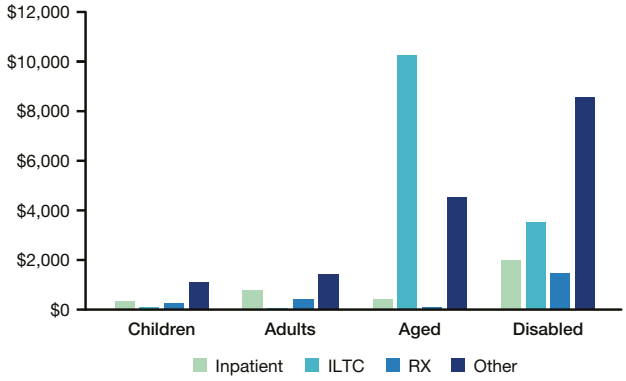


Source: Medicaid Analytic Extract 2012
FFS beneficiaries = full-benefit beneficiaries not enrolled in comprehensive managed care (HMO/HIO or PACE) in 2012

just 6 percent of those eligible on the basis of disability and less than 1 percent of adults and children.

FFS expenditures among FFS beneficiaries show some notable differences across the BOE groups and file types (Figure 3.10). Although each of the four groups had high utilization of Other services, much more was spent on average per beneficiary for aged ($4,500) and those who were eligible on the basis of disability ($8,600) than for children and adults ($1,100 and $1,400, respectively). The highest average expenditure

Figure 3.10
Per-Beneficiary FFS Expenditures Among FFS Beneficiaries in 2012, by Basis of Eligibility and Type of Service

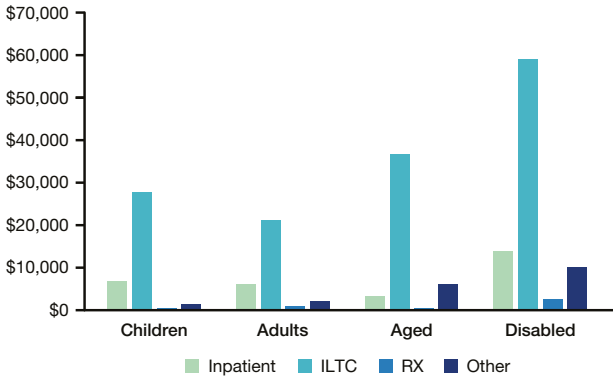


Source: Medicaid Analytic Extract 2012
FFS beneficiaries = full-benefit beneficiaries not enrolled in comprehensive managed care (HMO/HIO or PACE) in 2012

by type of service and BOE was for ILTC services for the aged group, at around $10,200 per beneficiary.

When looking at FFS expenditures by service user, long-term care services had the highest average costs across all of the BOE groups (Figure 3.11). Even though fewer individuals eligible on the basis of disability used ILTC services than the aged group, the average expenditure per service user was higher—approximately $59,000 compared to $36,600. Expenditures were also more than double per service user for inpatient and prescription drug services among those eligible on the basis of disability than among those in other BOE groups.

Figure 3.11
FFS Expenditures per User Among FFS Beneficiaries in 2012, by Basis of Eligibility and Type of Service



Source: Medicaid Analytic Extract 2012
FFS beneficiaries = full-benefit beneficiaries not enrolled in comprehensive managed care (HMO/HIO or PACE) in 2012

This chapter highlighted national utilization rates and expenditures, primarily among full-benefit FFS beneficiaries. Tables with national and state-level data limited to full-benefit FFS beneficiaries can be found in Appendix Tables A3.6–A3.18. In particular, separate tables by BOE that contain the utilization and expenditure data by type of service are presented in Appendix Tables A3.11–A3.18. In appendix tables for this chapter, we flag states

in which under 50 and 75 percent of the Medicaid population is covered under FFS. As stated previously, when analyzing state-level data, users of the data should consider the proportion of the population who are FFS beneficiaries versus those enrolled in managed care. Data for states with a small portion of FFS beneficiaries may not be representative of utilization and expenditures in those states. State-level data are also dependent on a number of other factors, including demographics, Medicaid eligibility criteria, and services offered, as well as state data anomalies. The data in this chapter are primarily broken down by BOE and the four major types of services. MAX data offer many other possibilities for researchers to explore. An analysis of FFS utilization and expenditure data focused on more detailed types of services are described in Chapter 4.

4. Utilization and Expenditures by Detailed Type of Service Among FFS Beneficiaries

States cover a range of medical services in Medicaid. As discussed in Chapter 1, these include both mandatory services that state Medicaid programs must cover under federal law and optional services that vary across states. Detailed analysis of Medicaid FFS service use and expenditures by type of service is possible with the MAX data system.[24] In this chapter, we summarize Medicaid service utilization and costs in 2012 for all full-benefit FFS beneficiaries and the subgroup of FFS duals by the type of service.

In Chapter 3, Medicaid services were categorized into inpatient care, long-term care, prescription drug, and other services, following the four types of claim files in MAX. However, MAX claims data can be used to identify services in more detail using provider codes, service codes, and other fields available in claims records. In addition, MAX claims contain a uniform type-of-service code for the 30 service categories shown in Table 4.1. In this chapter, we provide an overview of utilization and expenditures by these 30 detailed type-of-service categories.[25]

Table 4.1
Type-of-Service (TOS) Codes in MAX 2012, by file type

Type of Service	TOS Code
Inpatient (IP) File	
Inpatient hospital	01
Institutional Long-Term Care (LT) Field	
Mental hospital services for the aged	02
Inpatient psychiatric facility services for individuals under age 21	04
Intermediate care facility services for individuals with Intellectual Disabilities (ICF/IID)	05
Nursing facility services	07
Prescription Drug (RX) File	
Prescription drugs	16
Other (OT) File	
Physician services	08
Dental care	09
Other practitioner services	10
Outpatient hospital	11
Clinic	12
Home health	13
Lab and X-ray	15
Other services*	19
Sterilizations*	24
Abortions*	25
Transportation	26
Personal Care Services	30
Targeted case management	31
Rehabilitation Services	33
Physical therapy, occupational therapy, speech, or hearing services	34
Hospice benefits	35
Nurse midwife services	36
Nurse practitioner services	37
Private duty nursing	38
Religious non-medical health care institutions*	39
Durable medical equipment*	51
Residential care	52
Psychiatric services	53
Adult day care	54

* Claims of this service type may also appear in file types other than OT

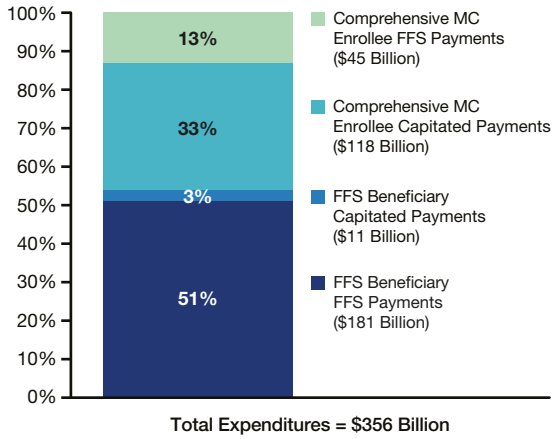
[24] MAX contains extensive Medicaid FFS utilization and payment information and monthly premiums, but limited utilization information (encounter data) from Medicaid managed care plans. See Chapter 5 for more detail about the availability of managed care information in MAX.

[25] Three types of service (TOS) are excluded from the expenditure and utilization categories for the analysis in this chapter. In 2012, there were about $103 million in expenditures for sterilizations (TOS 24); about $35 million in nurse/midwife services (TOS 36); and about $11 million in abortions (TOS 25). In addition, there were about $37 million in claims for unknown TOS. There were no claims for TOS 39 (religious non-medical health care institutions) in MAX 2012.

Note that type of service information presented in this chartbook reflects full-benefit FFS beneficiaries and their FFS utilization only. As discussed previously, these FFS beneficiaries exclude two important groups: (1) beneficiaries receiving only restricted Medicaid benefits in 2012, and (2) people ever enrolled in comprehensive managed care (HMOs, HIOs, or PACE) in 2012. For the purposes of this report, FFS beneficiaries do include people who received targeted services through PHP or PCCM plans that were not part of a comprehensive plan. However, FFS expenditures for these FFS beneficiaries do not reflect complete Medicaid expenditures because capitated payments made to these plans are not reflected.

The proportion of FFS expenditures for FFS beneficiaries within all expenditures for full-benefit beneficiaries continued to drop over the last decade, from 76 percent in 2004 and 65 percent in 2008 to 60 percent in 2010 (Perez et al. 2008; Borck et al. 2012). This proportion dropped further, to 51 percent in 2012, with FFS expenditures for FFS beneficiaries totaling $181 billion (Figure 4.1). This decline can be attributed to the continual growth of managed care enrollment in Medicaid.

Figure 4.1
FFS Expenditures Among FFS Beneficiaries as a Percentage of All Full-Benefit Beneficiary Expenditures in 2012



Source: Medicaid Analytic Extract 2012
FFS beneficiaries = full-benefit beneficiaries not enrolled in comprehensive managed care (HMO/HIO/PACE) in 2012
Comprehensive MC Enrollees = full-benefit enrollees with any comprehensive managed care enrollment (HMO/HIO/PACE) in 2012

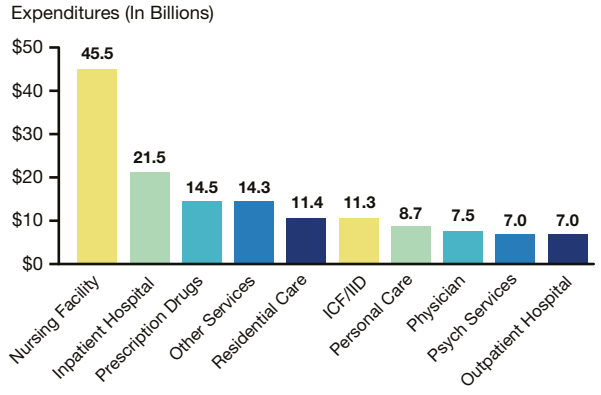
Because there is significant variation across states in managed care enrollment levels, the statistics presented in this chapter represent a different share of total expenditures in each state. In appendix tables for this chapter (A4.1 through A4.16), we flag states in which under 50 and 75 percent of the Medicaid population is covered under FFS. For these states, FFS expenditures presented in this chapter are associated with less than half, or less than three-quarters, respectively, of all full benefit beneficiaries. Chapter 5 has additional managed care enrollment detail by type of plan by state.

As discussed in previous chapters, observed differences in utilization and expenditures between states may also be due to differences in the structure of states' Medicaid programs, demographic composition, enrollment in PHPs and PCCM plans, or other utilization factors. Such differences must be considered when interpreting the national- and state-level utilization and expenditure measures presented in this and other chapters.

Services with Highest Expenditures and Utilization Among Medicaid FFS Beneficiaries

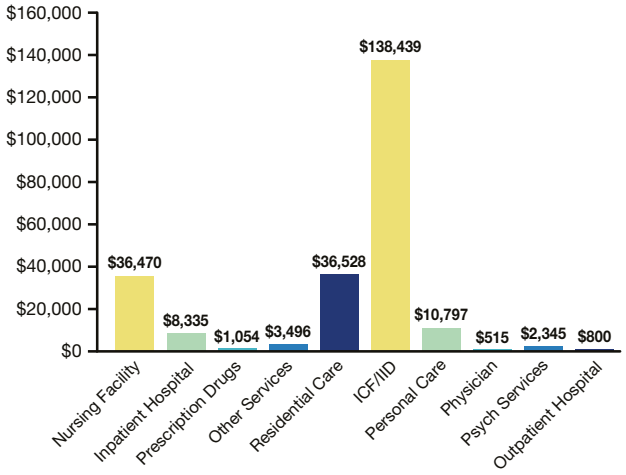
The 10 services with the highest expenditures (of the 30 service categories) accounted for 82 percent of the $181 billion in FFS expenditures for FFS beneficiaries in 2012. As in previous years, nursing facility services contributed most ($45.5 billion) to this population's FFS costs in 2012 (Figure 4.2). Inpatient hospital services, the next highest-cost service in 2012, were about $21.5 billion, or just under half the cost of nursing home services. These services were followed by prescription drugs ($14.5 billion), other types of services ($14.3 billion), and ICF/IID ($11.3 billion).

Figure 4.2
Medicaid Service Types with the Top 10 Highest Expenditures Among All FFS Beneficiaries in 2012



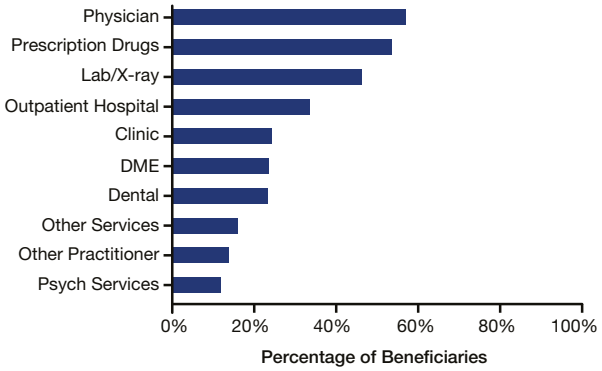
Source: Medicaid Analytic Extract 2012
ICF/IID = intermediate care facility for individuals with intellectual disabilities
FFS beneficiaries = full-benefit beneficiaries not enrolled in comprehensive managed care (HMO/HIO/PACE) in 2012

Figure 4.3
Cost per User for the Medicaid Service Types with the Top 10 Highest Expenditures Among All FFS Beneficiaries in 2012



Source: Medicaid Analytic Extract 2012
ICF/IID = intermediate care facility for individuals with intellectual disabilities
FFS beneficiaries = full-benefit beneficiaries not enrolled in comprehensive managed care (HMO/HIO/PACE) in 2012

Figure 4.4
Top 10 Most Utilized Services by All FFS Beneficiaries in 2012



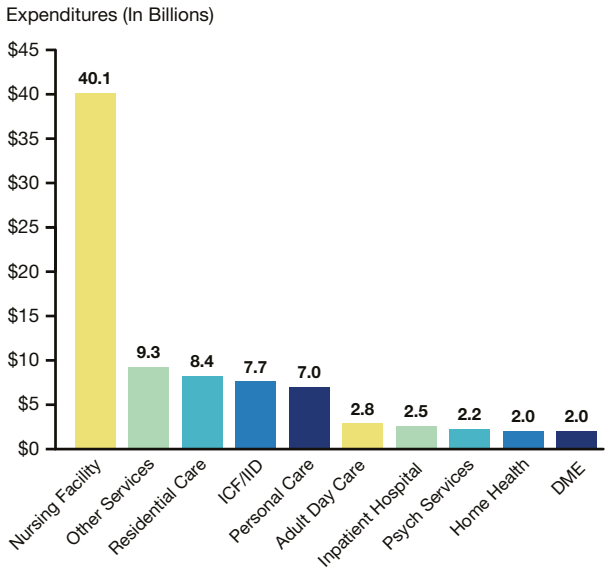
Source: Medicaid Analytic Extract 2012
FFS beneficiaries = full-benefit beneficiaries not enrolled in comprehensive managed care (HMO/HIO/PACE) in 2012
DME = durable medical equipment

High-cost service categories can be driven by frequently used services, services with high costs per user, or both. For example, the average expenditures of prescription drugs per user was only about $1,050, but it ranks as the third most costly service type ($14.5 billion) because it was used by more than half of FFS beneficiaries (Figures 4.2–4.4). Conversely, nursing facilities and ICF/ IIDs were used by only small percentages (data not shown—5 percent and less than 1 percent, respectively) but have such a high cost per user that they also rank as some of the most costly service types for Medicaid FFS beneficiaries. In fact, ICF/IIDs had the highest cost per user, at about $138,000 (Figure 4.3).

The subset of FFS beneficiaries who were dually enrolled in Medicare and Medicaid incurred a total of $93.0 billion in FFS Medicaid expenditures, accounting for just over half (51 percent) of FFS expenditures for all FFS beneficiaries (Appendix Table A6.5). Duals accounted for the majority of FFS expenditures on several high-cost services in 2012. Notably, about $40 billion was spent on nursing facility services for duals (Figure 4.5), accounting for 88 percent of all FFS Medicaid nursing facility expenditures in 2012. Duals also accounted for the bulk of residential care services ($8.4 of $11.4 billion), ICF/IID expenditures ($7.7 of $11.3 billion), and personal care services ($7.0 of $8.7 billion).

Figure 4.5

Medicaid Service Types with the Top 10 Highest Expenditures Among FFS Duals in 2012



Source: Medicaid Analytic Extract 2012

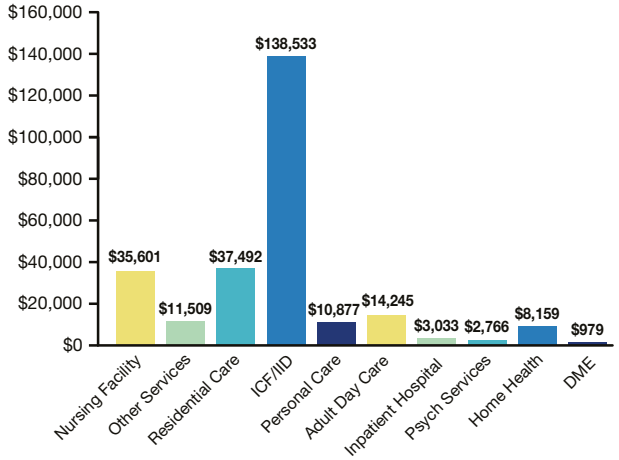
FFS duals = full-benefit dual beneficiaries not enrolled in comprehensive managed care (HMO/HIO/PACE) in 2012

ICF/IID = intermediate care facility for individuals with intellectual disabilities; DME = durable medical equipment

Some services are covered by Medicare for duals. Expenditures in Figure 4.5 show only Medicaid expenditures.

Figure 4.6

Cost per User for Medicaid Service Types with the Top 10 Highest Expenditures Among FFS Duals in 2012



Source: Medicaid Analytic Extract 2012

FFS duals = full-benefit dual beneficiaries not enrolled in comprehensive managed care (HMO/HIO/PACE) in 2012

ICF/IID = intermediate care facility for individuals with intellectual disabilities; DME = durable medical equipment

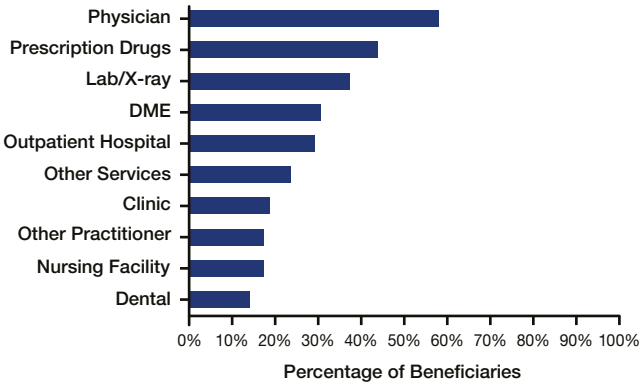
Some services are covered by Medicare for duals. Expenditures in Figure 4.6 show only Medicaid expenditures.

Conversely, duals accounted for much smaller percentages of Medicaid expenditures for inpatient hospital care ($2.5 of $21.5 billion), prescription drugs ($0.8 of $14.5 billion), physician services ($1.0 of $7.5 billion), and outpatient hospital services ($1.1 of $7.0 billion) (Figure 4.5 and Appendix Tables A4.14 and A6.7). Because Medicare is the primary payer for these services for duals, Medicaid expenditures for such services reflect only the cost of copayments and coinsurance for this coverage, not their full cost.

With the exception of nursing facilities, the top 10 most utilized services for FFS duals were also in the top 10 most used services among all FFS beneficiaries (Figures 4.4 and 4.7). Physician services were the most commonly utilized service among all FFS beneficiaries (57 percent) and FFS duals (58 percent). Because duals are aged or have disabilities, they were more likely than other FFS beneficiaries

Figure 4.7

Top 10 Most Utilized Services by FFS Duals in 2012



Source: Medicaid Analytic Extract 2012

FFS duals = full-benefit dual beneficiaries not enrolled in comprehensive managed care (HMO/HIO/PACE) in 2012

DME= durable medical equipment

Some services are covered by Medicare for duals. Utilization in Figure 4.7 shows only Medicaid utilization.

to use certain Medicaid services. For instance, 17 percent of FFS duals used nursing facility services in 2012, compared with only 5 percent of all FFS beneficiaries (see Figure 4.12). However, several services, including prescription drugs, clinic, dental, and lab and X-ray services—which are covered by Medicare, with the exception of dental—were used proportionately less often by FFS duals than by all FFS beneficiaries in 2012.

FFS Expenditures by Service Class

To examine the composition of FFS expenditures, we aggregated the 30 service types into six larger service classes. Three of the service classes generally correspond to types of claims files:

1. *ILTC:* All institutional long-term care services in the claims files, including inpatient psychiatric services for people under 21 and services provided in nursing facilities, ICF/IID, and mental hospitals for the aged. LT claims can include an array of bundled services, such as physical therapy and oxygen.
2. *Inpatient:* Inpatient hospital services, which may include some bundled services, such as lab tests or prescription drugs filled during an inpatient stay.
3. *Prescription drugs:* All Medicaid prescriptions filled, except those bundled with inpatient, nursing home, or other services.

We divide Other claims into three service classes:

1. *HCBS:* Residential care, home health, personal care services, adult day care, private-duty nursing, and hospice care.[26] This class includes HCBS provided under a Section 1915(c) (HCBS) waiver or through the State Plan.
2. *Physician and other ambulatory services (ambulatory):* Physician, outpatient hospital, clinic, dental, nurse practitioners, other practitioners, physical therapy (PT) or occupational therapy (OT), rehabilitation, and psychiatric services.
3. *Lab, X-ray, supplies, and other wraparound services (wraparound):* Lab and X-ray, durable medical equipment (DME), transportation, targeted case management, and other services.

Of these six service classes, ILTC contributed the most to Medicaid FFS expenditures among all FFS beneficiaries (32 percent) and FFS duals (52 percent) (Figure 4.8). For FFS duals and all FFS beneficiaries, the breakdown of expenditures by service class was relatively consistent with previous years.

Long-Term Care Utilization and Expenditures

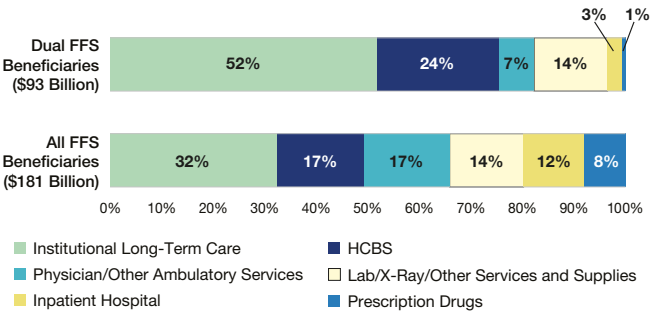
In 2012, ILTC services and HCBS, which together make up long-term care services, accounted for almost half (49 percent) of all FFS beneficiary costs and three-quarters (76 percent) of FFS costs among duals (Figure 4.8). Because long-term care services represented such a substantial portion of Medicaid FFS expenditures, they are explored in more detail below.

Although long-term care services accounted for almost half of FFS expenditures, they were used by only a small percentage of all FFS beneficiaries: about 9 percent of FFS beneficiaries used HCBS and about 5 percent used ILTC services in 2012 (Figure 4.9). Aged beneficiaries and those eligible on the basis of disability were the primary users of long-term care services. Aged beneficiaries, in particular, used ILTC services at a high rate (39 percent) and those eligible on the basis of disability were the most frequent users of HCBS (20 percent) (Figure 4.9).

Long-term care service costs for duals were large in both percentage and absolute value. Because

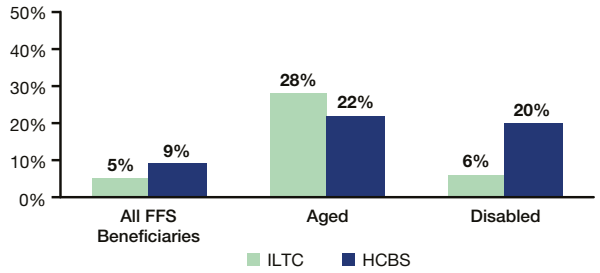
[26] Some HCBS may not be included in the HCBS class: psychiatric residential care may be classified with psychiatric services under physician and other professional services; some HCBS provided under HCBS waivers may be unclassified and grouped with Other services; and transportation, targeted case management, and durable medical equipment—sometimes used for long-term care—are not included.

Figure 4.8
Composition of FFS Expenditures Among All FFS and FFS Dual Beneficiaries in 2012



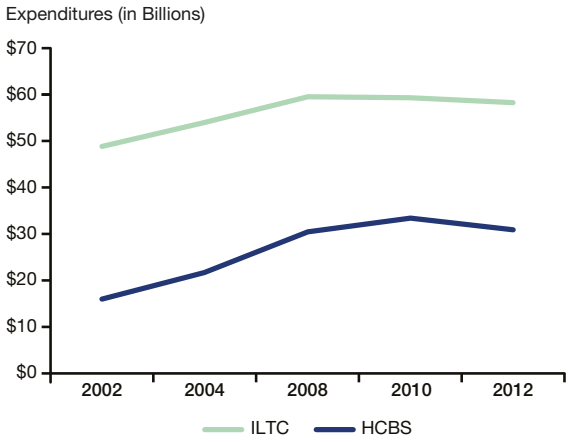
Source: Medicaid Analytic Extract 2012
FFS beneficiaries = full-benefit beneficiaries not enrolled in comprehensive managed care (HMO/HIO/PACE) in 2012
FFS duals = FFS beneficiaries with dual eligible status during the year
Some services are covered by Medicare for duals. Expenditures in Figure 4.8 show only Medicaid expenditures.

Figure 4.9
Percentage of FFS Beneficiaries Using HCBS and ILTC Services in 2012



Source: Medicaid Analytic Extract 2012
FFS beneficiaries = full-benefit beneficiaries not enrolled in comprehensive managed care (HMO/HIO/PACE) in 2012

Figure 4.10
Total FFS Long-Term Care Expenditures Among FFS Beneficiaries, 2002-2012



Source: Medicaid Analytic Extract 2012
FFS beneficiaries = full-benefit beneficiaries not enrolled in comprehensive managed care (HMO/HIO/PACE) in the year of analysis

Medicare covers many acute care services for duals, it is expected that long-term care and other non-acute care costs would account for a larger portion of expenditures than inpatient care or physician services among this group. Expenditures associated with FFS duals' use of ILTC and HCBS accounted for 78 percent of the FFS long-term care costs incurred by all FFS beneficiaries (Appendix Tables A4.2, A4.4, A4.10, and A4.12). Because FFS duals make up a majority of long-term care users, the composition of their long-term care costs and per-user expenditures was similar to those of all FFS beneficiaries, unless otherwise noted below.

Within long-term care, institutional care expenditures were about twice as large as HCBS expenditures in 2012. Among all FFS beneficiaries, ILTC services accounted for 32 percent ($58.3 billion) of FFS costs, compared with 17 percent ($30.8 billion) for HCBS (Figure 4.8). Most ILTC services are mandatory covered services, but HCBS are generally covered at a state's option, and there is greater variation across states in the type and extent of this coverage.[27]

Between 2010 and 2012, expenditures for ILTC and HCBS dropped by 2 percent and 8 percent, respectively—a marked change from the trends seen in previous years. Expenditures for HCBS grew at a faster rate than those for ILTC from 2002 (the first year of the MAX chartbook) to 2008. In 2002, ILTC expenditures were about triple the costs of HCBS (Figure 4.10). From 2002 to 2010, HCBS costs grew from $16.3 billion to $33.4 billion, an annualized rate of about 9 percent per year.[28] From 2002

[27] Because some HCBS are excluded from the HCBS category, the estimated expenditures measure may understate total Medicaid HCBS costs.

[28] Expenditures for private-duty nursing ($788 million in 2012) were not included in HCBS expenditures in 2002. When expenditures for these services are not included in 2010 HCBS totals, the growth rate from 2002 to 2010 drops to 8.6 percent per year.

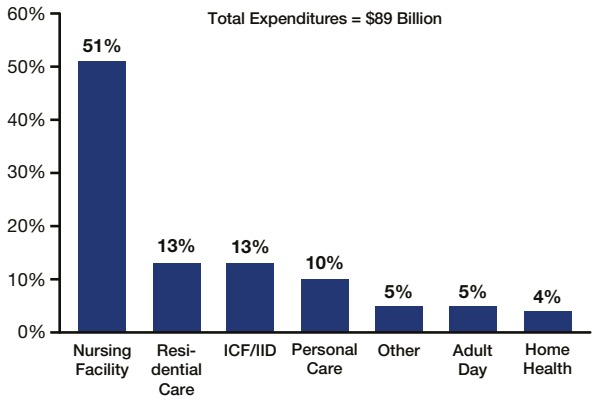
to 2008, ILTC expenditures grew from $49.1 billion to $59.6 billion before dropping slightly to $59.5 billion in 2010, resulting in expenditures only about twice as large as those for HCBS in 2010. However, in 2012, expenditures for ILTC and HCBS dropped to $58.3 billion (8 percent decrease) and $30.8 billion (2 percent decrease), respectively. Decreases in expenditures for personal care services and home health were the driving factors in the overall decline in HCBS expenditures between 2010 and 2012.

Nursing facilities were the biggest driver of long-term care costs, accounting for more than half (51 percent) of all FFS long-term care expenditures for FFS beneficiaries in 2012, with $45.5 billion in expenditures (Figure 4.11). Moreover, nursing facility services accounted for about one-fourth (25 percent) of all FFS expenditures for FFS beneficiaries. The additional services accounting for large percentages of long-term care costs for FFS beneficiaries were residential care ($11.4 billion, or 13 percent), ICF/IID ($11.3 billion, or 13 percent), and personal care services ($8.7 billion, or 10 percent).

In addition to constituting the largest expenditure, nursing facility services were also the most utilized long-term care service, used by about 5 percent of FFS beneficiaries in 2012. The next-most-utilized long-term care services included personal care (3 percent), home health (2 percent), residential care (1 percent), and adult day care (1 percent) (Figure 4.12). FFS duals had higher rates of long-term care utilization: 17 percent used nursing facilities, followed by personal care (10 percent), home health (4 percent), and residential care (3 percent). These utilization rates were practically the same in 2012 as in 2010.

ICF/IID services were by far the most costly long-term care service on a per-user basis; average expenditures were $138,400 per beneficiary served in an

Figure 4.11
Composition of FFS HCBS and ILTC Expenditures Among FFS Beneficiaries in 2012



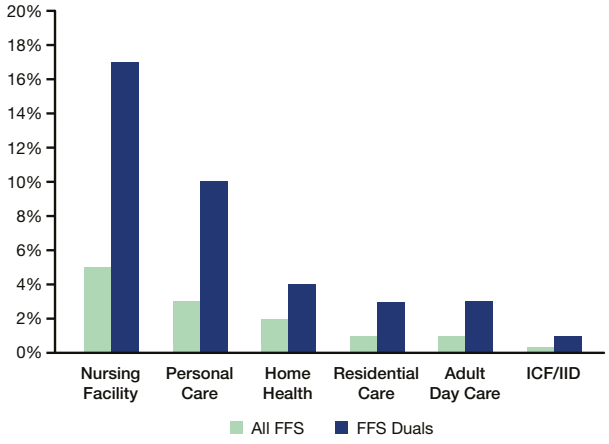
Source: Medicaid Analytic Extract 2012

FFS beneficiaries = full-benefit beneficiaries not enrolled in comprehensive managed care (HMO/HIO/PACE) in 2012

ICF/IID = intermediate care facility for individuals with intellectual disabilities

Other = MH (mental health) Aged, Inpatient psychiatric facility for individuals under age 21, hospice, and private duty nursing. Each of these represented 2 percent of less or total long-term care expenditures.

Figure 4.12
Percentage of all FFS and FFS Duals Who Used Selected Long-Term Care Services in 2012



Source: Medicaid Analytic Extract 2012

FFS beneficiaries = full-benefit beneficiaries not enrolled in comprehensive managed care (HMO/HIO/PACE) in 2012

Some services are covered by Medicare for duals. Expenditures in Figure 4.12 show only Medicaid expenditures.

ICF/IID in 2012 (Figure 4.13). Average expenditures per user of these services were high in all states but varied greatly, ranging from $40,355 in Indiana to $453,556 in Colorado (Figure 4.14).[29] Additional long-term care services with high annual per-user costs included residential care ($36,528), nursing facility ($36,470), inpatient psychiatric care for those under 21 ($26,843), and mental hospitals for the aged ($23,263).

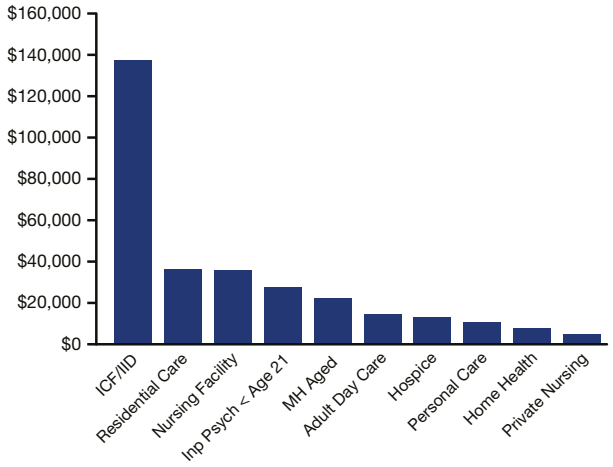
Additional information about FFS long-term care service use and expenditures in 2012 can be found in Appendix Tables A4.1 – A4.4 for all FFS beneficiaries, and in Tables A4.9 – A4.12 for FFS duals.

Physician and Other Ambulatory Services

Physician and other ambulatory services[30] accounted for 17 percent of FFS expenditures among FFS beneficiaries—the category of service with the third-largest total expenditures among such beneficiaries, after ILTC and HCBS.[31]

Physician services were both the largest contributor to physician and other ambulatory service expenditures ($7.5 billion, or 25 percent of $33.4 billion) and by far the service most utilized in this category by Medicaid FFS beneficiaries (57 percent) (Figures 4.15 and 4.16). The next three services with the highest overall costs were psychiatric ($7 billion, or 23 percent), outpatient hospital ($7 billion, or 23 percent), and clinic ($3.9 billion, or 13 percent) (Figure 4.15). The costs for outpatient hospital and clinic services were both driven by high utilization rates, while the costs for psychiatric services were driven by a high average cost per user. Outpatient hospital services were the second most utilized service type among FFS benefi-

Figure 4.13
Per-User Expenditures on Long-Term Care Services Among FFS Beneficiaries in 2012

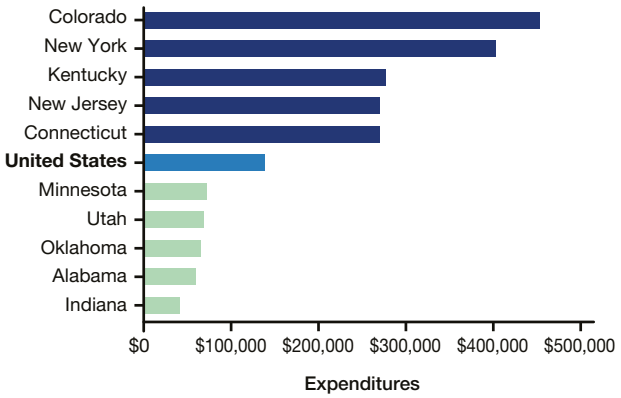


Source: Medicaid Analytic Extract 2012

FFS beneficiaries = full-benefit beneficiaries not enrolled in comprehensive managed care (HMO/HIO/PACE) in 2012

ICF/IID= intermediate care facility for individuals with developmental disabilities; Inp Psych < Age 21 = Inpatient psychiatric facility for individuals under age 21; MH Aged = mental hospital for the aged

Figure 4.14
Per-User ICF/IID Expenditures in 2012: Top and Bottom 5 States



Source: Medicaid Analytic Extract 2012

FFS beneficiaries = full-benefit beneficiaries not enrolled in comprehensive managed care (HMO/HIO/PACE) in 2012

ICF/IID = intermediate care facility for individual with intellectual disabilities

Arizona, Hawaii, Michigan, and Oregon did not report any ICF/IID utilization in 2012

[29] Please note that Indiana, Kentucky, Minnesota, New Jersey, and New York have a low percentage of FFS beneficiaries, so FFS expenditure data may not reflect typical Medicaid spending across those states.

[30] These services included the following: Physician, Psych Services, Outpatient Hospital, Clinic, Dental, Rehab, Other Practitioner, PT/OT, and Nurse Practitioner.

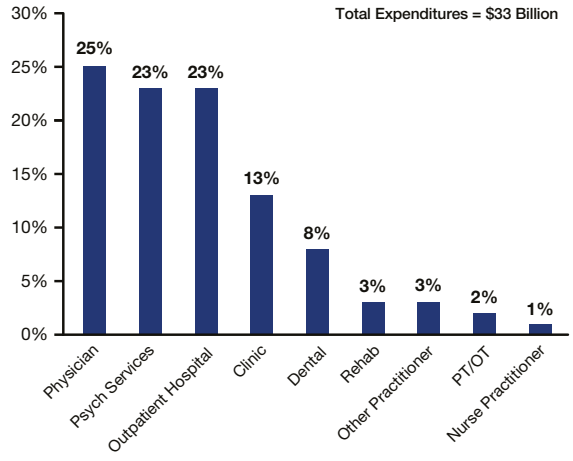
[31] Claims for physician services included separately billed physician services provided in inpatient settings.

ciaries, at 34 percent, followed by clinic services at 24 percent (Figure 4.16). While dental services were used nearly as much as clinic services, a lower average cost per user translated to lower overall expenditures.

Among physician and other ambulatory services, costs per user were highest for rehabilitation services, which were used by less than 1 percent of Medicaid FFS beneficiaries but represented 3 percent of ambulatory service expenditures. Figure 4.17 shows the average per-user expenditure for this service ($5,903 per user) far exceeded the average per-user expenditure of other services in the group. Psychiatric services had the next highest average expenditure per user ($2,345 per user), followed by PT/OT services ($858 per user). Additional summary information about FFS ambulatory service use and expenditures in 2012 can be found in Appendix Tables A4.5 and A4.6 for all FFS beneficiaries, and in Tables A4.13 and A4.14 for FFS duals.

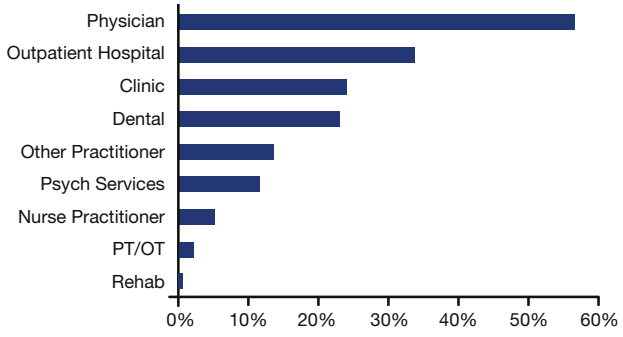
The results presented in this chapter and associated appendix tables represent only a small sample of the types of possible analyses that could be conducted with the MAX type-of-service data. MAX data can be used to investigate program cost drivers in greater depth and also to examine how changing patterns of utilization and expenditures are influenced by changing population demographics, state policies, and Medicaid coverage rules.

Figure 4.15
Composition of FFS Physician and Other Ambulatory Service Expenditures Among FFS Beneficiaries in 2012



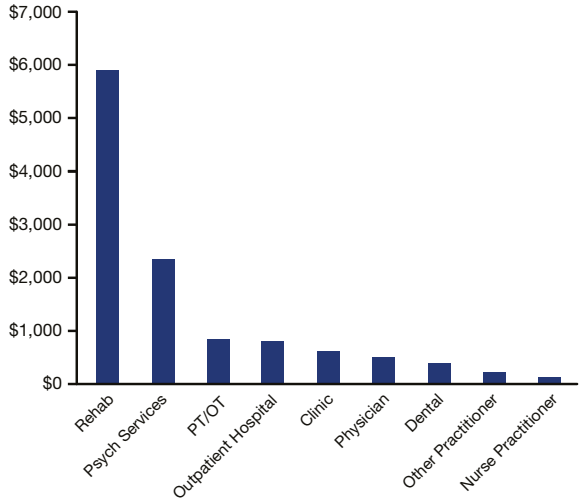
Source: Medicaid Analytic Extract 2012
FFS beneficiaries = full-benefit beneficiaries not enrolled in comprehensive managed care (HMO/HIO/PACE) in 2012
PT/OT = physical therapy/occupational therapy

Figure 4.16
Percentage of FFS Beneficiaries Who Used Physician or Other Ambulatory Services in 2012



Source: Medicaid Analytic Extract 2012
FFS beneficiaries = full-benefit beneficiaries not enrolled in comprehensive managed care (HMO/HIO/PACE) in 2012
PT/OT = physical therapy/occupational therapy

Figure 4.17
Per-User Expenditures for Physician and Other Ambulatory Services Among FFS Beneficiaries in 2012



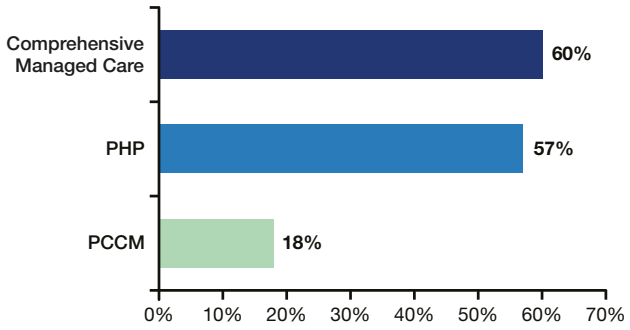
Source: Medicaid Analytic Extract 2012
FFS beneficiaries = full-benefit beneficiaries not enrolled in comprehensive managed care (HMO/HIO/PACE) in 2012
PT/OT = physical therapy/occupational therapy

5. Managed Care Enrollment Among Full-Benefit Beneficiaries

This chapter presents detailed information about managed care plan enrollment among full-benefit Medicaid beneficiaries (see Chapter 1 for a more detailed definition of full-benefit Medicaid beneficiaries). This information includes combinations of plans and enrollment by subpopulation, summaries of the availability of capitated payments and encounter data, and capitated payments by type of plan. The discussion of expenditures for managed care enrollees also includes a summary of FFS expenditures for people ever enrolled in comprehensive managed care in 2012 to capture all Medicaid expenditures for managed care enrollees.

Managed care is an integral part of the Medicaid service delivery system, with nearly 88 percent of full-benefit beneficiaries in some form of managed care in 2012 and many beneficiaries in multiple types of managed care plans (Appendix Table A5.1). Managed care plans differ greatly in the breadth of services they cover. HMOs, HIOs, and PACE plans provide comprehensive coverage for their enrollees. PHPs usually cover a limited set of services, such as behavioral health, dental care, or long-term care. PCCMs are paid a small premium (often a few dollars per enrollee per month) for case management services only; all other services for these beneficiaries are provided on an FFS basis. About 60 percent of all full-benefit Medicaid beneficiaries were in comprehensive managed care at some point in 2012 (Figure 5.1). Almost the same percentage

Figure 5.1
Percentage of Full-Benefit Beneficiaries Enrolled in Managed Care (MC) in 2012



Source: Medicaid Analytic Extract 2012
Comprehensive MC = HMO, HIO, or PACE; PHP = prepaid health plan; PCCM = primary care case management
Individuals may be enrolled in more than one type of managed care at a time.

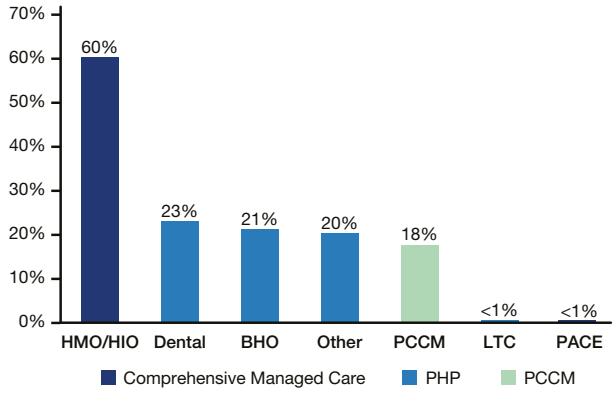
(57 percent) were enrolled in PHPs; 18 percent were in PCCMs. Note that beneficiaries can be enrolled in multiple types of managed care in a given month. For example, beneficiaries in comprehensive managed care can also be enrolled in a PHP that provides specialty services, such as behavioral health care, dental care, or transportation. Beneficiaries may also switch to different types of managed care enrollment during the year.

The extent and nature of managed care coverage varied across states in 2012. In 23 states, at least 95 percent of full-benefit beneficiaries were enrolled in some type of managed care in 2012; four states (Alaska, Connecticut, New Hampshire, and Wyoming) reported no managed care enrollment of any

kind during the year (Appendix Tables A5.1 and A5.2). In the states that reported almost 100 percent enrollment in managed care, the type varied among comprehensive, PHP, and PCCM plans. Table 5.1 shows the top 10 states separately in terms of the percentage ever enrolled in comprehensive managed care, PHP, and PCCM plans in 2012. Hawaii, Tennessee, Delaware, and Kentucky reported virtually all beneficiaries in comprehensive managed care plans; 32 states had at least one-quarter of their beneficiaries in comprehensive managed care, in combination with other types of managed care enrollment. Thirteen states had less than 1 percent comprehensive managed care enrollment; of those, eight had more than 70 percent of their population enrolled in PCCM plans (see Appendix Table A5.1 for state-level detail). In two states (Maine and South Dakota), managed care enrollment was limited to PCCM plans.

A range of PHPs was available across states, and substantial variation existed within PHP coverage. For example, Michigan enrolled almost all beneficiaries in a behavioral health services PHP. The types of PHPs with the highest enrollment in 2012 were dental plans (23 percent) and behavioral health organizations (BHOs) (21 percent) (Figure 5.2). About 20 percent of full-benefit beneficiaries participated in a PHP designated as "other" by the state, such as a transportation plan.

Figure 5.2
Percentage of Full-Benefit Beneficiaries Enrolled in Managed Care in 2012, by Type of Plan



Source: Medicaid Analytic Extract 2012
BHO = behavioral health organization; LTC = long-term care; PCCM = primary care case management; PACE = Program of All-Inclusive Care for the Elderly; Other = prepaid health plans identified as "other" managed care by the state
Individuals may be enrolled in more than one plan type at a time.

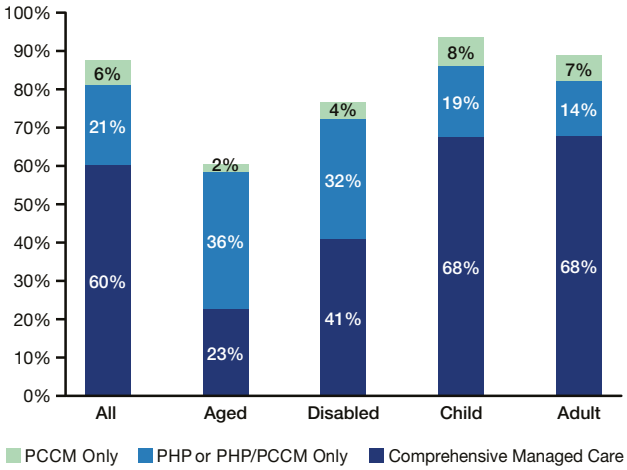
Table 5.1
Percentage of Full-Benefit Beneficiaries Ever Enrolled in Managed Care (MC) in 2012: Top 10 States, By Plan Type

Ever Enrolled in Comprehensive MC		Ever Enrolled in PHP		Ever Enrolled in PCCM	
Hawaii	99.6	Delaware	100.0	Maine	96.2
Tennessee	97.0	Mississippi	100.0	Idaho	90.7
Delaware	95.5	South Carolina	100.0	North Carolina	88.3
Kentucky	94.3	Washington	99.9	Montana	80.7
Arizona	89.4	Arizona	99.7	South Dakota	79.8
Oregon	89.1	Kentucky	99.6	Oklahoma	77.6
Maryland	88.3	California	99.1	Vermont	77.5
New Jersey	87.2	Michigan	99.1	Alabama	76.5
Texas	85.7	Idaho	98.6	Louisiana	72.3
Ohio	81.3	Oregon	98.5	Arkansas	71.0
United States	**60.3**	**United States**	**56.6**	**United States**	**17.6**

Source: Medicaid Analytic Extract 2012
Comprehensive Managed Care = HMO/HIO or PACE
Individuals may be enrolled in multiple managed care plan types.

Because of the diversity of Medicaid managed care plans, assessing the role of managed care in any state Medicaid program requires an understanding of the composition of plans in that state in addition to information about total managed care enrollment. For example, although similar percentages of full-benefit beneficiaries in both Delaware and Iowa were enrolled in managed care in 2012 (100 and 99.7 percent, respectively), the nature of Medicaid managed care was quite different in the two states. In Delaware, more than 95% of managed care enrollees were covered by a combination of comprehensive and other managed care plans; in Iowa, however, only 2.5 percent were enrolled in comprehensive managed care, with most beneficiaries covered by a combination of PHP and PCCM (Appendix Tables A5.1 and A5.2). States vary a great deal in how they roll out managed care across populations. Figure 5.3 shows how managed care eligibility patterns differed by eligibility group in 2012, with children and non-disabled adults more likely to be enrolled in comprehensive managed care compared to aged and disabled populations. Conversely, managed care for individuals who are aged or have disabilities is more likely to be in PHPs, with or without PCCM coverage, compared to child and non-disabled adult populations.

Figure 5.3
Type of Managed Care (MC) Enrollment Among Full-Benefit Beneficiaries in 2012



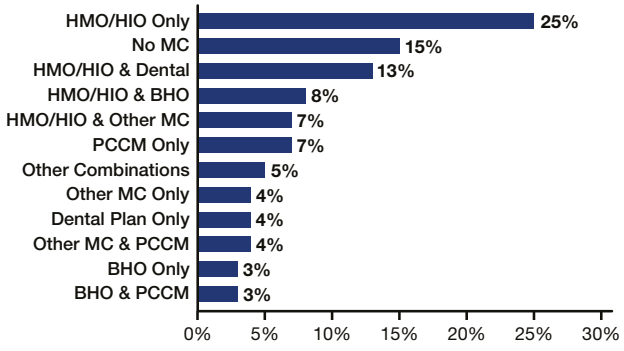
Source: Medicaid Analytic Extract 2012
Comprehensive = HMO, HIO or PACE; PHP = Prepaid Health Plan; PCCM = Primary Care Case Management
MC enrollees are assigned to only one type of managed care.

Managed Care Enrollment Combinations

Even states that use similar types of managed care plans may differ in how they combine these plans to provide Medicaid services to enrollees. For example, when behavioral health services are "carved out" of traditional HMOs, a person can be enrolled in both an HMO and a BHO. BHOs can also be stand-alone prepaid plans for people receiving primarily FFS care. Similarly, dental plans and other PHPs can be used alone or in combination with other types of managed care plans. Therefore, it is useful to examine how plans are combined across states at a specific point in time.

Figure 5.4 shows 12 of the most common combinations of managed care enrollment out of the 16 measured in Medicaid in June 2012. The percentage of full-benefit beneficiaries enrolled in HMOs

Figure 5.4
Managed Care (MC) Enrollment: Top 12 Combinations in June 2012 Among Full-Benefit Beneficiaries



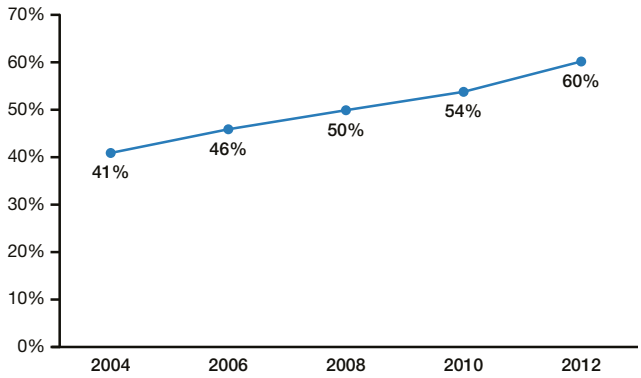
Source: Medicaid Analytic Extract 2012
HMO/HIO = Health Maintenance Organization/Health Insuring Organization; BHO = Behavioral Health Organization; PCCM = Primary Care Case Management; Other MC = plans designated as other types of prepaid health plans by the state
MC enrollees are assigned to only one managed care combination.

or HIOs only (25 percent) was highest, followed by the percentage of full-benefit beneficiaries not enrolled in managed care (15 percent). Other common managed care combinations in 2012 were HMO/HIO and Dental (13 percent), HMO/HIO and BHO (8 percent), and HMO/HIO and other managed care (7 percent). The complexity of managed care arrangements continued to grow in 2012, with 21 states enrolling more than 50 percent of beneficiaries in a combination of two or more plan types, compared to 16 in 2010. For more detail about managed care plan combinations by state, see Appendix Table A5.4.

Managed Care Enrollment Trends

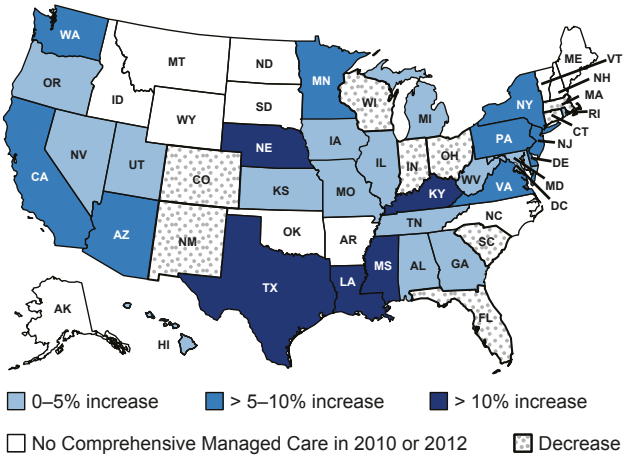
Comprehensive managed care enrollment grew steadily from 2004 to 2012, from 41 percent of beneficiaries in 2004 to about 60 percent in 2012 (Figure 5.5). The national expansion of comprehensive managed care between 2010 and 2012 was dramatic in several states but relatively stable in a majority of them (Figure 5.6). One notable exception is Connecticut, which in the period 2010–2012 completely eliminated comprehensive managed care. Several states reported notable increases in comprehensive

Figure 5.5
Percentage of All Medicaid Beneficiaries Enrolled In Comprehensive Managed Care, 2004-2012



Source: Medicaid Analytic Extract 2004-2012
Comprehensive Managed Care = HMO, HIO, or PACE

Figure 5.6
Change in Comprehensive Managed Care Enrollment, 2010–2012



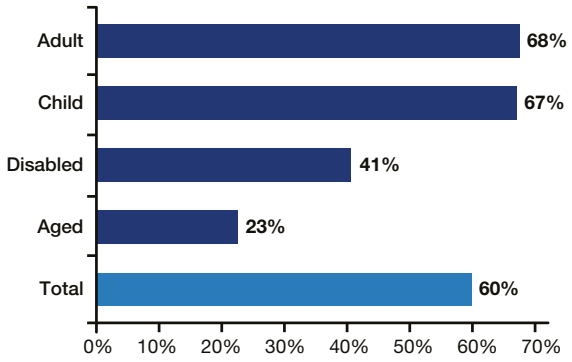
Source: Medicaid Analytic Extract 2012
Comprehensive Managed Care = HMO, HIO, or PACE

managed care coverage in this two-year period. Kentucky, Louisiana, Texas, and Nebraska had the largest expansions from 2010 to 2012. Mississippi introduced comprehensive managed care, which covered more than 20 percent of its beneficiaries in 2012 (Appendix Table A5.5).

As noted above, children and adults are more likely than the aged or individuals with disabilities to be enrolled in comprehensive managed care: in 2012, 68 percent of adults and just over 67 percent of children were enrolled in such care at some point during the year (Figure 5.7), compared with 41 percent of beneficiaries with disabilities and 23 percent of aged beneficiaries. States are generally less likely to enroll dual eligibles in comprehensive managed care, so the high rates of dual eligibility among the aged may help to explain their traditionally low managed care enrollment rates.

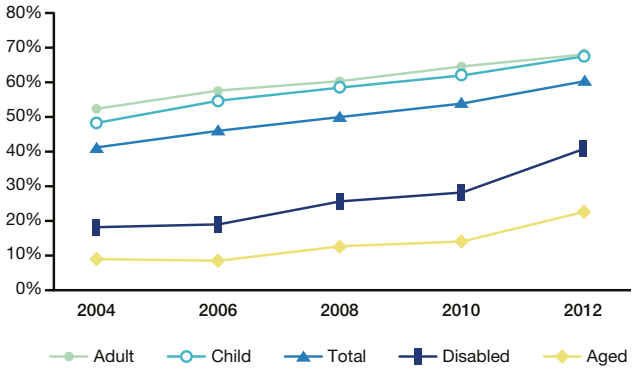
Although rates of comprehensive managed care enrollment remained relatively low among enrollees eligible on the basis of disability and age in 2012, they have increased markedly since 2010,

Figure 5.7
Percentage of Full-Benefit Beneficiaries Ever Enrolled in Comprehensive Managed Care in 2012, by Basis of Eligibility



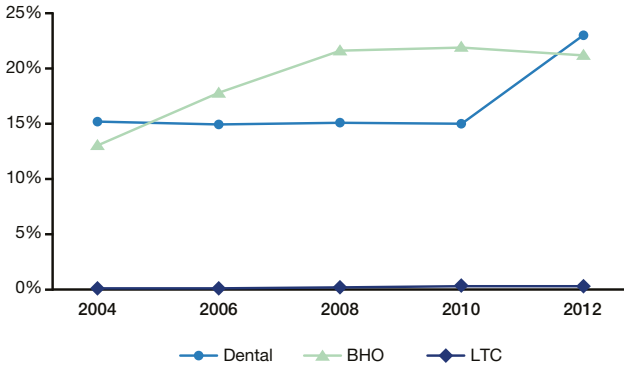
Source: Medicaid Analytic Extract 2012
Comprehensive Managed Care = HMO, HIO, or PACE

Figure 5.8
Percentage of Full-Benefit Beneficiaries Enrolled in Comprehensive Managed Care from 2004 to 2012, by Basis of Eligibility



Source: Medicaid Analytic Extract, 2004-2012
Comprehensive Managed Care = HMO, HIO, or PACE

Figure 5.9
Percentage of Full-Benefit Beneficiaries Enrolled in PHPs from 2004 to 2012



Source: Medicaid Analytic Extract 2012
PHP = Prepaid Health Plan; BHO = Behavioral Health Organization; LTC = long-term care.

and increased considerably since 2004, when such rates among these populations were 18 and 9 percent, respectively (Figure 5.8). The large change masks variation across states, however, and the drivers of the increase are clustered among a few states that expanded comprehensive managed care to large percentages of their disabled and aged beneficiaries. For example, states with high managed care penetration overall, such as Arizona, Delaware, Hawaii, Kentucky, New Jersey, Oregon, Tennessee, and Texas, enrolled more than 50 percent of aged and disabled beneficiaries in comprehensive managed care, whereas most other states maintained relatively low penetration of comprehensive managed care for these populations (see Appendix Table A5.7). Comprehensive managed care enrollment among adult and child beneficiaries increased between 2010 and 2012, but to a lesser extent compared with those eligible on the basis of age or disability (Figure 5.8).

Figure 5.9 shows enrollment trends among PHPs. Enrollment in dental PHPs was constant, at around 15 percent, between 2004 and 2010, and then increased to 23 percent from 2010 to 2012; however, this increase was driven mostly by growth in enrollment in Florida, Michigan, and Texas (Appendix Table A5.8). BHO enrollment increased until 2008 and then remained fairly level through 2012. Long-term care managed care continued to grow slightly during this period, but in 2012 it still covered less than 1 percent of beneficiaries nationally. Growth in this program has been limited to the few states (Arizona, New Mexico, New York, and Wisconsin) that opted to use this type of coverage.

Expenditures and Service Utilization for Managed Care Enrollees

As noted earlier, capitated payments reflect the set fee the state pays to a managed care organization to cover an enrollee, regardless of service use. Because PCCMs provide case management only, with all other services covered on an FFS basis, service use for PCCM enrollees is captured through FFS claims data. For comprehensive managed care and PHP enrollees, service use is captured through encounter data—records that contain utilization but not expenditure information. The availability of capitation payment and encounter data in MAX varies by state and type of managed care. MAX data users should consider the availability of these data when assessing expenditures and utilization patterns for managed care enrollees across states.

Table 5.2 shows the availability of capitation payment data in MAX 2012. For most states, if the state reported capitation payments in MSIS, the records are available for nearly all enrollees in these programs. In 2012, 40 of the 43 states with comprehensive managed care[32] submitted capitation payment records for more than 90 percent of comprehensive managed care enrollees, two states submitted payments for more than 80 percent (Maryland and Rhode Island), and one state (Vermont) did not submit any capitation data for its PACE plan. Although states may report less complete capitation data for beneficiaries in PHP and PCCM plans, most states with such plans submitted capitation data for more than 90 percent of their enrollees. For state-level detail on the availability of capitation payments and encounter data, see Appendix Table A5.9.

States reported encounter data for fewer managed care enrollees than they did capitation data (Table 5.3). Encounter data are a potential source of

[32] Arkansas, North Carolina, North Dakota, Oklahoma, South Dakota, and Vermont are listed as having comprehensive managed care; however, their programs consist of a PACE program only, with enrollment of under 1 percent.

Table 5.2
Status of Capitation Payment Reporting in 2012, by Plan Type

	Comprehensive MC	PHP	PCCM
Number of states with managed care plan type[a]	43	35	27
Number of states with capitation payments for more than 90% of enrollees	40	23	14
Number of states with capitation payments for 0% of enrollees	1	9	4

Source: Medicaid Analytic Extract 2012
Comprehensive = HMO, HIO, or PACE; PHP = Prepaid Health Plan; PCCM = Primary Care Case Management
[a] State was considered to have a managed care plan if at least one person was reported as enrolled.

Table 5.3
Availability of Encounter Data in 2012, by Plan Type

	Comprehensive MC	PHP Only or PHP and PCCM Only
Number of states with managed care plan type[a]	43	35
Number of states with encounter data for more than 75% of enrollees	27	3
Number of states with encounter data for 0% of enrollees	5	6

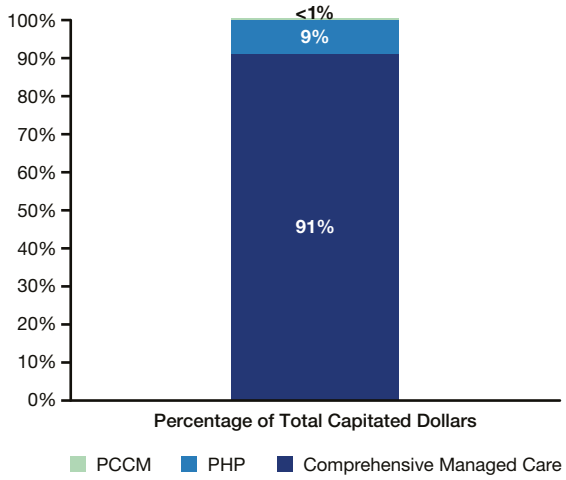
Source: Medicaid Analytic Extract 2012
Comprehensive = HMO, HIO, or PACE; PHP = Prepaid Health Plan; PCCM = Primary Care Case Management
[a] State was considered to have a managed care plan if at least one person was reported as enrolled.

information about service utilization among comprehensive managed care and PHP enrollees. More than 60 percent of the states with comprehensive managed care (27 of 43) submitted encounter data for more than 75 percent of their managed care enrollees in 2012. Only 5 of the 43 states with comprehensive managed care submitted no encounter data—a significant improvement over 2010 data, in which 12 states submitted no such data. Far fewer states submitted encounter data for beneficiaries in PHP-only or PHP- and PCCM-only plans. Only three states (New Mexico, New York, and Tennessee) submitted encounter data for more than 75 percent of beneficiaries in PHP-only or PHP- and PCCM-only plans.

Capitation Payments for Managed Care

Medicaid paid $128.6 billion in capitated payments to managed care organizations in 2012 (Appendix Table A5.10), an increase of more than 38 percent from $92.7 billion in 2010. This increase may be related to the increase in the number and percent of Medicaid beneficiaries enrolled in comprehensive managed care between 2010 and 2012 and in particular, the marked increase in comprehensive managed care enrollment among beneficiaries eligible on the basis of age or disability (Figure 5.8). In addition, the distribution of payments across plans changed somewhat from 2010; in 2012, 91 percent of the $128.6 billion was payments to comprehensive managed care plans, compared to 88 percent in 2010; almost 9 percent was for PHP plans, compared to almost 12 percent in 2010. In both years, less than 1 percent was spent on premiums for PCCM (Figure 5.10). Average monthly payments per plan enrollee in 2012 were $326 for comprehensive managed care, $33 for PHPs, and $5 for PCCM plans (Table 5.4). See Appendix Table A5.10 for state-level details.

Figure 5.10
Composition of Medicaid Capitated Payments in 2012 among Full-Benefit Beneficiaries



Source: Medicaid Analytic Extract 2012
Comprehensive = HMO, HIO, or PACE; PHP = Prepaid Health Plan; PCCM = Primary Care Case Management

There was substantial variation in average premium payments across states, which is to be expected, as individual contracts between states and plans vary in the level of services the plans cover and the populations they serve. Capitation payment amounts vary by the characteristics of covered services and the characteristics of managed care enrollees. Of all plan types, payments to comprehensive managed care plans showed the greatest variation in 2012. Capitation payments for comprehensive managed care enrollees ranged from less than $60 per person per month in Alabama to $4,368 in North Dakota. Three other states also had average payments above $3,000 per person per month (Arkansas, North Carolina, and Oklahoma) for comprehensive plans, whereas most other states' averages were below $1,000. This difference is likely because those states operate PACE plans as their comprehensive managed care.

Compared to capitation payments for comprehensive managed care enrollees, these payments for

Table 5.4
Capitated Payments per Person per Month in Managed Care in 2012, by Type of Plan: Top and Bottom 5 States

Comprehensive Managed Care		PHP		PCCM	
State	Dollars	State	Dollars	State	Dollars
North Dakota[a]	$4,368	North Dakota	$197	Oregon	$422
Arkansas[a]	$3,561	Wisconsin	$173	Indiana	$128
North Carolina[a]	$3,175	Pennsylvania	$125	Washington	$13
Oklahoma[a]	$3,096	Illinois	$110	North Carolina	$12
Tennessee	$831	Michigan	$105	South Carolina	$10
United States	**$326**	**United States**	**$33**	**United States**	**$5**
Wisconsin	$154	Georgia	$5	South Dakota	$2
Nevada	$149	Oklahoma	$4	Virginia	$2
West Virginia	$147	Nevada	$3	Iowa	$1
Indiana	$131	Texas	$2	Kansas	$1
Alabama	$60	California	$1	Florida	$1

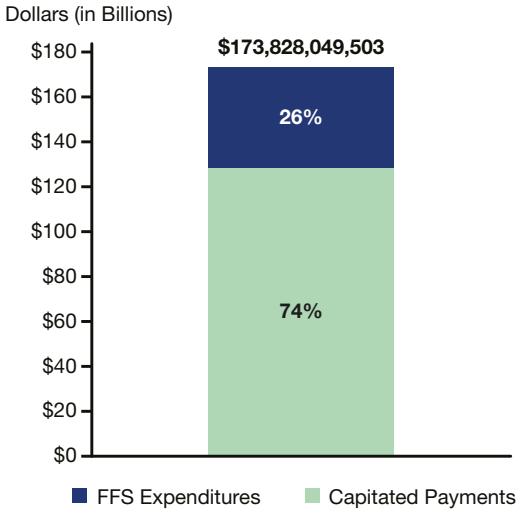
Source: Medicaid Analytic Extract 2012
[a] The only comprehensive managed care in the state is PACE, and these plans typically have higher capitation payments than HMO and HIO plans.
States that reported no capitation payments for a plan type are not included in this table.

PHP enrollees were much lower in 2012, averaging $33 per person per month nationally and ranging from only $1 in California to $197 in North Dakota. Because PCCM plans cover case management services only, capitation payments for these plans tend to be much lower; in 2012, they ranged from under $1 to $13 per person per month, with the notable exceptions of Indiana and Oregon. These two states have enhanced PCCM programs that cover a wider range of services that extend beyond basic case management services, as reflected in their average PCCM payments of $128 and $422, respectively.

FFS Expenditures Among People Enrolled in Comprehensive Managed Care

Comprehensive managed care enrollees in 2012 incurred $173.8 billion in Medicaid expenditures, compared to $119.3 billion in Medicaid in 2010—an increase of 46 percent. The vast majority (74 percent) of their expenditures were for managed care capitated payments, whereas $45 billion (26 percent) was paid on FFS expenditures (Figure 5.11). Because comprehensive managed care enrollees are excluded from most FFS expenditure summary statistics in this chartbook, we provide some information about FFS costs for these enrollees here.

Figure 5.11
Composition of Expenditures for Comprehensive Managed Care Enrollees in 2012

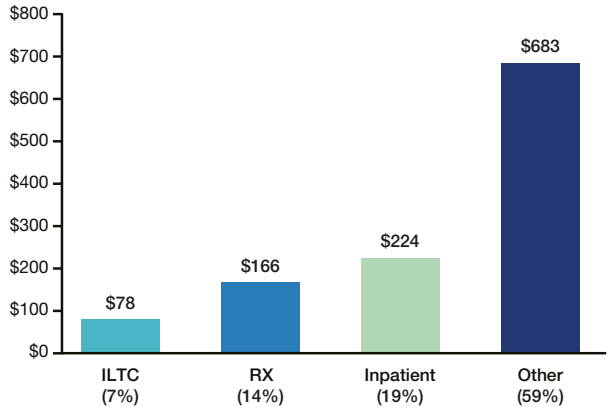


Source: Medicaid Analytic Extract 2012
Comprehensive Managed Care = HMO, HIO, or PACE

There are two key reasons why people enrolled in comprehensive managed care might incur FFS expenditures. First, for the purposes of this chartbook, comprehensive managed care enrollees are considered to be those enrolled in managed care at any point in 2012, so some Medicaid beneficiaries may be in managed care for a limited number of months during the year but use health care services covered by FFS during other months. Second, comprehensive managed care plans do not typically cover all Medicaid services. For example, dental care, behavioral health care, long-term care, and other services may not be included in the comprehensive plan's capitated rate and may instead be covered on an FFS basis.

On average, $1,151 was spent in FFS payments for each comprehensive managed care enrollee in 2012 (Appendix Table A5.11). The services with the highest FFS expenditures among comprehensive managed care enrollees included those submitted in the Other services claims file in MAX, which include HCBS, ambulatory services, and wraparound services. These services accounted for almost 60 percent ($683) of all FFS expenditures among comprehensive managed care enrollees (Figure 5.12). Another 19 percent ($224) of their FFS costs were for inpatient care, 14 percent ($166) for prescription drugs, and 7 percent ($78) for ILTC. This distribution changed from 2010, when prescription drug averages were higher than inpatient averages ($288 and $209, respectively) (Borck et al. 2014). The variation in FFS expenditures per comprehensive managed care enrollee is very wide across states; users wishing to understand these patterns should perform more granular, state-specific analyses because covered services vary greatly across states and subpopulations.

Figure 5.12
Per-Enrollee FFS Expenditures Among Comprehensive Managed Care Enrollees in 2012, by Type of Service

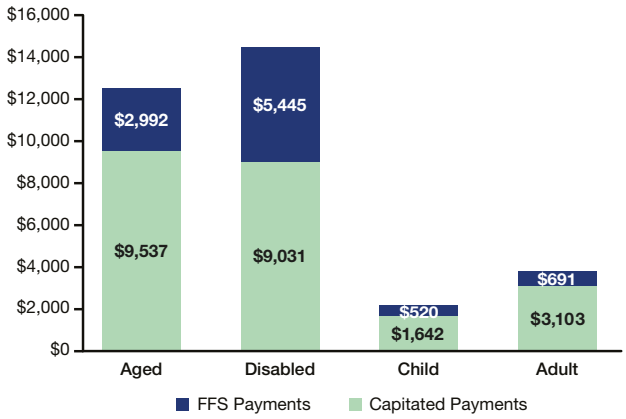


Source: Medicaid Analytic Extract 2012
Comprehensive = HMO, HIO, or PACE; ILTC = institutional long-term care; RX = prescription drugs

Average FFS expenditures per comprehensive managed care enrollee varied by eligibility group, which is in line with the expectations noted earlier. Although fewer full-benefit aged and people with disabilities were enrolled in comprehensive managed care than children or adults, their costs per enrollee were substantially higher for both capitated payments and FFS expenditures. In 2012, the average capitated payments per enrollee were highest for aged enrollees, followed by those with disabilities, adult enrollees, and children. The average FFS expenditures per comprehensive managed care enrollee were highest for enrollees with disabilities, followed by aged enrollees, adult enrollees, and children (Figure 5.13).

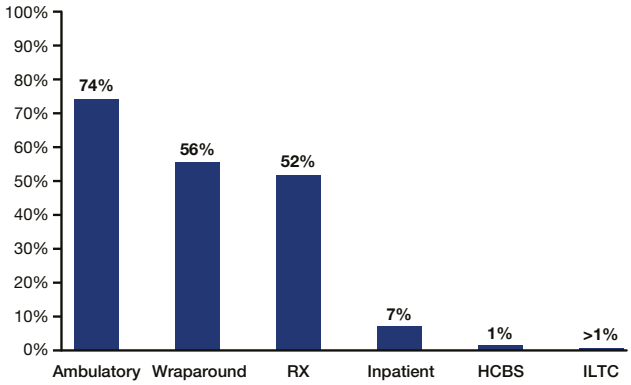
The substantially greater FFS costs among the aged and people with disabilities are likely because most states do not include long-term care and other high-cost services in the set of services covered by capitated plans, preferring instead to use other arrangements for payment.

Figure 5.13
Average FFS Expenditures and Capitated Payments Among Full-Benefit Comprehensive Managed Care Enrollees in 2012, by Basis of Eligibility



Source: Medicaid Analytic Extract 2012
Comprehensive Managed Care = HMO, HIO, or PACE

Figure 5.14
Percentage of Comprehensive Managed Care Enrollees with Encounter Data in 2012, by Service Class



Source: Medicaid Analytic Extract 2012
Note: Includes 36 states that enrolled at least 5 percent of full-benefit Medicaid beneficiaries in comprehensive managed care
Comprehensive managed care = HMO, HIO, or PACE; ILTC = institutional long-term care; HCBS = home- and community-based services

Service Utilization for Comprehensive Managed Care Enrollees

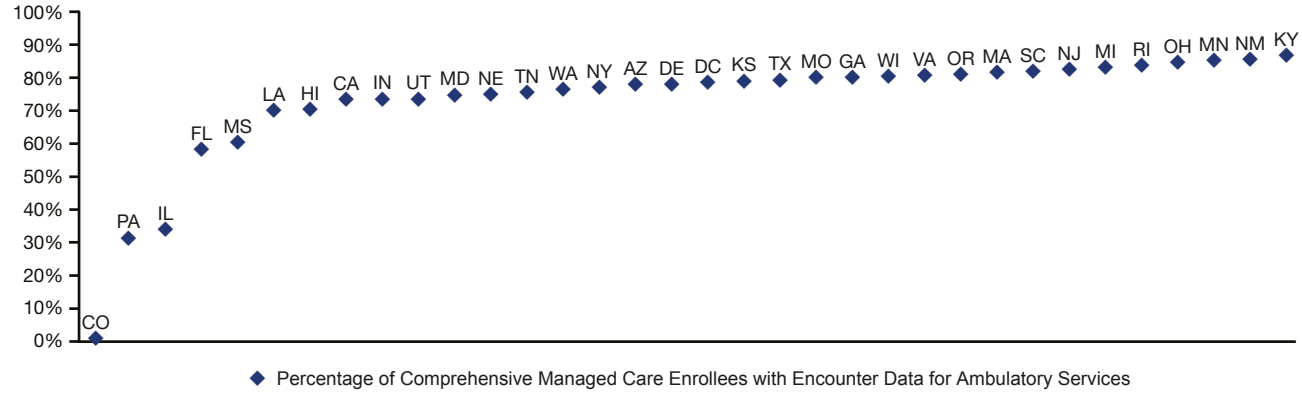
Encounter data provide insights into the services that Medicaid beneficiaries receive in exchange for capitation payments. In 2012, the services most commonly reported in encounter data for comprehensive managed care enrollees were those in the physician and other ambulatory service class (ambulatory services), followed by the wraparound and other services class (wraparound), and prescription drugs (RX) (Figure 5.14). All states with encounter records reported particularly low rates of encounters for ILTC. Most also reported low rates for HCBS use, with the notable exception of Minnesota, which incorporates MLTSS into its comprehensive managed care contracts. Because of the relatively low rate of individuals in comprehensive managed care who are aged or have disabilities, and because ILTC and HCBS are typically not covered under comprehensive managed care contracts, low rates of encounters for these services are generally expected.

There was a notable increase in states that reported encounters for ambulatory services, wraparound services, and RX in 2012 (Figure 5.14) compared with 2010 (see Borck et al. 2014). Appendix Tables A5.13 and A5.14 through A5.17 provide state-level encounter data reporting by service class and eligibility group, respectively. MAX data users interested in studying encounter data for a subpopulation of enrollees may want to replicate this analysis for the specific subpopulations of interest.

Ambulatory services were the most commonly reported services in encounter data in 2012, with 74 percent of comprehensive managed care enrollees reported with such an encounter. The percentage varied from a low of about 1 percent in Colorado to about 87 percent in Kentucky (Figure 5.15). One possible explanation of this variance is that the encounter data some states submit to MSIS or T-MSIS are incomplete and do not accurately reflect utilization under managed care arrangements. Though a few states reported very low rates of ambulatory encounters, most of those reporting

Figure 5.15

Percentage of Comprehensive Managed Care Enrollees with Encounter Data for Ambulatory Services in 2012



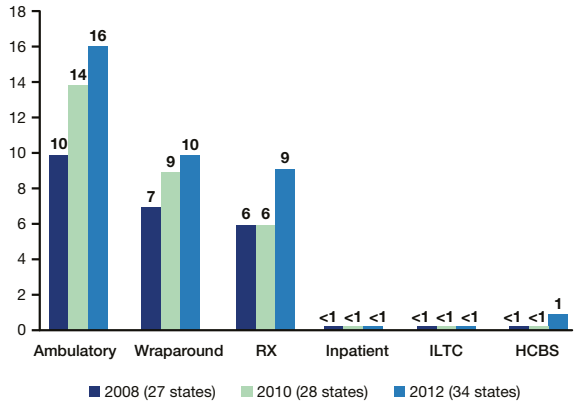
Source: Medicaid Analytic Extract 2012
Note: Includes 34 states that enrolled at least 5 percent of full-benefit beneficiaries in comprehensive managed care and reported encounter data for them. Comprehensive managed care = HMO, HIO, or PACE

these data reported encounters for at least 60 percent of comprehensive managed care enrollees, which is in line with reported utilization of many ambulatory services provided on an FFS basis (Appendix Tables A5.13 and A4.5).

Figure 5.16 highlights the reporting of average encounters per person-year of comprehensive managed care enrollment from 2008 to 2012 for commonly reported services in encounter data. Between 2008 and 2012, the average number of encounters per person-year of comprehensive managed care enrollment increased from 10 to 16 for ambulatory services, 7 to 10 for wraparound services, and 6 to 9 for prescription drugs, whereas inpatient, ILTC, and HCBS stayed fairly constant at or below 1 in all three years. (See Appendix Tables A5.20 through A5.22 for average numbers of encounters by state in 2012, and Appendix Tables A5.23 and A5.24 for state-level changes in the percentage of comprehensive managed care enrollees reporting any encounter data from 2004 to 2012.)

Figure 5.16

Average Number of Encounters per Person-Year of Comprehensive Managed Care Enrollment in 2008, 2010, and 2012, by Service Class



Source: Medicaid Analytic Extract 2012

Note: Includes states that enrolled at least 5 percent of full-benefit beneficiaries in comprehensive managed care and reported encounter data for them.

Comprehensive Managed Care = HMO, HIO, or PACE; ILTC = institutional long-term care; HCBS = home- and community-based services

6. Dual Eligibles

As described in previous chapters, dual eligibles ("duals") include the aged and individuals with disabilities who qualify for both Medicare and Medicaid coverage. Duals are among the most vulnerable people served by Medicare and Medicaid, and among the costliest users of health care in the United States (Hayes et al. 2016). Average health care costs for duals are more than double those of other Medicare beneficiaries (MedPAC 2016), and annualized Medicaid costs for FFS duals are almost seven times higher than for low-income children covered by FFS Medicaid (Appendix Tables A3.6 and A6.5). The availability of monthly Medicare enrollment information in the MAX data system enables researchers to conduct in-depth analyses of Medicaid enrollment rates and service use among this costly subgroup of beneficiaries.

Duals must meet the eligibility requirements of both Medicare and Medicaid. Generally, Medicare provides basic health insurance coverage for most aged and people with disabilities under age 65 who have received Social Security or Railroad Retirement disability benefits for at least two years. Medicare benefits are provided to these groups regardless of their income or assets. There are substantial out-of-pocket costs for Medicare beneficiaries, however, including premiums and cost-sharing payments as well as some uncovered services—most notably for long-term care. As a result, many low-income Medicare beneficiaries who are aged or with disabilities get help with these expenses when they enroll in the Medicaid program. In contrast to Medicare, Medicaid is a means-tested program. The aged and people with disabilities can qualify for Medicaid benefits only if they meet federal and state income and resource criteria.

Most duals qualify for full Medicaid benefits. For these beneficiaries, Medicare is the primary payer for services covered by both programs. Services covered by Medicare Part A include inpatient hospital stays, hospice care, skilled nursing facilities, and some care by home health agencies. Medicare Part B enrollment is voluntary and requires a premium, which Medicaid covers for duals. Among other things, Part B covers physician services, inpatient and outpatient medical services, laboratory services, and some medical equipment. Since 2006, Medicare Part D has covered prescription drugs for duals.[33] Medicaid, on the other hand, provides wraparound coverage for services not covered by Medicare, such as long-term care, home health services, and HCBS.

For services covered only by Medicaid, Medicaid claim records in MAX should reflect all services delivered, and Medicaid payment amounts can be

[33] Medicare Part D is optional for most Medicare beneficiaries, but full-benefit dual beneficiaries must either enroll in a Part D plan or be automatically enrolled into one. Medicare covers Part D premiums and deductibles for duals. One exception is that Medicaid may pay for a prescription if the drug is not covered by Medicare Part D but is covered by the state Medicaid program.

interpreted like those for other beneficiaries. For services covered by both Medicaid and Medicare, Medicaid payment amounts in MAX claim records reflect only the coinsurance and deductible amounts that Medicaid paid after Medicare made payments up to its coverage limits.[34] For this reason, expenditures in MAX for Medicare-covered services provided to duals will substantially understate the total (Medicare plus Medicaid) cost of care for those services.

A smaller population of restricted-benefit duals includes Medicare beneficiaries who do not receive the full range of Medicaid benefits. Generally, duals who qualify only for restricted Medicaid benefits have higher income and/or assets than duals who qualify for full Medicaid benefits. Services such as long-term care, which are covered only by Medicaid, are not covered for restricted-benefit duals. For some, such as QMB-only duals, Medicaid pays Medicare premiums as well as any coinsurance and deductibles for Medicare services. For certain other restricted-benefit duals, Medicaid covers only Medicare premiums, including Part A premiums for Qualified Working Disabled Individuals (QDWI) and Part B premiums for SLMB-only and QI duals. Table 6.1 lists the categories of full-benefit and restricted-benefit duals, eligibility requirements, and the types of Medicaid benefits received.

The unique characteristics of dual beneficiaries and their MAX records should be kept in mind when interpreting the summary enrollment, Medicaid service utilization, and expenditure statistics presented in this chapter. The MAX 2012 anomaly tables provide additional detail regarding the completeness and limitations of MAX data for duals (see Chapter 1 for the web link).

Enrollment Characteristics of Duals

There were nearly 11 million duals in 2012—nearly 15 percent of all Medicaid beneficiaries. There was significant variability across states in the percentage of beneficiaries who were duals in 2012, ranging from 10 percent in Colorado and Utah to 27 percent in Maine (Table 6.2). The proportion of female duals (61 percent) was similar to that in the overall Medicaid population (58 percent) (Appendix Tables A6.1 and A2.4).

Medicaid beneficiaries who were aged were more likely than those with disabilities to be duals in 2012 (Table 6.2).[35] Nationally, about 93 percent of aged and 43 percent of Medicaid beneficiaries eligible on the basis of disability were dually enrolled in Medicare during the year. There was more variation in dual enrollment among beneficiaries with disabilities than among aged beneficiaries. In all but four states, at least 90 percent of aged beneficiaries were dually enrolled in Medicare and Medicaid in 2012. The percentage of aged who were duals was lowest in Massachusetts (85 percent) (Figure 6.1). Overall, Medicare eligibility is very high among aged individuals, which is to be expected, given that aged people who worked (or had a spouse who worked) and paid Medicare taxes for at least 10 years are generally eligible for Medicare.

The percentage of beneficiaries eligible on the basis of disability who were dually enrolled in Medicare and Medicaid varied more—from 22 percent

[34] If Medicare has already paid more than the coverage limit specified in Medicaid fee schedules, then Medicaid's contribution is zero.

[35] Nationally, around 211,000 dual eligibles (less than 2 percent of all duals) were eligible for Medicaid on the basis of being a child or an adult rather than being aged or having a disability.

Table 6.1
Categories of Dual Eligibles and Benefits Received

Category	Eligibility Provisions	Medicaid Benefits
Full-Benefit Duals		
Qualified Medicare Beneficiaries with full Medicaid (QMB Plus)	Medicare beneficiaries with income below **100** percent of the federal poverty level (FPL) and assets below **200** percent of the asset limit for Social Security Insurance (SSI) eligibility; eligible for full Medicaid benefits.	Medicare Part A and B premiums and cost-sharing payments (deductibles and/or coinsurance) plus full Medicaid benefits
Specified Low-Income Medicare Beneficiaries with full Medicaid (Plus)	Medicare beneficiaries with income between **100** percent and **120** percent of the poverty level and assets below **200** percent of the asset limit for Social Security Insurance (SSI) eligibility; eligible for full Medicaid benefits.	Medicare Part B premiums plus full Medicaid benefits
Restricted-Benefit Duals		
Qualified Medicare Beneficiaries without other Medicaid (QMB Only)	Medicare beneficiaries with income below **100** percent of the federal poverty level (FPL) and assets below **200** percent of the asset limit for Social Security Insurance (SSI) eligibility; not otherwise eligible for full Medicaid benefits.	Medicare Part A and B premiums and cost-sharing payments (deductibles and/or coinsurance)
Specified Low-Income Medicare Beneficiaries (SLMB Only)	Medicare beneficiaries with income between **100** percent and **120** percent of the poverty level and assets below **200** percent of the asset limit for Social Security Insurance (SSI) eligibility; not otherwise eligible for full Medicaid benefits.	Medicare Part B Premiums only
Qualifying Individuals 1 (QI1s)	Medicare beneficiaries with income between **120** percent and **135** percent of the poverty level; not otherwise eligible for full Medicaid benefits.	Medicare Part B Premiums only
Qualifying Individuals (2) (QI-2s)	Medicare beneficiaries with income between **135** percent and **175** percent of the poverty level; not otherwise eligible for full Medicaid benefits.	A portion of Medicare Part B Premiums only
Qualified Disabled and Working Individuals (QDWI)[a]	Medicare beneficiaries with income of **200** percent or less of the poverty level; not otherwise eligible for full Medicaid benefits.	Medicare Part A Premiums only

[a]These individuals lost their Medicare Part A benefits due to their return to work but are eligible to purchase Medicare Part A benefits.

in Colorado[36] to 62 percent in Connecticut (Figure 6.2). Variation in rates of dual enrollment can be attributed to differences in state eligibility criteria. For example, Vermont's high rate can be attributed partially to an 1115 waiver program that extends Medicaid coverage to Medicare beneficiaries with household income up to 200 percent of the FPL. In other states, these Medicare beneficiaries are not eligible for Medicaid benefits.

Of all duals, about 53 percent were classified as aged, whereas 45 percent were eligible for Medicaid based on a disability. At first, this composition of duals may seem unexpected because 93 percent of aged Medicaid beneficiaries were duals, compared to

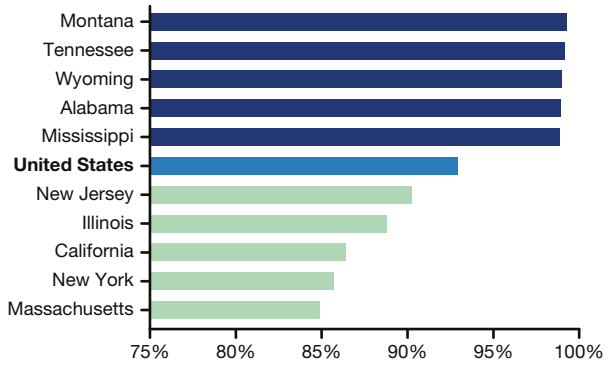
[36] Colorado's percentage of beneficiaries with disabilities who are duals decreased markedly from 2010 to 2012 (from 37 percent to 22 percent) and may be related to the state's transition from MSIS to T-MSIS; Colorado's dual coding may have been unreliable in 2012. See the 2012 MAX anomaly tables for more details.

Table 6.2
Dual Enrollment in Medicare and Medicaid in 2012, by Basis of Eligibility

	Percentage of All Medicaid Beneficiaries Who Were Duals			Number of Dual Eligibles			Percentage of Dual Eligibles	
	Total	Aged	Disabled	Total	Aged	Disabled	Aged	Disabled
United States	**14.8**	**92.9**	**43.4**	**10,859,324**	**5,772,538**	**4,875,534**	**53.2**	**44.9**
Alabama	19.7	98.9	47.6	218,551	97,957	119,705	44.8	54.8
Alaska	11.1	91.4	45.4	17,071	7,774	9,170	45.5	53.7
Arizona	10.7	92.3	44.9	183,649	90,789	83,826	49.4	45.6
Arkansas	17.5	98.0	41.6	137,631	70,506	66,288	51.2	48.2
California	11.4	86.4	44.5	1,410,607	803,907	577,568	57.0	40.9
Colorado	10.1	90.7	22.1	82,378	47,351	17,146	57.5	20.8
Connecticut	20.1	95.0	61.7	166,734	110,316	50,069	66.2	30.0
Delaware	11.4	95.4	47.8	29,377	14,834	13,232	50.5	45.0
District of Columbia	12.7	90.9	38.5	31,989	13,456	17,275	42.1	54.0
Florida	18.5	93.1	44.3	782,280	466,131	311,446	59.6	39.8
Georgia	15.9	96.4	43.7	316,948	154,021	161,788	48.6	51.0
Hawaii	11.8	94.0	35.3	38,828	25,029	12,941	64.5	33.3
Idaho	13.8	96.3	46.2	41,598	19,734	21,659	47.4	52.1
Illinois	12.3	88.8	53.6	389,496	153,439	215,075	39.4	55.2
Indiana	15.4	95.9	49.3	201,186	94,576	105,332	47.0	52.4
Iowa	14.1	97.6	52.2	91,564	43,543	46,297	47.6	50.6
Kansas	17.5	95.2	47.3	76,130	36,843	38,948	48.4	51.2
Kentucky	19.6	97.9	39.9	193,199	96,945	95,511	50.2	49.4
Louisiana	14.9	97.5	37.9	210,369	116,185	92,669	55.2	44.1
Maine	26.8	98.3	54.9	103,191	59,973	38,069	58.1	36.9
Maryland	11.3	91.9	36.5	138,268	76,316	54,336	55.2	39.3
Massachusetts	18.5	84.9	34.6	294,618	155,762	135,990	52.9	46.2
Michigan	13.9	95.8	42.2	318,901	146,557	165,002	46.0	51.7
Minnesota	14.7	95.3	49.9	168,991	92,683	71,369	54.8	42.2
Mississippi	21.3	98.9	43.8	166,220	89,344	76,617	53.8	46.1
Missouri	16.1	94.4	45.1	192,240	90,515	100,802	47.1	52.4
Montana	18.0	99.2	46.7	26,071	13,052	11,691	50.1	44.8
Nebraska	15.3	94.3	54.0	47,071	23,581	23,273	50.1	49.4
Nevada	13.5	97.0	44.3	55,435	30,435	24,605	54.9	44.4
New Hampshire	19.9	92.1	59.4	35,880	15,398	19,494	42.9	54.3
New Jersey	15.7	90.2	45.8	227,866	124,094	100,594	54.5	44.1
New Mexico	11.7	98.5	48.7	77,433	34,854	40,692	45.0	52.6
New York	14.5	85.7	45.9	876,302	475,219	382,876	54.2	43.7
North Carolina	17.0	97.9	44.7	346,338	185,736	158,334	53.6	45.7
North Dakota	18.2	97.7	56.0	16,340	9,163	7,120	56.1	43.6
Ohio	13.7	92.3	45.2	371,366	181,586	170,666	48.9	46.0
Oklahoma	12.3	96.4	45.7	127,209	65,277	60,336	51.3	47.4
Oregon	15.7	97.4	48.1	118,735	63,743	53,657	53.7	45.2
Pennsylvania	17.8	95.1	30.0	455,972	241,763	212,385	53.0	46.6
Rhode Island	19.4	94.7	44.8	48,170	21,490	21,428	44.6	44.5
South Carolina	14.4	98.2	45.5	163,240	77,146	83,183	47.3	51.0
South Dakota	15.2	98.5	50.8	22,550	10,980	11,443	48.7	50.7
Tennessee	18.9	99.1	52.1	300,278	129,434	165,517	43.1	55.1
Texas	14.1	96.8	36.0	741,302	474,360	264,992	64.0	35.7
Utah	10.4	96.2	48.0	40,480	15,827	24,250	39.1	59.9
Vermont	18.6	98.7	57.7	38,073	22,491	15,083	59.1	39.6
Virginia	17.0	95.0	48.2	199,061	98,232	98,181	49.3	49.3
Washington	13.4	97.2	38.4	190,022	101,962	86,932	53.7	45.7
West Virginia	20.5	98.6	36.4	88,913	43,145	45,395	48.5	51.1
Wisconsin	17.4	98.5	48.7	231,103	132,999	89,316	57.5	38.6
Wyoming	13.6	99.0	48.5	12,100	6,085	5,961	50.3	49.3

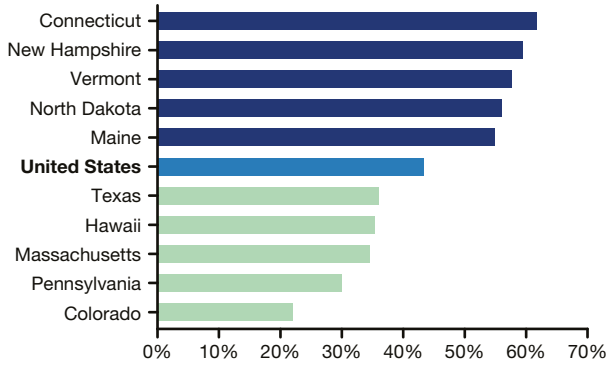
Source: Medicaid Analytic Extract 2012
Dual = enrolled in both Medicare and Medicaid in at least one month in 2012
Note: Nationally, about 211,000 children and adults are reported as dual eligibles. This enrollment is very low across states and is not reported at the state level.

Figure 6.1
Percentage of Aged Medicaid Beneficiaries Who Were Duals in 2012: Top and Bottom 5 States



Source: Medicaid Analytic Extract 2012
Dual = ever enrolled in both Medicare and Medicaid in 2012

Figure 6.2
Percentage of Disabled Medicaid Beneficiaries Who Were Duals in 2012: Top and Bottom 5 States

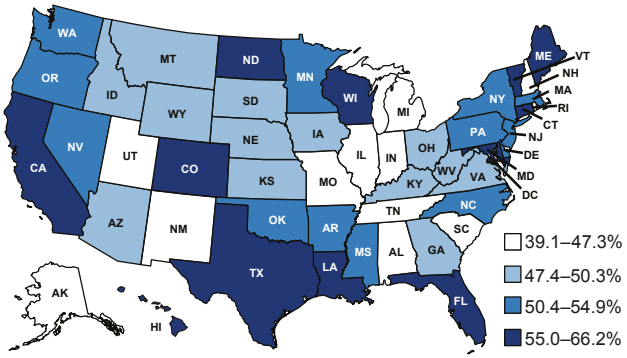


Source: Medicaid Analytic Extract 2012
Dual = ever enrolled in both Medicare and Medicaid in 2012

about 43 percent with disabilities. However, beneficiaries eligible on the basis of disability represented a larger share of Medicaid beneficiaries in 2012 (15 percent, compared with 9 percent for the aged), so the composition of duals is weighted only slightly toward the aged.

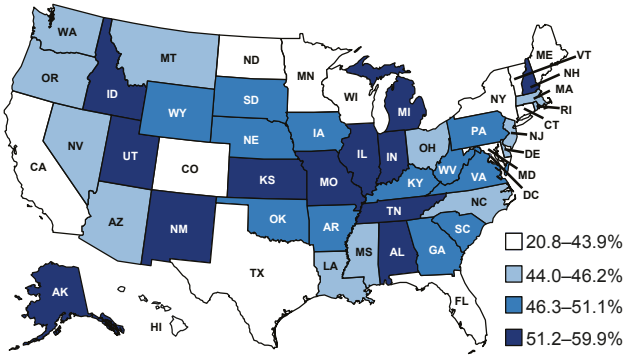
The percentage of duals who were aged or had disabilities varied significantly across states (Figure 6.3, Figure 6.4, and Table 6.2). In Connecticut, Hawaii, and Texas, about two-thirds of duals were aged in 2012. In Illinois and Utah, however, less than 40 percent were aged. Generally, states with a high percentage of duals who are aged have a relatively low percentage with disabilities. Utah had the highest percentage of duals with disabilities, at about 60 percent in 2012, whereas in Colorado, just 21 percent of duals had disabilities. Because the criteria for Medicare enrollment are the same in all states, these differences in the makeup of the dual population by state can be attributed to differences in the composition of state populations and state Medicaid eligibility policy.

Figure 6.3
Percentage of Duals (in Quartiles) Who Were Aged in 2012



Source: Medicaid Analytic Extract 2012
Dual = ever enrolled in both Medicare and Medicaid in 2012

Figure 6.4
Percentage of Duals (in Quartiles) Who Were Disabled in 2012



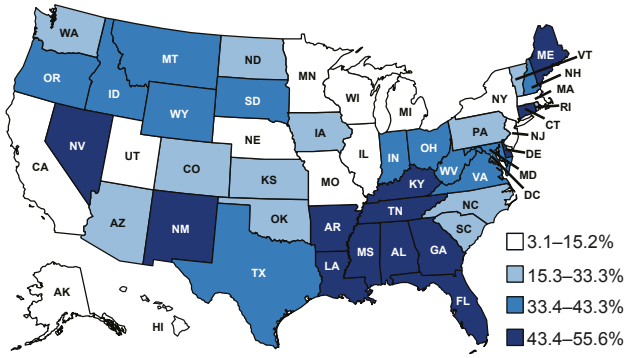
Source: Medicaid Analytic Extract 2012
Dual = ever enrolled in both Medicare and Medicaid in 2012

Restricted-Benefit Duals

As discussed in Chapter 2, duals may be eligible for full or restricted Medicaid benefits. A person's dual eligibility status can change, primarily as a result of changes in income. In MAX 2012, duals were assigned an annual code based on their status during their last month of eligibility in 2012, so that each dual was assigned to only one dual eligibility group. About 27 percent of all duals qualified for only restricted Medicaid benefits during their last month of dual eligibility in 2012. Some of these beneficiaries may have been eligible for full benefits at some point during the year. When this group of duals—those who qualified for only restricted benefits in their last month of dual eligibility in 2012—was limited to those who qualified for only restricted benefits in 2012, their Medicaid expenditures were generally quite low because they received only premium and cost-sharing assistance. In 2012, average Medicaid expenditures for restricted-benefit duals were $813 per person—much lower than the average Medicaid expenditures of $14,678 per dual who received full benefits for at least one month during the year (Appendix Table A6.2).

The percentage of duals that had restricted benefits in 2012 ranged from 3 percent in Alaska and California to 56 percent in Alabama (Figure 6.5 and Appendix Table A6.2).[37] In 29 states, more than one-quarter of duals had restricted benefits (Appendix Table A6.2). Several factors could account for this variability across states. A low percentage of restricted-benefit duals may reflect a state's ability and willingness to provide full benefits to a greater percentage of low-income aged beneficiaries and those with disabilities. For example, states with poverty-related coverage expansions for people who are aged or have disabilities and had incomes up to 100 percent of the FPL generally had fewer restricted-benefit duals in 2012.[38]

Figure 6.5
Percentage of Dual Eligibles (in Quartiles) with Restricted Medicaid Benefits in 2012



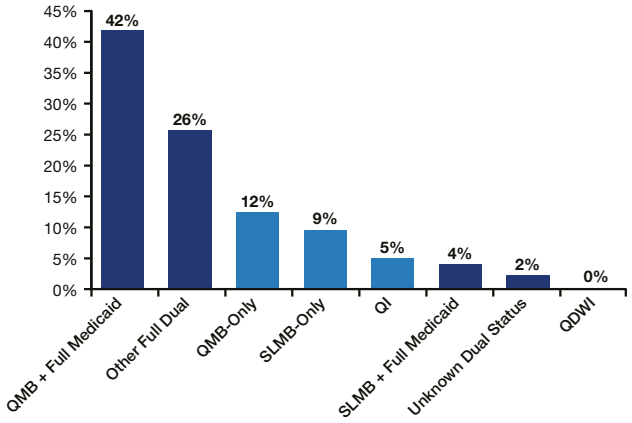
Source: Medicaid Analytic Extract 2012
Dual Status based on last month of dual eligibility. Dual = ever enrolled in both Medicare and Medicaid in at least one month in 2012. Restricted benefit = duals with benefits limited to Medicare cost-sharing.

As described above, there are four primary categories of duals: QMB, SLMB, QI, and QDWI. In general, these categories are distinguished by income, with QMBs having the lowest incomes and QIs and QDWIs the highest. Because state income eligibility criteria for aged beneficiaries and those eligible on the basis of disability vary, a dual in each of these categories could qualify for cost-sharing only (restricted-benefits dual) or cost-sharing plus full Medicaid eligibility (full-benefit dual), depending on state of residence. Nationally, 42 percent of all duals were QMB duals eligible for full Medicaid benefits (Figure 6.6). The next largest group, about 26 percent of duals, was "other" full-benefit duals, a designation indicating that a dual receives full benefits but the state cannot identify the dual category (QMB or SLMB). A smaller percentage were QMB duals eligible only for restricted Medicaid benefits (12 percent); SLMB duals eligible only for restricted Medicaid benefits (9 percent); QIs (5 percent), most of whom received only restricted benefits; and SLMB duals eligible for full Medicaid benefits (4 percent). Nationally, states reported a combined total of fewer than 100 QDWIs in 2012. The relatively large percentage of duals with

[37] Restricted-benefit duals were identified based on the annual dual code in MAX 2012.

[38] A list of states with poverty-related expansions for the aged and people with disabilities is in Chapter 1, Table 1.1.

Figure 6.6
Dual Eligible Enrollment by Type of Dual Status in 2012



Source: Medicaid Analytic Extract 2012
Note: Dual Status based on last month of dual eligibility. QI = Qualified Individual, QMB = Qualified Medicare Beneficiary, SLMB = Specified Low-Income Medicare Beneficiary, QDWI = Qualified Disabled Working Individual. Lighter blue bars indicate restricted-benefit dual eligibles while darker blue bars indicate full-benefit dual eligibles.

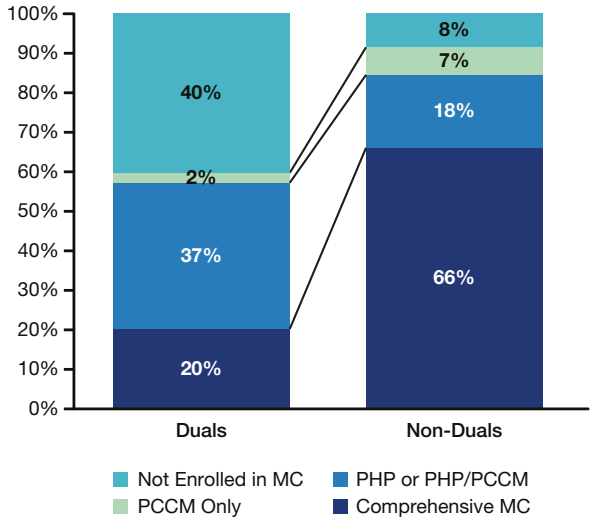
"other" or "unknown" dual status calls for caution when disaggregating the duals into the different types for analysis, because the exact status of many duals (more than one-quarter) is unknown. (See Appendix Table A6.3 for state-level enrollment by dual type.)

Because restricted-benefit duals are eligible for Medicaid reimbursement of Medicare premiums and/or coinsurance and deductibles for Medicare services only, the remainder of this chapter focuses on Medicaid managed care enrollment and FFS expenditures and service utilization among full-benefit duals only.

Managed Care Enrollment Among Full-Benefit Duals

Nationally, duals were less likely than non-duals to be enrolled in Medicaid managed care in 2012. About 60 percent of full-benefit duals were enrolled in managed care of some kind in 2012, compared to about 92 percent of full-benefit non-duals (Figure 6.7 and Appendix Table A6.4).[39] Lower rates of managed care participation among duals relative to non-duals could reflect the difficulty either of establishing risk-adjusted capitation rates for duals or coordinating care with Medicare coverage.

Figure 6.7
A Comparison of Managed Care (MC) Enrollment Between Full-Benefit Dual and Non-Dual Medicaid Beneficiaries in 2012



Source: Medicaid Analytic Extract 2012
Dual = Ever enrolled in both Medicare and Medicaid in 2012
PCCM = primary care case management
PHP = prepaid health plan
Comprehensive = HMO, HIO, or PACE

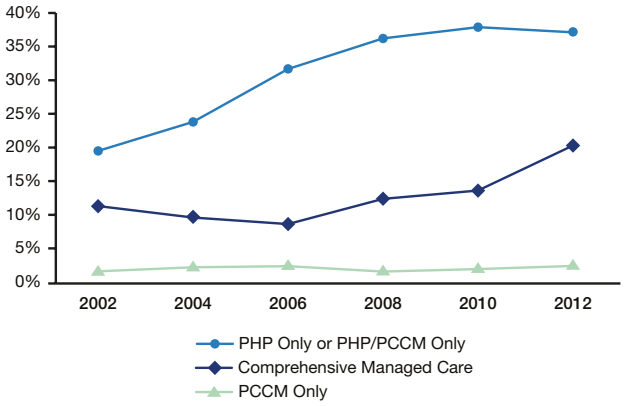
Nationally, comprehensive managed care enrollment (HMO, HIO, or PACE) was relatively low among duals, with only 20 percent of full-benefit duals enrolled in these plans compared to 66 percent of full-benefit non-duals. In 30 states, less than 5 percent were enrolled in comprehensive managed care in 2012 (Appendix Table A6.4). However, relatively high rates of comprehensive managed care enrollment among full-benefit duals in a small number of states drove the national comprehensive managed care

[39] Restricted-benefit duals are not included in analysis of managed care enrollment because they receive such limited benefits that they are generally ineligible for managed care coverage.

enrollment rate up to 20 percent (only 10 states had comprehensive managed care enrollment rates above the national rate) (Figure 6.7). In particular, in Hawaii and Tennessee, all but 1 percent of full-benefit duals were enrolled in a comprehensive managed care plan in 2012. Both states operate statewide comprehensive managed care programs with mandatory enrollment for all population groups, including duals. In both states, these programs incorporate MLTSS.

Though comprehensive managed care enrollment remained relatively low among duals compared to non-duals in 2012, the rate has nearly doubled over the last 10 years, from 11 percent in 2002 to 20 percent in 2012 (Figure 6.8). Between 2010 and 2012 alone, rates of full-benefit duals enrolled in comprehensive managed care increased markedly, from 14 percent to 20 percent. This rate may continue to grow in subsequent years as CMS initiatives, such as the Financial Alignment Initiative, which supports states in integrating Medicare and Medicaid care for duals (including through a capitated model option), pave the way for states to serve more duals through comprehensive managed care plans (Kaiser Family Foundation 2017).

Figure 6.8
Percentage of full-benefit dual eligibles ever-enrolled in managed care, by type of plan: 2002–2012



Source: Medicaid Analytic Extract 2002–2012
Dual = ever enrolled in both Medicare and Medicaid in 2010.
Duals with managed care enrollment are assigned to only one of the three groups.
Comprehensive managed care = HMO, HIO, or PACE

Although rates of comprehensive managed care enrollment among duals generally were relatively low, 39 states and the District of Columbia enrolled at least some full-benefit duals in other forms of managed care in 2012—most commonly PHPs and PCCMs. In several states, nearly all duals were enrolled in PHPs (Table 6.3). Because most PHP

Table 6.3
Percentage of Full-Benefit Duals Enrolled in Medicaid Managed Care in 2012, by Type of Plan, Top 10 States

Ever Enrolled in Comprehensive Managed Care		Enrolled in PHP Only or PHP/PCCM Only		Enrolled in PCCM Only	
State	Percentage	State	Percentage	State	Percentage
Hawaii	99.5	Mississippi	97.8	Maine	97.0
Tennessee	98.9	Iowa	97.2	North Carolina	38.0
Delaware	90.0	South Carolina	96.9	Vermont	8.0
New Jersey	78.1	Washington	96.3	Alabama	4.4
Arizona	72.9	Nevada	95.2	Montana	3.8
Kentucky	69.0	Louisiana	93.8	Illinois	3.8
Oregon	59.5	Oklahoma	93.5	South Dakota	2.4
Minnesota	56.7	Georgia	93.0	Iowa	2.2
Texas	51.7	Idaho	91.5	Indiana	1.3
California	29.7	District of Columbia	89.1	Florida	1.1
United States	**20.3**	**United States**	**37.1**	**United States**	**2.4**

Source: Medicaid Analytic Extract 2012
Duals with managed care enrollment are assigned to only one of the three managed care groups.
Comprehensive Managed Care = HMO, HIO, or PACE

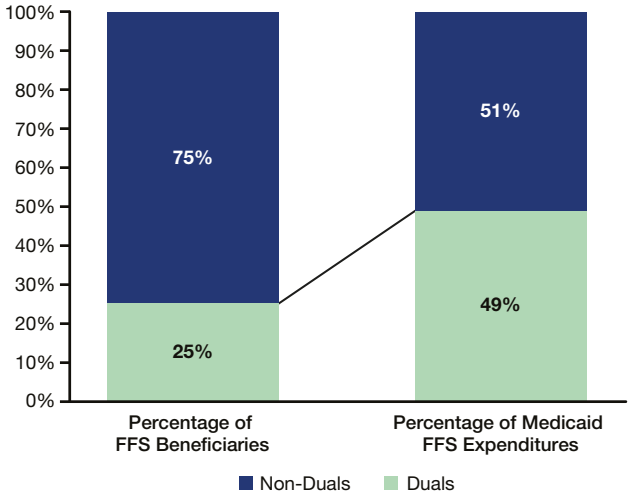
plans cover only a limited set of services, dual beneficiaries in these states typically received targeted managed care benefits concurrently with FFS benefits for most services and thus are included in the subset of "FFS duals" (defined as those not enrolled in a comprehensive managed care plan during the year) examined in more detail below. Appendix Table A6.4 shows state-level managed care enrollment by plan type. Between 2010 and 2012, the rates of duals enrolled in PHPs and PCCMs remained relatively unchanged (Figure 6.8).

Medicaid FFS Utilization and Expenditures Among FFS Duals

The following analysis presents information about FFS utilization and expenditures among FFS duals only—that is, full-benefit duals never enrolled in comprehensive managed care during 2012. For states with high rates of comprehensive managed care among full-benefit duals—particularly Arizona, Delaware, Hawaii, Kentucky, Minnesota, New Jersey, Oregon, Tennessee, and Texas—FFS expenditures by type of service should be interpreted with particular caution. Cost information is available in MAX only for services paid for on an FFS basis. Because high-cost users may self-select themselves into either FFS or managed care, average FFS expenditures in states with high rates of enrollment in comprehensive managed care plans may greatly understate or overstate the true average cost of duals. More importantly, total FFS expenditures in these states understate the total cost of Medicaid care for duals.

Total FFS expenditures for FFS duals in 2012 were just under $93 billion. Duals represented one-fourth (25 percent) of all FFS Medicaid beneficiaries but accounted for almost half (49 percent) of Medicaid FFS expenditures in 2012 (Figure 6.9). This finding is consistent with research suggesting that many duals require extensive and costly medical care.

Figure 6.9
Medicaid Enrollment and FFS Expenditures Among Dual and Non-Dual FFS Beneficiaries in 2012



Source: Medicaid Analytic Extract 2012
FFS beneficiaries = full-benefit beneficiaries not enrolled in comprehensive managed care (HMO, HIO, or PACE) in 2012
Dual = ever enrolled in both Medicare and Medicaid in 2012

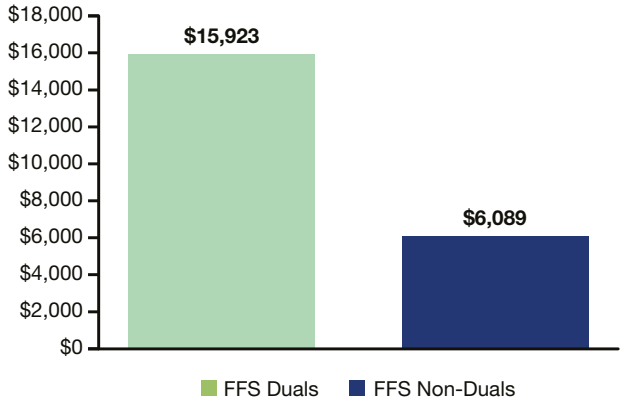
A comparison of annualized per-beneficiary expenditures between dual and non-dual FFS beneficiaries—that is, average expenditures for the year based on person-years enrolled—indicates that the annualized FFS costs per dual ($15,923) were about two and a half times higher than the costs per non-dual ($6,089) (Figure 6.10). This differential is also evident when comparing average (non-annualized) costs per service user ($16,512 for duals and $5,836 for non-duals) (Figure 6.11).

Medicaid FFS expenditures per dual varied significantly across states (Figure 6.12). As noted earlier, states with the highest annualized per-beneficiary expenditures tended to have very low rates of duals who are FFS (less than 25%), including Delaware ($92,269), Tennessee ($77,628), and New Jersey ($63,301). On the other hand, Hawaii, the state with the lowest rate of FFS duals, also had the lowest annualized per-beneficiary expenditures ($2,573), whereas Arizona (with only 27 percent duals that

were FFS) had the second lowest annualized per-beneficiary expenditures ($5,357) (Appendix Table A6.5). Several factors may account for these differences in expenditures. High-expenditure states may have more generous Medicaid benefits. Low-expenditure states may have less stringent enrollment criteria, resulting in a higher number of less-expensive beneficiaries, or may not extend Medicaid coverage to costly services that some Medicaid programs cover for duals, such as personal care through the State Plan.

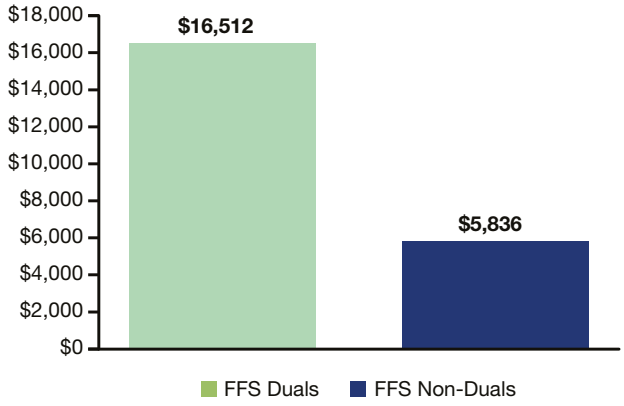
Annualized expenditures per FFS dual who was aged were about 11 percent higher than for those eligible on the basis of disability ($17,734, compared to $14,448) in 2012 (Appendix Table A6.5). This difference can be attributed to higher rates of ILTC use among duals who were aged (Figure 6.13).

Figure 6.10
A Comparison of Annualized Medicaid Fee-for-Service (FFS) Expenditures per Beneficiary Between FFS Duals and Non-Duals in 2012



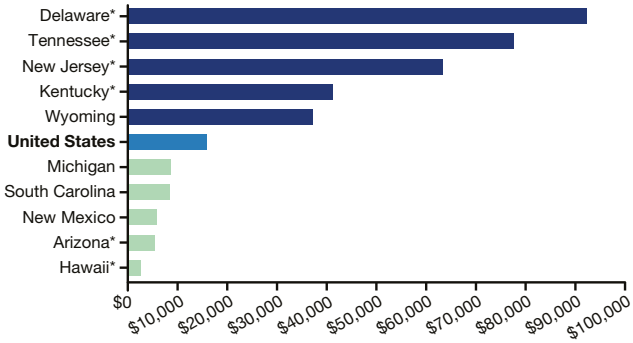
Source: Medicaid Analytic Extract 2012
FFS beneficiaries = full-benefit beneficiaries not enrolled in comprehensive managed care (HMO, HIO, or PACE) in 2012
Dual = ever enrolled in both Medicare and Medicaid in 2012

Figure 6.11
A Comparison of Average Medicaid Fee-for-Service (FFS) Expenditures Per Service User Between FFS Duals and Non-Duals in 2012



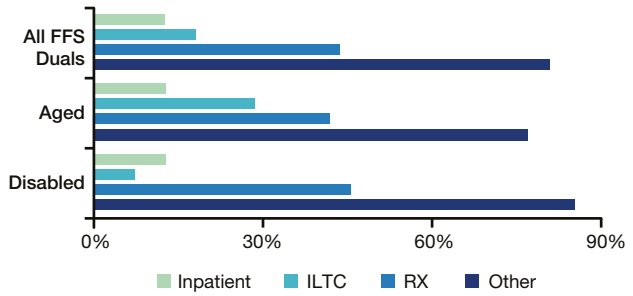
Source: Medicaid Analytic Extract 2012
FFS beneficiaries = full-benefit beneficiaries not enrolled in comprehensive managed care (HMO, HIO, or PACE) in 2012
Dual = ever enrolled in both Medicare and Medicaid in 2012

Figure 6.12
Annualized FFS Expenditures per FFS Dual in 2012: Top and Bottom 5 States



Source: Medicaid Analytic Extract 2012
FFS duals = full-benefit duals not enrolled in comprehensive managed care (HMO, HIO, or PACE) in 2012
Dual = ever enrolled in both Medicare and Medicaid in 2012.
*FFS duals represented less than 50 percent of duals in Arizona, Delaware Hawaii, Kentucky, New Jersey, and Tennessee

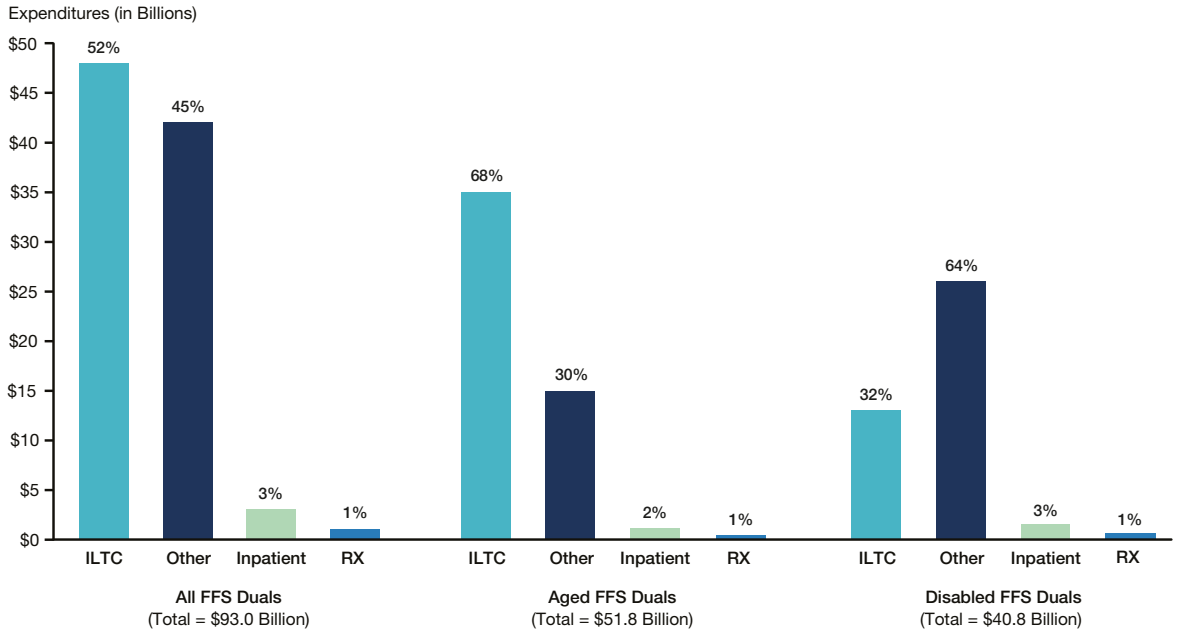
Figure 6.13
Percentage of FFS Duals Using Four Major Types of Service in 2012



Source: Medicaid Analytic Extract 2012
Dual = ever enrolled in both Medicare and Medicaid in 2012
FFS duals = full-benefit duals not enrolled in comprehensive managed care (HMO, HIO, or PACE) in 2012

ILTC was the costliest service among FFS dual beneficiaries, accounting for about half of their expenditures (52 percent) in 2012 (Figure 6.14). As might be expected, total ILTC expenditures were much higher among aged duals ($35.2 billion), who tend to use such services more than their counterparts with disabilities ($12.9 billion) (Figure 6.14, Appendix Table 6.9 and Appendix Table 6.11). (Appendix Tables A6.6 through A6.11 and A4.9 through A4.16 present state-level detail on dual

Figure 6.14
Medicaid Fee-for-Service (FFS) Expenditures Among FFS Duals in 2012, by Type of Service



Source: Medicaid Analytic Extract 2012
Dual = ever enrolled in both Medicare and Medicaid in 2012
FFS duals = full-benefit duals not enrolled in comprehensive managed care (HMO, HIO, or PACE) in 2012

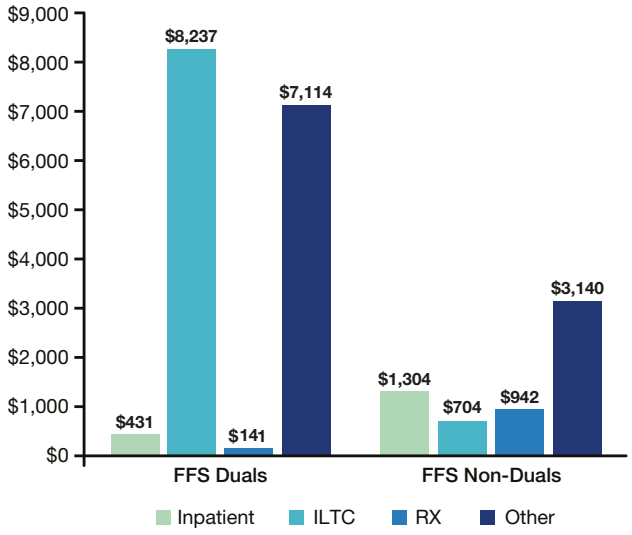
service utilization and expenditures by basis of eligibility and type of service.)

As in the overall Medicaid FFS population, duals used other services (non-inpatient medical services, those included in the OT file) at a higher rate than any other service (Figure 6.13 and Appendix Table A3.9).[40] The highest shares of other FFS expenditures among duals were for HCBS, including personal care services, residential care, home health, and adult day care (data not shown).

FFS duals used inpatient services at a lower rate than "other" services in 2012 (13 percent of FFS duals used inpatient services) (Figure 6.13)—similar to the rate among FFS non-duals (9 percent). However, because Medicare Part A covers inpatient care for duals, annualized per-beneficiary FFS expenditures for these services ($431) (Figure 6.15) were low compared to annualized per-beneficiary inpatient expenditures for non-dual Medicaid beneficiaries ($1,304).

[40] Other services include HCBS; physician and other ambulatory services; and lab, X-ray, supplies, and other wraparound services. See Chapter 4 for details on type-of-service categories.

Figure 6.15
Annualized Fee-for-Service (FFS) Expenditures among Dual and Non Dual FFS Beneficiaries in 2012, by Type of Service



Source: Medicaid Analytic Extract 2012
Dual = ever enrolled in both Medicare and Medicaid in 2012
FFS duals = full-benefit duals not enrolled in comprehensive managed care (HMO, HIO, or PACE) in 2012

Medicaid FFS expenditures on prescription drugs (included in the RX file) for duals have dropped substantially since the implementation of Medicare Part D in 2006. Prescription drug expenditures for FFS duals were $0.8 billion in 2012 (a decrease from $1.1 billion in 2010) and accounted for only 1 percent of FFS expenditures among FFS duals (Figure 6.14). In 2004, before Medicare Part D implementation, FFS expenditures for prescription drugs were about $21 billion, accounting for about 22 percent of FFS expenditures for duals (Perez et al. 2008). Although Medicare is now the primary payer for prescription drugs, state Medicaid programs continue to finance a significant share of prescription expenses for duals. States continue to cover prescription drugs that are not covered by Medicare plans if the drugs are covered in the state for other Medicaid populations. Also, states pay Medicare a portion of the prescription drug costs for duals in the state through a "clawback" provision (Kaiser Family Foundation 2005); state clawback payments totaled $8 billion in fiscal year 2012 (NASBO 2013). These payments are not included in MAX data.

7. Waiver Enrollment and Utilization

State Medicaid programs must adhere to the provisions of Title XIX of the Social Security Act to receive federal matching funds. As discussed in Chapter 1, these provisions require that states cover certain populations and services. The Act includes additional stipulations related to service delivery and benefit packages, including the following:

- *Freedom of choice.* Beneficiaries must be allowed to choose any authorized provider of services.
- *Statewideness.* Eligibility rules, benefit packages, and reimbursement rates must be the same throughout the state.
- *Comparability.* Benefits offered to one categorically eligible group must be comparable in amount, duration, and scope to those offered to other categorical eligibility groups.

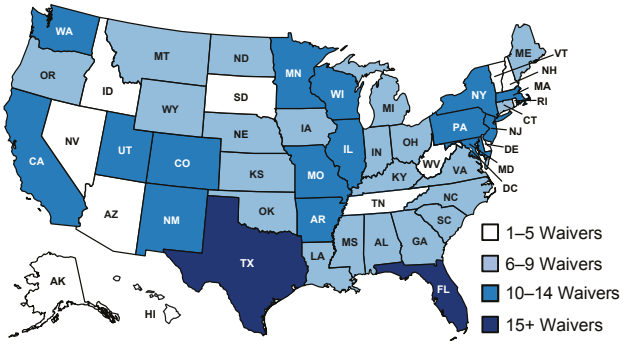
If states want to expand eligibility or services beyond what Title XIX allows or provide them in a way that differs from what the provisions allow, they must obtain a "waiver" from CMS. Under the Social Security Act, states can apply for four different types of Medicaid waivers:

1. *Section 1115 waivers.* These waivers allow states to implement demonstration projects that test policy innovations likely to further the objectives of the Medicaid program. States use these waivers for a variety of purposes—most commonly to expand Medicaid coverage to otherwise ineligible groups or implement a delivery system change, such as managed care.
2. *Section 1915(b).* States can use these waivers to implement mandatory managed care delivery systems or otherwise limit individuals' choice of providers under Medicaid.
3. *Section 1915(c) HCBS.* These waivers allow states to extend their benefit plans to offer long-term care services beyond the scope of the allowed Medicaid benefit package and serve individuals in community settings. These services offer an alternative for people who would otherwise need institutional care. States can target these waivers to geographic areas within the state and subpopulations of beneficiaries.
4. *Section 1915(b)(c).* These waivers incorporate both 1915(b) and 1915(c) program authorities to provide long-term care services, including HCBS, through managed care or other provider choice restrictions. These waivers must meet all federal requirements for both waiver types.

In 2012, every state had at least one Medicaid waiver. Most states maintained multiple waivers of different types, with 38 states operating six or more waivers in 2012 (Figure 7.1). Florida had the most waivers in 2012, including 14 HCBS waivers, three 1115 waivers, three 1915(b) waivers, and one 1915(b)(c) waiver. The states with the fewest waivers in 2012 were Hawaii (with one 1115 waiver

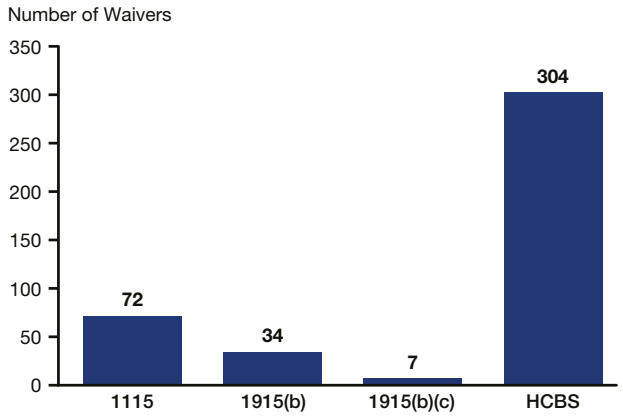
and one HCBS waiver) and Vermont (with two 1115 waivers). Nationally, HCBS waivers were the most utilized type of waiver, with 304 active waivers of this type identified in MAX in 2012 (Figure 7.2).

Figure 7.1
Number of Medicaid Waivers Per State in 2012



Source: Medicaid Analytic Extract Waiver Crosswalk 2012
Note: Waiver count includes all CMS-approved Medicaid waivers that were active at any time during 2012.
Many states have several populations under a single global 1115 waiver; in some cases each population is counted individually for the purposes of this figure. See the Waiver Crosswalk for more detail.

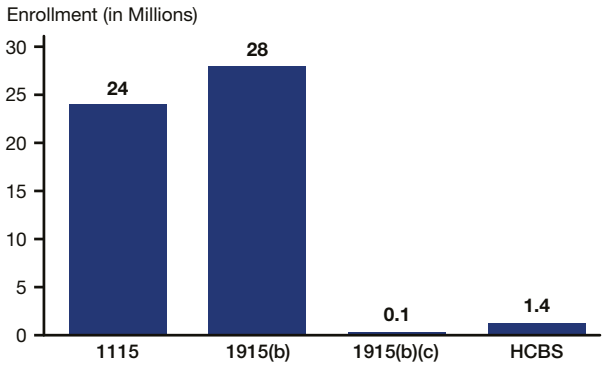
Figure 7.2
Number of Waivers by Type in 2012



Source: Medicaid Analytic Extract Waiver Crosswalk 2012
Note: Waiver count includes all CMS-approved Medicaid waivers that were active at any time during 2012.

Despite their large number, HCBS waivers covered disproportionately fewer Medicaid beneficiaries than Section 1915(b) or 1115 waivers in 2012 (Figure 7.3). HCBS waivers typically target specific, relatively small populations, whereas 1915(b) and 1115

Figure 7.3
Medicaid Enrollment by Type of Waiver in 2012



Source: Medicaid Analytic Extract 2012
Note: Waiver count includes all CMS-approved Medicaid waivers that were active at any time during 2012.

waivers in many states enrolled large majorities of the state Medicaid population. For example, California's Specialty Mental Health 1915(b) waiver—the Medicaid waiver with the most enrollees in 2012—had more than 7.7 million enrollees a month (data not shown). The smallest HCBS waivers enrolled fewer than 20 people a month (data not shown). In 2012, about 1.4 million Medicaid beneficiaries were enrolled in HCBS waivers. By comparison, about 28 million Medicaid beneficiaries were covered by 1915(b) waivers. About 24 million Medicaid beneficiaries were enrolled in Section 1115 waivers in 2012; of these, 5.2 million were expansion beneficiaries who would have otherwise been ineligible for Medicaid. (For more detail, see Appendix Tables A7.1 to A7.3a.)[41] Individuals can be enrolled in more than one waiver at a time. For example, a Medicaid beneficiary who received managed behavioral health services through a 1915(b) waiver could also receive HCBS through a 1915(c) waiver.

States reported limited information about waiver enrollment and expenditures in MSIS until FFY 2005. At that time, Medicaid waiver data in MSIS

[41] Appendix Table A7.2 shows combined enrollment in 1915(b) and 1915(b)(c) waivers, both nationally and by state. Figure 7.3 separates these numbers into enrollment in 1915(b) waivers and enrollment in 1915(b)(c) waivers.

improved notably when states began reporting HCBS waiver enrollment. States are also continually working to improve reporting for Section 1115 and 1915(b) waivers; researchers should consult the 2012 MAX eligibility anomaly tables for more information about waiver-reporting anomalies. The MAX 2012 waiver crosswalk also includes detailed information about each state's Medicaid waivers.[42] The remainder of this chapter provides an overview of some of the analyses of waiver enrollment and expenditure data possible with MAX data, focusing on each type of Medicaid waiver: Section 1115, Section 1915(b) and Section 1915(b)(c), and HCBS.[43]

Section 1115 Research and Demonstration Project Waivers

Section 1115 waivers enable states to test new and innovative approaches for providing Medicaid services. Section 1115 of the Social Security Act includes broad authority for the Secretary of the U.S. Department of Health and Human Services (HHS) to authorize experimental, pilot, or demonstration projects likely to assist in promoting the objectives of the Medicaid statute. To receive approval, states must demonstrate that an 1115 waiver program will be budget neutral for the federal government; in addition, the waiver must include an evaluation component.

In 2012, 38 states and the District of Columbia maintained 1115 waivers, which they used for diverse purposes. Table 7.1 shows the populations covered under Section 1115 waivers in each state in 2012. (See Appendix Table A7.1 for state-level enrollment in 1115 waivers.) State demonstrations operated under 1115 waivers in 2012 included the following:

- *Delivery system changes,* such as mandatory enrollment in managed care. Such changes can apply to specific eligibility groups (such as all children in the state) or geographic regions (such as major cities or statewide). For example, New York's Section 1115 Partnership Plan implemented mandatory comprehensive managed care enrollment for most Medicaid beneficiaries in select counties.
- *Coverage expansions with targeted benefits for specific populations,* such as a Medicaid-expansion program with benefits tailored to uninsured individuals with HIV/AIDS in Maine and Massachusetts, and a prescription drug coverage program for aged beneficiaries in Wisconsin.
- *Coverage expansions with basic benefit packages for broader uninsured populations,* such as Utah's Primary Care Network 1115 waiver program. This waiver extended preventive and primary health care services to beneficiaries who would have otherwise not been covered in Medicaid.
- *Combinations of coverage expansions and delivery system changes,* such as Arizona's Health Care Cost Containment System 1115 waiver. Through this waiver, Arizona provided medical, behavioral, and long-term care services through a prepaid, capitated managed care delivery model for Medicaid State Plan groups, including the elderly and persons with disabilities who receive long-term care services, as well as expansion groups, including parents and caretakers. In addition, the demonstration provided payments to Indian Health Services and tribal facilities to address the fiscal burden for certain uncovered services. Like Arizona, many states combined the implementation of managed care or other cost-savings approaches with expansion programs to ensure that the waiver remained budget neutral.

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[42] The MAX 2012 anomaly tables and waiver crosswalk are available at https://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MedicaidDataSources-GenInfo/MAXGeneralInformation.html. To access the crosswalk, download the "MAX Data 2012 General Information" file, and open Waiver_Crosswalks-MAX_2012.xlsx.

[43] Section 1915(b)(c) waivers are presented with Section 1915(b) waivers because they offer more extensive services than those offered in HCBS waivers.

Table 7.1
Section 1115 Waivers in MAX 2012

State	No Section 1115 Waiver	Section 1115 Waiver with Non-Expansion Components	1115 Waiver Expands Medicaid Eligibility and/or Extends Targeted Coverage to a Special Population								
			Aged Expansion	Disabled Expansion	Children Expansion	Pregnant Women Expansion	Parents/ Caretakers Expansion	Low-Income Adult Expansion	Family Planning Only[a]	HIV Positive Individuals	Prescription Drug Only[a]
Total Number of States	**13**	**23**	**4**	**9**	**11**	**9**	**19**	**26**	**24**	**2**	**2**
Alabama									♦		
Alaska	♦										
Arizona		♦					NR	♦	♦		
Arkansas		♦		♦	♦		NR	NR	♦		
California		♦						NR			
Colorado	♦										
Connecticut	♦										
Delaware		♦					♦	♦	♦		
District of Columbia								♦			
Florida		♦	♦	♦					♦		
Georgia									♦		
Hawaii		♦		♦	♦	♦	♦	♦			
Idaho		♦						♦			
Illinois								♦	♦		
Indiana		♦					♦	♦			
Iowa		♦			♦	♦	♦	♦	♦		
Kansas	♦										
Kentucky		♦									
Louisiana							♦	♦	♦		
Maine								♦		♦	
Maryland		♦					♦	♦	♦		
Massachusetts		♦		♦	♦	♦	♦	♦		♦	
Michigan								♦	♦		
Minnesota		♦			♦	♦	♦	♦	♦		
Mississippi			♦	♦					♦		
Missouri								NR	♦		
Montana		♦		♦					♦		
Nebraska	♦										
Nevada	♦										
New Hampshire	♦										
New Jersey		♦				♦	♦	♦			
New Mexico		♦			♦		♦	♦			
New York		♦					♦	♦	♦		
North Carolina									♦		
North Dakota	♦										
Ohio	♦										
Oklahoma		♦		♦			♦	♦			
Oregon		♦			♦	♦	♦	♦	NR		
Pennsylvania									♦		
Rhode Island		♦			♦	♦	♦		♦		
South Carolina	♦										
South Dakota	♦										
Tennessee		♦	♦	♦	♦						
Texas		NR							♦		
Utah						♦	♦	♦			
Vermont		♦	♦	♦	♦	♦	♦	♦			♦
Virginia	♦										
Washington								NR	♦		
West Virginia	♦										
Wisconsin					♦		♦	♦	♦		♦
Wyoming									♦		

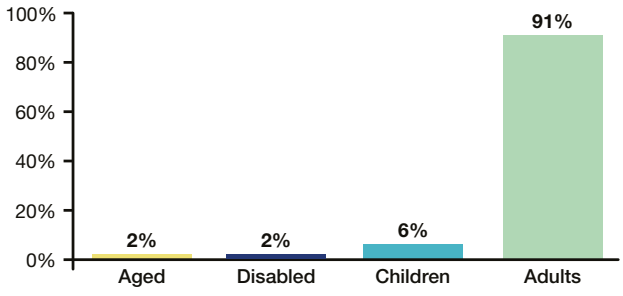
Source: Medicaid Analytic Extract 2012
Notes: Some states have multiple Section 1115 waivers. These waivers have been combined to show total Section 1115 waiver coverage in a single row per state. See the MAX 2012 waiver crosswalk for additional details of state waiver reporting in MAX and information about individual Section 1115 waivers. Many Section 1115 Waivers include coverage expansions as well as other components that do not expand Medicaid coverage.
NR = not reported in MAX 2012 data.
[a] Prescription Drug Only and Family Planning Only waivers extend coverage for these services only to individuals who are otherwise not eligible for Medicaid.

In 2012, almost all states with Section 1115 waivers used this authority to extend coverage to people who were otherwise ineligible for Medicaid.[44] Adults made up the largest group receiving Medicaid coverage through an 1115 expansion in 2012, accounting for 91 percent of all 1115 expansion enrollees (Figure 7.4). Overall, about 23 percent of all Medicaid-covered adults in 2012 were covered through 1115 waiver expansions, compared to about 2 percent of all aged beneficiaries and less than 1 percent of all child beneficiaries and beneficiaries eligible on the basis of disability (Figure 7.5 and Appendix Table 7.1).

States had limited options outside of 1115 waivers for covering low-income adults in 2012. With one exception, all 27 states that covered low-income adults in 2012 did so through 1115 waivers, either through an 1115 waiver alone or a combination of an 1115 waiver and a state plan amendment. The one exception was Connecticut, which covered low-income adults through a state plan amendment alone. A subset of states used these authorities to adopt early expansion of the ACA (See Table 1.2).

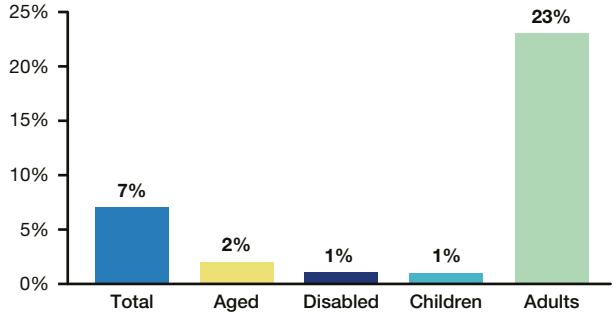
Other common 1115 expansions for adults in 2012 included those to higher-income pregnant women, parents or caretaker relatives of children enrolled in Medicaid or CHIP, and more targeted expansions that included family planning services only. Some states also used 1115 waivers to expand coverage to children, the aged, and people with disabilities, but these programs were generally smaller and more targeted, and occurred in combination with expansions for adults. This concentration on adult populations for 1115 expansions is expected to shift over time as states expand Medicaid eligibility to adults under the ACA.

Figure 7.4
Percentage of Section 1115 Expansion Enrollees by Basis of Eligibility in 2012



Source: Medicaid Analytic Extract 2012

Figure 7.5
Percentage of Medicaid Beneficiaries Eligible Through Section 1115 Waiver Expansions



Source: Medicaid Analytic Extract 2012

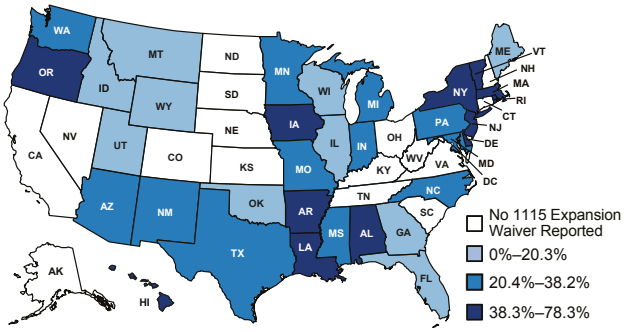
Due to differences in eligibility requirements and waiver operating systems, among other factors, the rates at which adults are enrolled in Medicaid through 1115 waivers vary greatly at the state level (Figure 7.6 and Appendix Table 7.1). For example, in Vermont, more than 78 percent of adults entered Medicaid through the state's 1115 waiver, which operates under a publicly sponsored managed care organization with mandatory enrollment for many adult Medicaid beneficiaries (both with and without children). Conversely, in Idaho, just 1 percent of adults entered Medicaid through the state's 1115 waiver—a more targeted waiver that offers assistance to low-income adults who are employees or the spouse of an employee of a small business.

States that expand Medicaid coverage through 1115 waivers can provide more limited benefit packages to

[44] Kentucky used an 1115 waiver to implement only delivery system changes, not expand Medicaid coverage. As Appendix Table A7.1 shows, Kentucky had no 1115 waiver expansion enrollment.

Figure 7.6

Percentage of All Adult Medicaid Beneficiaries (in Thirds) Enrolled In 1115 Waivers in States that have 1115 Expansion Waivers During 2012



Source: Medicaid Analytic Extract 2012

Note: States are grouped according to the state's percent of all Medicaid beneficiaries enrolled in an 1115 waiver in 2012.

those enrollees than to mandatory coverage groups. In particular, one type of 1115 waiver—the Health Insurance Flexibility and Accountability (HIFA) waiver—was created in 2001 to extend basic health coverage to low-income uninsured adults.[45] In 2012, six states (Arizona, Arkansas, Maine, New Jersey, New Mexico, and Oklahoma) used HIFA waivers to extend limited Medicaid coverage to adults. Medicaid benefits provided via HIFA waivers may be limited to premium assistance payments toward the purchase of employer-sponsored insurance or enrollment in state employee insurance.[46]

In 2012, 24 states had family planning waivers—a type of 1115 waiver that covers only family planning benefits for individuals, typically women of childbearing age, who are not otherwise eligible for Medicaid (Table 7.1). These waivers, first offered in 1993, provide only limited services, including contraceptive coverage, testing for sexually transmitted diseases, limited counseling, and assistance with access to primary care services. In 2012, Medicaid expenditures for family planning-only enrollees averaged about $187 per enrollee ($284 annualized), compared to $2,664 per full-benefit adult beneficiary (Appendix Tables A7.4 and A3.6).[47] (State-level family planning enrollment and expenditures are shown in Appendix Table A7.4.)

In 2010, the ACA authorized states to provide family planning and related services to otherwise ineligible people under the State Plan.[48] California transitioned its large family planning program from a waiver to its State Plan in July 2010, which accounted for 2.7 million family planning waiver enrollees, or 61 percent of Medicaid beneficiaries in family planning waivers nationwide that year. In addition to California, as of 2012, seven other states (Connecticut, New Mexico, New York, Ohio, Oklahoma, South Carolina, and Virginia) had transitioned their family planning programs from a waiver to the State Plan. This transition largely contributed to the decrease in the nationwide percentage of adult Medicaid beneficiaries enrolled in family planning waivers between 2010 and 2012 (from 24 percent to 8 percent; 2010 data not shown). Furthermore, only 5 percent of adults received only family planning services during the year, compared

[45] HIFA waivers are shown with all other Section 1115 waivers in the tables for this chartbook, but researchers can identify them separately by waiver type in MAX data.

[46] Because some HIFA waiver enrollees receive only premium assistance, and because of the limited and unique scope of these benefits, these enrollees may be undercounted in state MMIS data. When states are able to identify these enrollees, they are reported in MSIS as 1115 waiver enrollees. Because individuals who receive only premium assistance cannot be identified in all states, enrollees in these waivers are considered full-benefit beneficiaries in this chartbook. Researchers may want to flag individuals who receive only premium assistance in those states where they can be identified. For more information on reporting anomalies for specific waivers, see the MAX 2012 anomaly tables at https://www.cms.gov/research-statistics-data-and-systems/computer-data-and-systems/medicaiddatasourcesgeninfo/maxgeneralinformation.html.

[47] States receive a federal matching rate of 90 percent for family planning waiver expenditures.

[48] Individuals who receive family planning-only benefits through a State Plan are not included in this chapter, which focuses only on waiver enrollees (e.g., family planning 1115 waiver enrollees). Information about all restricted-benefit family planning enrollees (including individuals who receive family planning-only benefits through a State Plan and an 1115 waiver, identified by restricted benefit flag 6) are included in Appendix Table A2.10.

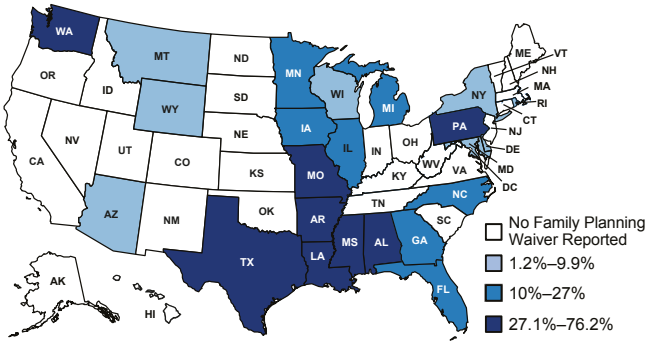
to 21 percent in 2010. As more states adopt this approach in future years, the number of beneficiaries receiving family planning services through State Plans can be expected to increase.

Among states with family planning waivers, the percentage of adult Medicaid beneficiaries who were family planning enrollees ranged from a low of 1 percent of adult beneficiaries in Rhode Island to 76 percent in Alabama (Figure 7.7). In addition to differences in program size, the percentage of family planning waiver enrollees is affected by the size of the full-benefit adult population in the state, which varies with the state's income eligibility standards and the percentage of eligible adults who enroll in Medicaid. States in which a large percentage of the adult population received only family planning services tended to be those that were otherwise more restrictive in coverage for adults; for example, with lower income eligibility limits for that population. Because family planning enrollees receive very limited benefits, expenditure and service utilization analyses that include them may cause such states to differ considerably from those that do not have family planning programs.[49]

A small percentage of adult Medicaid beneficiaries (3 percent) transitioned between family planning waivers and other Medicaid benefits during 2012 (Figure 7.8). They represent about 37 percent of all family planning enrollees. This pattern varied considerably across states that maintained such programs. Less than 10 percent of the family planning enrollees in Montana received any other Medicaid coverage during the year. In other states, family planning enrollees moved more regularly between this coverage and full Medicaid benefits. In Rhode Island, around 82 percent of family planning enrollees received other Medicaid benefits at some point during 2012. Rhode Island's 1115 demonstra-

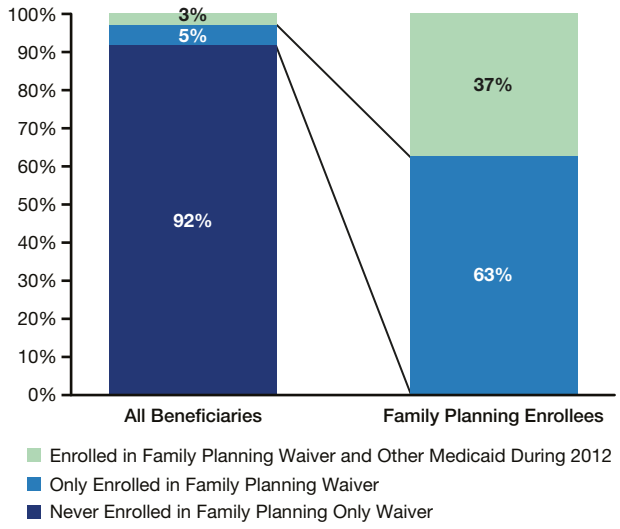
[49] As discussed in Chapter 2, people who received only family planning benefits in 2012 were identified as restricted-benefit beneficiaries in this analysis and were excluded from the population of full-benefit beneficiaries in this chartbook.

Figure 7.7
Percentage of All Adult Medicaid Beneficiaries (in Thirds) Enrolled In Family Planning Waivers During 2012



Source: Medicaid Analytic Extract 2012
*Oregon has a family planning waiver but did not report enrollment in MAX 2012.
Note: States are grouped according to the state's percent of all Medicaid beneficiaries enrolled in a family planning waiver in 2012.

Figure 7.8
Percentage of All Adult Medicaid Beneficiaries Enrolled in Family Planning Waivers and Other Medicaid in 2012



Source: Medicaid Analytic Extract 2012
Note: Family planning enrollees receive only the benefits specified in the waiver while enrolled in the waiver.

tion waiver targeted women with family income at or below 250 percent of the FPL who lose Medicaid eligibility at the end of their 60-day postpartum period, whereas other states generally targeted all eligible women who were otherwise ineligible for Medicaid.

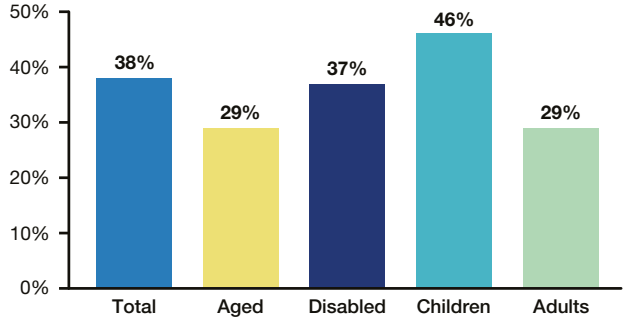
Section 1915(b) Managed Care/Freedom of Choice Waivers

The Omnibus Budget Reconciliation Act of 1981 established Section 1915(b) waivers, which allow states to waive statewideness, comparability of services, and/or freedom of choice, and require individuals to enroll in managed care plans for some or all of their Medicaid benefits. Mandatory managed care plan benefit packages must provide, at a minimum, the benefit package covered under the regular Medicaid State Plan, but states can use cost savings from the use of managed care to add to the services covered under managed care contracts.

In 2012, 23 states used Section 1915(b) or 1915(b)(c) waivers to place some or all of their Medicaid population into managed care of some kind. (State-level enrollment in Section 1915(b) and 1915(b)(c) waivers is shown in Appendix Table A7.2.) Managed care programs operated via 1915(b) waivers include the full range of Medicaid managed care types, from PHPs to comprehensive managed care plans. In 2012, states frequently used 1915(b) waivers to implement managed care programs providing specialty services, most commonly including mental health services, non-emergency transportation, and dental services. In Washington State, 1915(b) waiver use was limited to placing beneficiaries into behavioral health plans. States may also use 1915(b) waivers to place different populations into different kinds of managed care. For example, Virginia's managed care waiver placed beneficiaries into either PCCMs or comprehensive managed care.

Nationally, about 28 million beneficiaries, or 38 percent of all Medicaid beneficiaries, were placed into some form of managed care by Section 1915(b) or 1915(b)(c) waivers (Figure 7.9). Large programs in some states accounted for much of this enrollment. California used 1915(b) waivers to place about 9.6 million beneficiaries, or about 78 percent of the state's total Medicaid population, into comprehensive managed care plans and dental PHPs or provide them with mental health services. Florida placed about 3.8 million beneficiaries in non-emergency transportation, mental health, and disease management PHPs.

Figure 7.9
Percentage of All Medicaid Beneficiaries in Section 1915(b) or 1915(b)(c) Waivers in 2012



Source: Medicaid Analytic Extract 2012

Seven states (Florida, Louisiana, Michigan, Minnesota, New Mexico, North Carolina, and Pennsylvania) used combination Section 1915(b)(c) waivers to implement mandatory managed care programs that included HCBS.[50] Managed care programs implemented under these waivers included comprehensive managed care as well as plans that provided coverage for behavioral or other specialty managed care. These programs ranged from FFS adult day care and Alzheimer's programs in Florida to comprehensive managed care in Minnesota. Because these programs

[50] With the exception of Louisiana, each of these states also operated a separate Section 1915(b) waiver in 2012.

included HCBS, they generally targeted beneficiaries who were aged or had disabilities. For example, in Minnesota, aged beneficiaries could elect to enroll in the state's integrated Medicare managed care program, or be enrolled in the state's 1915(b) Senior Care managed care and HCBS combination program.

In 2012, states had multiple options for placing Medicaid beneficiaries in managed care beyond 1915(b) waivers, including 1115 waivers and State Plan options. For this reason, managed care programs offered under 1915(b) waivers represented only a fraction of Medicaid managed care in 2012. See Chapter 5 for more detail on all Medicaid managed care in 2012.

Section 1915(c) Home- and Community-Based Services Waivers

Since 1982, Section 1915(c) of the Social Security Act has authorized the HHS Secretary to waive Medicaid provisions, thus allowing long-term care services to be delivered in home and community settings to people who would otherwise require care in an institution. Section 1915(c) waivers (also called HCBS waivers) give the aged and beneficiaries eligible on the basis of disability more options for long-term care services through Medicaid. HCBS waivers also help states respond to the requirement that people with disabilities be served in the most integrated setting possible.[51] To serve an individual in an HCBS waiver, the state must use a standard evaluation process to determine that the individual requires an institutional level of care.

Medicaid services covered under HCBS waivers can include medical services, such as skilled nursing and dental services, as well as non-medical services, such as case management, personal care, homemaker services, adult day care, respite care, and transportation. These waivers are also used for environmental adaptations, habilitation, pre-vocational training, and supported employment. The services offered in an HCBS waiver cannot duplicate those provided under a Medicaid State Plan, but states can use these waivers to augment services in the State Plan by raising the amount, duration, or frequency of covered services for waiver participants. States can also use these waivers to waive certain income and resource rules, and cover services in the community that would otherwise be available only in an institutional setting.

Every state except Arizona, Rhode Island, and Vermont maintained at least one HCBS waiver in 2012 (data not shown).[52] These three states had programs similar to HCBS waiver programs, but they operated them through 1115 waivers instead. Since 1999, states have reported services provided through HCBS waivers in their MSIS data. In FFY 2005, the information in MSIS about HCBS waivers became more complete when states started reporting monthly HCBS waiver enrollment. At that time, CMS also began reporting more detailed information in MAX about the population that each HCBS waiver targets.

Because of the eligibility requirements for HCBS waivers, these waivers target almost exclusively beneficiaries who are aged or have disabilities, and nearly 70 percent of HCBS waiver enrollees are duals. Although dual HCBS waiver enrollees are evenly split between those who are aged or have disabilities, nearly all non-dual HCBS waiver enrollees have disabilities (Appendix Table A7.6). Nationally, about 8 percent of all Medicaid beneficiaries who

[51] This requirement was established in 1999 in the U.S. Supreme Court's Olmstead v. L.C. decision.

[52] Massachusetts and Washington State maintained HCBS waivers, but because of data system limitations, this enrollment was not reported in MAX data in 2012. For more information about these and other waiver reporting anomalies, see the MAX 2012 data anomaly tables or the MAX 2012 Waiver Crosswalk.

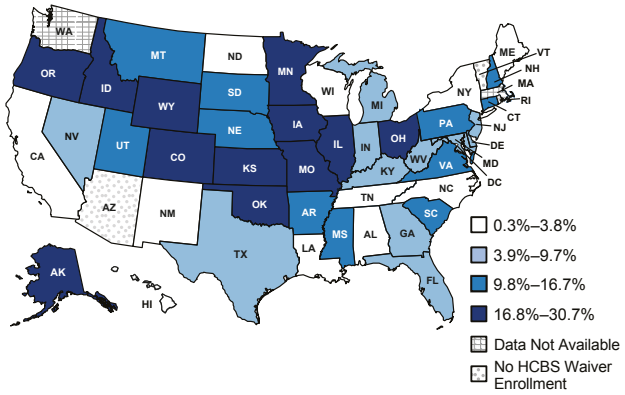
were aged or had disabilities were enrolled in HCBS waivers in 2012 (Appendix Table A7.3a). Among states reporting HCBS waiver enrollment, enrollment rates among beneficiaries who were aged or had disabilities varied considerably across states in 2012, from less than 1 percent of aged beneficiaries in Hawaii, New Mexico, and Tennessee to 31 percent in Oregon (Figure 7.10), and from about 1 percent of beneficiaries with disabilities in Michigan to 27 percent in Wyoming (Figure 7.11). States in the Midwest and West generally had high rates of HCBS waiver enrollment.

Most states maintained multiple HCBS waivers and targeted specific services to defined populations, such as elderly people or those under 65 with physical disabilities. States may also target services on the basis of disease or condition, such as brain injuries or autism. In 2012, states targeted HCBS waivers to a variety of populations, including the following:

- Aged and disabled people
- Aged people
- Physically disabled people
- People with brain injuries
- People with HIV/AIDS
- People with intellectual or developmental disabilities (ID/DD)
- People with mental illness/severe emotional disturbance (MI/SED)
- Technology-dependent/medically fragile people
- People with autism

Waivers for people with ID/DD were the most common type of HCBS waiver in 2012; there were 109 of these waivers, operated across 46 states, with an enrollment of nearly 592,000 (Table 7.2). In comparison, only 10 states maintained HCBS waivers for people with MI/SED or autism. There were 12 and 11 of these waivers, respectively, which had a combined enrollment of fewer than 20,000 nationwide. State-level expenditure and enrollment data for HCBS waiver types are reported in Appendix Tables A7.7a and A7.7b; annualized person-years of enrollment and expenditure data are reported in Appendix Tables A7.7c and A7.7d.

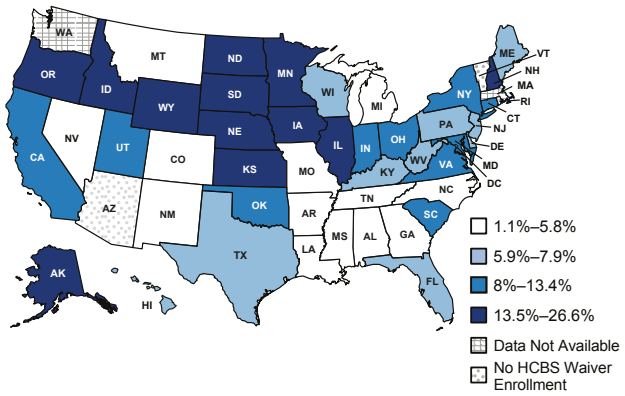
Figure 7.10
Percentage of Aged Medicaid Beneficiaries in HCBS Waivers in 2012



Source: Medicaid Analytic Extract 2012

Note: Arizona, Rhode Island, and Vermont did not have active HCBS waivers in 2012. Massachusetts and Washington had HCBS waivers but did not report this enrollment in MAX. Maine had HCBS waivers but did report waiver enrollment in MAX from January to June 2012.

Figure 7.11
Percentage of Disabled Medicaid Beneficiaries in HCBS Waivers in 2012



Source: Medicaid Analytic Extract 2012

Note: Arizona, Rhode Island, and Vermont did not have active HCBS waivers in 2012. Massachusetts and Washington had HCBS waivers but did not report this enrollment in MAX. Maine had HCBS waivers but did report waiver enrollment in MAX from January to June 2012.

Table 7.2
Enrollment and Expenditures by HCBS Waiver Type in 2012

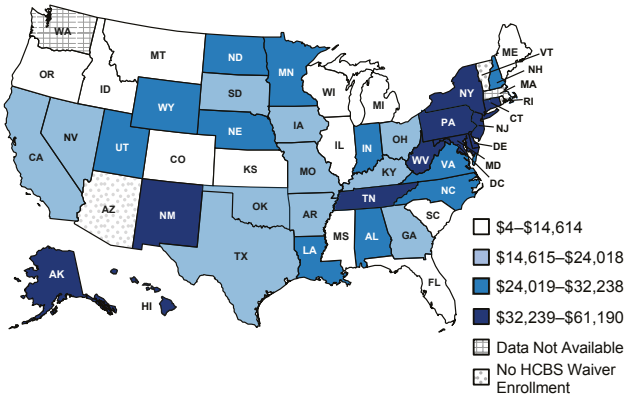
HCBS Waiver Type	Number of States with HCBS Waiver Type	Number of Waivers by HCBS Waiver Type	National Enrollment	Average HCBS Waiver Expenditures ($)
Aged	12	15	173,393	5,092
Aged and Disabled	37	56	444,862	10,106
Autism	10	11	5,276	6,119
Brain injuries	19	21	16,493	34,191
HIV/AIDS	11	11	13,417	3,631
ID/DD	46	109	591,996	40,560
Mentally Ill/Severely Emotionally Disturbed	11	12	14,078	10,073
Physically Disabled	24	30	97,733	18,804
Technology-Dependent/Medically Fragile	17	20	12,356	21,145

Source: Medicaid Analytic Extract 2012
Massachusetts and Washington had HCBS waivers but did not report this enrollment in MAX; these states are excluded from the table. Maine had HCBS waivers but did report waiver enrollment in MAX from January to June 2012.
Maine was unable to accurately report HCBS claims in 2012.
Enrollment in individual 1915(c) waiver types is undercounted in Colorado as most of the state's waivers 1915(c) waivers are reported with Waiver Type 'O' (1915(c) waiver for unknown or unspecified populations) in 2012.
Waivers are included in these counts if they are reported with enrollment in MAX 2012.
ID/DD = intellectual or developmental disability.

Nationally, expenditures for HCBS provided through waivers were about $23,400 per waiver enrollee. Average expenditures for HCBS ranged from a low of $7,521 per enrollee[53] (or $8,649 annualized) in South Carolina to a high of $61,190 (or $64,818 annualized) in New Mexico (Figure 7.12 and Appendix Tables A7.3a–A7.3b). Low average waiver expenditures for HCBS enrollees could be driven by lower service costs in these states or limited service offerings in these waivers.

Average HCBS expenditures could also be driven by the composition of HCBS waiver types. The states with the highest average costs, for instance, enrolled a disproportionately higher number of beneficiaries in ID/DD waivers, whereas the lowest-cost states enrolled a disproportionately higher number of beneficiaries in relatively lower-cost aged and disabled waivers (see Appendix Tables A7.7a–A7.7d). HCBS waiver expenditures varied considerably by waiver type at the national level, from a low of $3,631 nationally per enrollee in HIV/AIDS waivers to a high of about $40,560 for those in ID/DD waivers (Table 7.2). These variations stem from the range of service offerings in such waivers and the diverse needs of the populations covered.

Figure 7.12
Average Waiver Expenditures for HCBS Waiver Enrollees (in Quartiles) in 2012



Source: Medicaid Analytic Extract 2012
Note: Arizona, Rhode Island, and Vermont did not have active HCBS waivers in 2012. Massachusetts and Washington had HCBS waivers but did not report this enrollment in MAX; these states are excluded from national averages and other estimates that include claims.

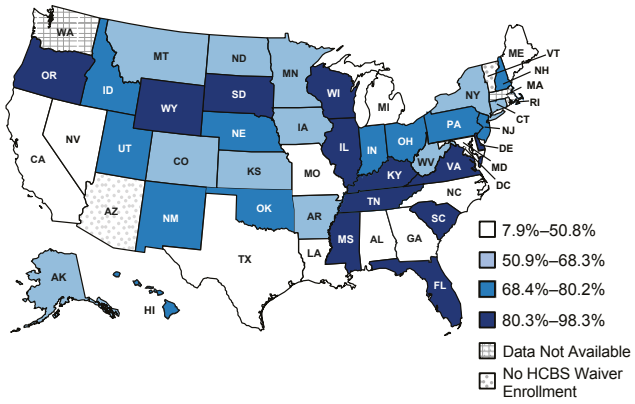
[53] Maine had the lowest average HCBS expenditures, at $4; however, its expenditures are believed to be underreported in MAX.

It is important to note that in some states, including Maine, South Carolina, and Montana (the states with the lowest average HCBS expenditures), HCBS waiver claims were not fully reported in MAX, which likely impacted average expenditure data (see MAX 2012 anomaly tables for additional details concerning waiver reporting issues).

Expenditures through HCBS waivers comprise a considerable portion of total Medicaid spending for the average HCBS waiver enrollee. Nationally, expenditures for all Medicaid services were about $36,800 per HCBS waiver enrollee. In total, expenditures for HCBS waiver services accounted for 64 percent of all Medicaid expenditures for HCBS enrollees. Percentages varied across states, from 32 percent of total expenditures in South Carolina to 92 percent in New Mexico (data not shown). The wide range can be attributed to differences in the services offered through HCBS waivers across states, as well as how states divide long-term care service provision across HCBS waivers, HCBS offered in the State Plan, and reliance on ILTC services. (Chapter 4 further discusses utilization and expenditure rates for long-term care services offered in the community as compared to institutional settings.)

In addition to, or instead of, providing HCBS through waivers, states may provide personal care services, adult day care services, private-duty nursing, home health, and hospice care as part of the Medicaid State Plan for all eligible beneficiaries. In 2012, around 3.1 million beneficiaries received Medicaid HCBS, and 45 percent of all HCBS users were enrolled in HCBS waivers. In other words, in some states HCBS waiver enrollment may represent only a fraction of the population that receives HCBS. For example, in Alabama, only 8 percent of HCBS users were enrolled in an HCBS waiver in 2012. By comparison, some states, like Tennessee, where 98 percent of all HCBS users were enrolled in HCBS waivers, appear to have used such waivers as the primary vehicle for providing HCBS to Medicaid beneficiaries. Figure 7.13 highlights state variations in approaches for providing HCBS to Medicaid beneficiaries. In the top quartile of states, 80 percent or more of HCBS users received these services through waivers. In the bottom quartile, about half of HCBS users (or fewer) were provided with these services through waivers. State-level long-term care utilization and expenditures are reported in Appendix Table A7.8.

Figure 7.13
Percentage of HCBS Users Enrolled in HCBS Waivers (in Quartiles) in 2012

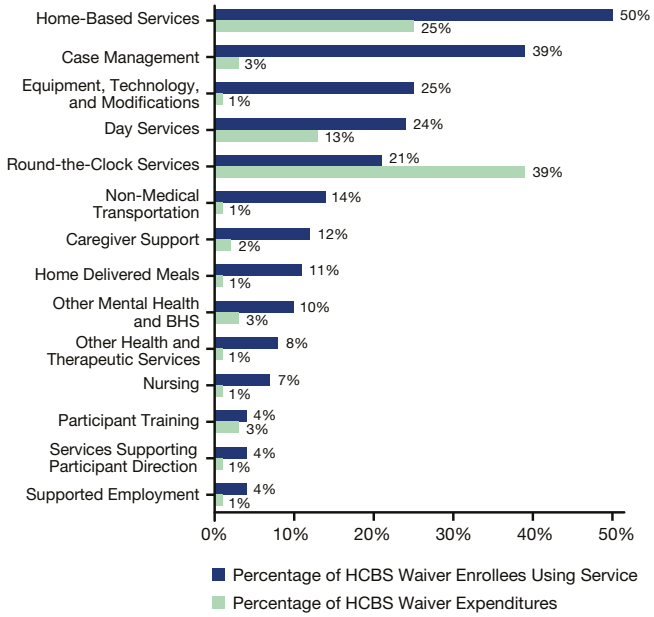


Source: Medicaid Analytic Extract 2012
Note: Arizona, Rhode Island, and Vermont did not have active HCBS waivers in 2012. Massachusetts and Washington had HCBS waivers but did not report this enrollment in MAX. These states are excluded from national averages and other estimates that include claims.

States offered a variety of HCBS through waivers in 2012. Data fields introduced in MAX 2010 group these services into standard categories across states so that researchers can learn more about the services provided via HCBS waivers. The most common types of HCBS received by HCBS waiver enrollees were home-based services; case management; and equipment, technology, and modifications (Figure 7.14 and Appendix Tables A7.9a to A7.10b). Nationally, each of these HCBS were used by more than one-quarter of HCBS waiver enrollees.

Figure 7.14

Percentages of HCBS Waiver Enrollees Using HCBS and Expenditures by HCBS Taxonomy Category in 2012



Source: Medicaid Analytic Extract 2012

Note: Arizona, Rhode Island, and Vermont did not have active HCBS waivers in 2012. Massachusetts and Washington had HCBS waivers but did not report this enrollment in MAX. These states are excluded from national averages and other estimates that include claims.

Maine had HCBS waivers but did report waiver enrollment in MAX from January to June 2012. Maine was also unable to accurately report HCBS claims in 2012.

MAX includes information about additional HCBS taxonomy categories. These categories (other services, community transition services, and rent and food for live-in caregiver) were used by less than 4 percent of HCBS enrollees and represented less than 0.5% of expenditures in 2012 and are not shown in Figure 7.15. In addition about 10 percent of HCBS enrollees used HCBS that could not be further identified in MAX 2012; these unknown services represented less than 5 percent of expenditures.

BHS = behavioral health services.

Among them, services in the category of equipment, technology, and modifications were the lowest cost per service user—although 25 percent of enrollees received these services, expenditures for the category made up less than 1 percent of HCBS waiver expenditures. Similarly, 40 percent of HCBS enrollees used case management services although the expenditures made up less than 4 percent of HCBS expenditures. Home-delivered meals also accounted for a relatively low share of expenditures relative to the number of services users (11 percent used this service, accounting for less than 1 percent of HCBS expenditures), as did non-medical transportation (14 percent of users and less than 2 percent of such expenditures) and caregiver support (12 percent of users and 2 percent of such expenditures).

Expenditures for waiver HCBS were largely concentrated among three commonly used service types: round-the-clock services (39 percent), home-based services (25 percent), and day services (13 percent) (Figure 7.14). However, home-based services and day services had relatively high percentages of users (50 percent and 24 percent, respectively) relative to their share of expenditures. Conversely, round-the-clock services users accounted for a comparatively lower percentage of users (21 percent) relative to their share of expenditures.

Glossary of Terms

1115 Waiver (MAS Group) a maintenance assistance status (MAS) group that consists of people eligible for Medicaid via a state 1115 waiver program that extends benefits to certain otherwise ineligible persons. Some states provide only limited family planning benefits or other limited services to 1115 adults, although a few states provide full Medicaid benefits to persons qualifying through 1115 provisions. Many 1115 waivers also have other provisions such as mandatory managed care coverage. However, the MAS 1115 waiver group relates only to the 1115 eligibility extensions.

1915(b) Waiver Medicaid waiver authorized by the Social Security Act. These waivers allow states to implement mandatory managed care delivery systems or otherwise limit individuals' choice of provider under Medicaid.

1915(c) HCBS Waiver Medicaid waiver authorized by the Social Security Act. These waivers allow states to offer long-term care services beyond the scope of the allowed Medicaid benefit package and serve people in community settings. Also called home- and community-based services (HCBS) waivers.

1915(b)(c) Waiver Medicaid waiver authorized by the Social Security Act. These waivers implement both 1915(b) and 1915(c) program authorities to provide long-term care services, including HCBS, through managed care or other provider choice restrictions. These waivers must meet all federal requirements for both waiver types.

Adults a basis of eligibility (BOE) group that includes pregnant women and caretaker relatives in families with dependent (minor) children; most caretaker relatives of dependent children are parents, but this group can also include other family members serving as caretakers, such as aunts or grandparents. In a few states with Section 1115 waivers or that made use of the state plan option to implement an early ACA expansion, the adult BOE includes low-income adults.

Affordable Care Act of 2010 (ACA) a health reform law enacted in March 2010. The ACA included several provisions related to Medicaid eligibility, financing, and benefits. Many provisions, including the option for states to expand Medicaid coverage to low-income non-disabled adults without dependent children, were not implemented until 2014. Some states, however, did expand coverage or change benefits for Medicaid beneficiaries between 2010 and 2012.

Aged a basis of eligibility (BOE) group that includes people aged 65 or older.

Aid to Families with Dependent Children (AFDC) a federal assistance program for children and families with low or no income from 1935 through 1996.

Alien a person who is not a permanent resident or citizen of the United States. In Medicaid, "unqualified" aliens include illegal immigrants and immigrants entering the United States legally after 1996 for five years from their date of entry; unqualified aliens are eligible only for emergency hospital services.

Annualized Expenditures an annual per capita measure of expenditures adjusted as if each beneficiary was enrolled in Medicaid for all 12 months of the year. Annualized expenditures are calculated by dividing total expenditures by total person-years of enrollment. Given Medicaid beneficiaries are not always enrolled for the entire year (and some subgroups of beneficiaries tend to have shorter lengths of enrollment than

others), this measure allows a more commensurate comparison of annual expenditures between beneficiary groups.

Basis of Eligibility (BOE) eligibility grouping that traditionally has been used by CMS to classify beneficiaries; BOE categories include children, adults, aged, and disabled (see other entries for descriptions of these categories).

Behavioral Health Organizations (BHO) provide mental health and substance use disorder care. They had the highest enrollment in 2012 of any type of PHP.

Beneficiaries for the purposes of this chartbook, people enrolled in Medicaid for at least one day in 2012 (sometimes referred to as enrollees or eligibles).

Capitation or Capitated Payment a method of payment for health services in which a health plan, practitioner, or hospital is paid in advance a fixed amount to cover specified health services for an individual for a specific period of time, regardless of the amount or type of services provided. In contrast with fee-for-service (see entry below), capitation shifts the financial risk of caring for patients from the payer to the provider.

Children a basis of eligibility (BOE) group that includes persons under age 18, or up to 21 in states electing to cover older children.

Children's Health Insurance Program (CHIP) authorized in 1997 and reauthorized in 2009, this program provides enhanced federal matching funds to help states expand health care coverage to the nation's uninsured children. CHIP is jointly financed by federal and state governments and administered by states. States may administer CHIP through their Medicaid program (referred to as M-CHIP) or as a separate program (referred to as S-CHIP); M-CHIP children are included in the MAX data and reported under the poverty-related maintenance assistance status (MAS).

Children's Health Insurance Program Reauthorization Act (CHIPRA) authorized states to make expansions to CHIP coverage, including authorization for states to cover pregnant women through CHIP and the option to cover lawfully residing immigrant children and pregnant women in Medicaid and CHIP without a five-year waiting period.

Comprehensive Managed Care health care plans that provide comprehensive medical services to people in return for a prepaid fee. This group includes health maintenance organizations (HMOs), health insuring organizations (HIOs), and Program of All-Inclusive Care for the Elderly (PACE) plans.

Disabled a basis of eligibility (BOE) group that includes persons of any age (including children) who are unable to engage in substantial gainful activity by reason of any medically determinable physical or mental impairment that can be expected to result in death or that has lasted or can be expected to last for a continuous period of not less than 12 months.

Disproportionate Share Hospital (DSH) a hospital that serves a disproportionate share of low-income patients. DSH facilities receive supplemental Medicaid payments in addition to reimbursements for the Medicaid beneficiaries they serve.

Duals persons dually enrolled in Medicare and Medicaid (sometimes referred to as dual eligibles). In this chartbook, duals are defined as people in the Medicaid data files with matching records in the EDB indicating enrollment in both Medicare and Medicaid in at least one month in 2012.

Durable Medical Equipment (DME) medical equipment (wheelchairs, beds); supplies (adult diapers, dialysis equipment); home improvements (ramps); emergency response systems; and repairs, replacements, or renting of these items.

Encounter Records records for services utilized under managed care. Encounter records do not include payment information for services used. MAX encounter records are incomplete in some states.

[Medicare] Enrollee Database (EDB) the authoritative data source for all Medicare entitlement information; contains information on all Medicare beneficiaries, including demographic information, enrollment dates, and Medicare managed care enrollment.

Family Planning services and supplies that enable individuals and couples to anticipate and have the desired number of children and to space and time their births. There is no regulatory definition for the services and supplies covered by Medicaid, but CMS has provided guidance that states may cover counseling services, examination and treatment by medical professionals, pharmaceutical devices to prevent conception, infertility services, and assistance with access to primary care. States also maintain family planning programs (implemented through a Section 1115 waiver or a state plan amendment) that provide only these services to beneficiaries otherwise ineligible for Medicaid.

Federal Fiscal Year (FFY) the federal fiscal year begins on October 1 and ends on September 30 of the following year; FY 2012 runs from October 1, 2011 through September 30, 2012.

Federal Medical Assistance Percentage (FMAP) the federal matching rate for states for service costs incurred by the Medicaid program. The FMAP is calculated by taking into account the average per capita income in a given state in relation to the national average; the FMAP ranged from 50 to 74 percent in 2012, with higher matching allocated to states with lower per capita income.

Federal Poverty Level a measure of income issued annually by HHS that is used to determine eligibility for certain programs, such as Medicaid.

Fee-for-Service (FFS) a payment mechanism in which payment is made for each service used.

Financial Alignment Initiative a CMS demonstration program that aims to address the financial misalignment between Medicare and Medicaid—a longstanding barrier to coordinating care for duals—by allowing states with approved demonstrations to test models to better align the financing of these two programs and integrate primary, acute, behavioral health, and long-term services and supports for duals. The Financial Alignment Initiative has two models, the capitated model and the managed FFS model.

Health Insurance Flexibility and Accountability (HIFA) waivers were created in 2001 to extend basic health coverage to low-income uninsured adults.

Home- and Community-Based Services (HCBS) long-term support services for people who are not institutionalized but who do require nursing or other support services typically provided in nursing homes or other institutions. In this chartbook, we include 6 MAX service types in HCBS: adult day care, home health, hospice care, personal care services, residential care, and private-duty nursing (sometimes referred to as community long-term care). These services may be offered through a 1915(c) HCBS waiver or under the Medicaid state plan.

Inpatient Care health care received when a person is admitted to a hospital.

Inpatient File (IP) MAX inpatient hospital care claims file, which includes inpatient hospital services as well as some bundled services such as lab tests or prescription drugs filled during an inpatient stay.

Institutional Long-Term Care (ILTC) Medicaid-covered institutional or inpatient long-term care services. ILTC includes four service types: (1) nursing facility services, (2) intermediate care facilities for individuals with intellectual disabilities (ICF/IID), (3) mental hospital services for the aged, and (4) inpatient psychiatric facility services for those under age 21.

Institutional Long-Term Care File (LT) MAX institutional long-term care claims file (community long-term care services are categorized as "Other" and can be found in the MAX OT file).

Intermediate Care Facility for Individuals with Intellectual Disabilities (ICF/IID) a Medicaid benefit that can be provided at state option. Many of the individuals covered under this option are non-ambulatory, have seizure disorders, behavior problems, mental illness, visual or hearing impairments, or a combination.

Maintenance Assistance Status (MAS) eligibility grouping traditionally used by CMS to classify beneficiaries by the financial-related criteria by which they are eligible for Medicaid. MAS groups include cash assistance-related, medically needy, poverty-related, 1115 waiver, and "other" (see other entries for descriptions of these categories).

Managed Care (MC) systems and payment mechanisms used to manage or control the use of health care services, which may include incentives to use certain providers and case management. A managed care plan usually involves a system of providers with a contractual arrangement with the plan; health maintenance organizations (HMOs), primary care case management (PCCM) plans, and prepaid health plans (PHPs) are examples of managed care plans.

Managed Long Term Services and Supports (MLTSS) Long-term services and supports delivered through capitated Medicaid managed care programs.

Medicaid Analytic eXtract (MAX) data are a set of person-level data files derived from MSIS data on Medicaid eligibility, service utilization and payments.

Medicaid Statistical Information System (MSIS) the CMS data system containing complete eligibility and claims data from each state Medicaid program. Electronic submission of data by states to MSIS became mandatory in 1999, in accordance with the Balanced Budget Act of 1997.

Medically Needy (MN) a maintenance assistance status (MAS) group that includes persons qualifying for Medicaid through the medically needy provision (a state option) that allows a higher income threshold than required by the AFDC cash assistance level. Persons with income above the medically needy threshold can deduct incurred medical expenses from their income and/or assets—or "spend down" their income/assets—to determine financial eligibility.

Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA) amendment to Title XVIII of the Social Security Act that added Part D (the Medicare prescription drug benefit) to cover the costs of outpatient prescription drugs through prescription drug plans beginning in 2006.

Other a maintenance assistance status (MAS) group that consists of a mixture of mandatory and

optional coverage groups not reported under the other MAS categories, including many institutionalized aged and disabled, those qualifying through hospice and HCBS waivers, and immigrants who qualify for emergency Medicaid benefits only.

Other Services File (OT) MAX other services claims file, which includes claims for all Medicaid services that are not reported to the inpatient (IP), institutional long-term care (LT), or prescription drug (RX) files. Other claims include claims for home- and community-based services, physician and other ambulatory services, and lab, X-ray, supplies, and other wraparound services.

Person Summary (PS) files in the MAX data system contain summary demographic and enrollment characteristics and summary claim information for each person enrolled in Medicaid in a state during a given year.

Person-Years Enrollment (PYE) a measure of the actual amount of time that Medicaid beneficiaries were enrolled in Medicaid. In contrast with the number of beneficiaries, this assigns a lower count for those beneficiaries who are not enrolled for a full year (for example, a person who is enrolled in Medicaid for six months of the year will contribute enrollment of 0.5 person-years).

Poverty-Related a maintenance assistance status (MAS) group that consists of persons qualifying through any poverty-related Medicaid expansions enacted from 1988 on; in addition, this group includes QMB, SLMB, and QI dual groups.

Prepaid Health Plan (PHP) a type of managed care plan that provides less-than-comprehensive services on an at-risk basis; these may include dental care, behavioral health services, long-term care, or other service types.

Prescription Drug File (RX) MAX prescription drug claims file, which includes all Medicaid prescriptions filled, except those bundled with inpatient, nursing home, or other services.

Primary Care Case Management (PCCM) a type of managed care plan that is paid a small premium (often $3 per person per month) for case management services only; in some states, PCCM premiums are not paid unless case management services are delivered.

Program of All-Inclusive Care for the Elderly (PACE) a program that states may offer to older Medicaid beneficiaries who are in need of nursing facility care. PACE providers are paid on a capitated basis, and enrollees receive all the services covered by Medicare and Medicaid through their PACE provider. These plans are one type of comprehensive managed care plan.

Psychiatric Residential Treatment Facility (PRTF) provide treatment to those struggling with severe emotional and/or behavioral problems.

Qualified Disabled and Working Individuals (QDWIs) disabled and working Medicare beneficiaries with income between 175 and 200 percent of the federal poverty level (FPL) and eligible for Medicare Part A. States have the option to cover Medicare Part A premiums for QDWIs.

Qualified Individuals 1 (QI1s) Medicare beneficiaries with income between 120 percent and 135 percent of the FPL; Medicaid pays all or some of Medicare Part B premiums for QI1s.

Qualified Individuals 2 (QI2s) Medicare beneficiaries with income between 135 and 175 percent of the FPL. States have the option to cover a portion of Medicare Part B premiums for QI2s.

Qualified Medicare Beneficiary (QMB) a Medicare beneficiary with income below 100 percent of FPL and assets under 200 percent of SSI asset

limit. QMBs receive Medicare premiums and cost-sharing payments, and a vast majority of QMBs qualify for full Medicaid benefits.

Restricted-Benefit Beneficiaries Medicaid beneficiaries who receive only limited health coverage. In this chartbook, restricted-benefit beneficiaries include aliens eligible for only emergency hospital services, duals receiving only coverage for Medicare premiums and cost-sharing, and people receiving only family planning services.

Section 1931/Cash Assistance-Related a maintenance assistance status (MAS) group that consists of persons receiving SSI benefits and those who would have qualified under the pre-welfare reform Aid to Families with Dependent Children (AFDC) rules.

Section 209(b) States states that have elected to use eligibility requirements more restrictive than those of the Supplemental Security Income (SSI) program. These requirements cannot be more restrictive than those in place in the state's Medicaid plan as of January 1, 1972. Section 209(b) states include Connecticut, Hawaii, Illinois, Indiana, Minnesota, Missouri, New Hampshire, North Dakota, Ohio, and Oklahoma.

Specified Low-Income Medicare Beneficiary (SLMB) a Medicare beneficiary with income between 100 percent and 120 percent of the FPL who is eligible for Medicaid payment of Part B Medicare premiums; some SLMBs also qualify for full Medicaid benefits.

State Plan Amendment (SPA) documentation sent by a state to CMS for review and approval when the state is planning to make a change to the program policies or operational approach outlined in its Medicaid and CHIP state plan. A Medicaid and CHIP state plan is an agreement between a state and the federal government describing how that state administers its Medicaid and CHIP programs. It gives an assurance that a state will abide by federal rules and may claim federal matching funds for its program activities. The state plan specifies the groups of individuals to be covered, services to be provided, methodologies for providers to be reimbursed and the administrative activities that are underway in the state.

Supplemental Security Income (SSI) a federal entitlement program providing cash assistance to low-income aged, blind, and disabled individuals; people receiving SSI are eligible for Medicaid in all but Section 209(b) states, where more restrictive criteria may be used to determine Medicaid eligibility.

Temporary Assistance for Needy Families (TANF) a block grant program that provides states with federal matching funds for cash and other assistance to low-income families with children. Established through the 1996 welfare law that repealed the Aid to Families with Dependent Children (AFDC) program, TANF eligibility has no direct bearing on Medicaid eligibility (as was the case with AFDC); however, 1996 AFDC rules are still used to determine eligibility for Medicaid. AFDC groups are commonly referred to as the Section 1931 groups (after the section of the Social Security Act that specifies AFDC-related eligibility after welfare reform).

Transformed Medicaid Statistical Information System (T-MSIS) an enhanced CMS data system containing complete eligibility and claims data from each state program. In 2013, CMS replaced MSIS with T-MSIS to expand on the data that state Medicaid agencies report to CMS while improving the data's quality and timeliness. T-MSIS differs from MSIS in the following ways: (1) data are submitted by states and retained in a relational database format as opposed to a flat fixed-length format, (2) it

requires monthly reporting instead of quarterly, (3) it has new and modified data elements, and (4) it increased the number of files from five to eight. The three new files include data on managed care, Medicaid providers, and third-party liability. The first state (Colorado) made the transition from MSIS to T-MSIS starting with its 2011 data. As a result, the MAX 2012 files are produced with a combination of MSIS and T-MSIS Valids file data—the latter being T-MSIS data converted to MSIS format for easy incorporation into MAX.

Upper Payment Limit (UPL) limit on payments made by states to facilities and providers for which the federal government will provide matching funds. UPL programs are funding mechanisms in which states supplement reimbursable service costs at specific facilities; payments may exceed the costs of services provided to Medicare beneficiaries in those facilities as long as they are not higher than the aggregate UPL for that class of facilities.

User beneficiaries with a claim for a specific service are called "users" of that service; beneficiaries typically use multiple services.

Waivers statutory authorities that allow states to receive federal matching funds for Medicaid expenditures even if the state is not in compliance with requirements of the federal Medicaid statute; for example, 1115 waivers allow states to cover categories of people that are not generally covered under Medicaid.

Acronyms and Abbreviations

1115 Section 1115 waiver

1915(b) Section 1915(b) waiver

1915(b)(c) Section 1915(b)(c) waiver

1915(c) Section 1915(c) waiver, also known as HCBS waiver

1931 Section 1931/Cash assistance

ACA Affordable Care Act of 2010

AFDC Aid to Families with Dependent Children

BHO behavioral health organization

BOE basis of eligibility

CHIP Children's Health Insurance Program

CHIPRA Children's Health Insurance Program Reauthorization Act

CMS Centers for Medicare & Medicaid Services

DME durable medical equipment

DSH disproportionate share hospital

EDB [Medicare] Enrollee DataBase

FFS fee-for-service

FFY federal fiscal year

FMAP federal medical assistance percentage

FPL federal poverty level

HCBS home- and community-based services

HHS United States Department of Health and Human Services

HIFA Health Insurance Flexibility and Accountability

HIOs health insuring organizations

HMO health maintenance organization

HMO/HIO health maintenance organization/health insuring organization

ICF/IID intermediate care facility for individuals with intellectual disabilities

ID/DD intellectual or developmental disabilities

ILTC institutional long-term care

IP inpatient; MAX inpatient claims file

LT MAX long-term care claims file

MAS maintenance assistance status

MAX Medicaid Analytic Extract

MC managed care

MI/SED mental illness/severe emotional disturbance

MLTSS Managed Long-Term Services and Supports

MN medically needy

MSIS Medicaid Statistical Information System

OT occupational therapy in the context of specific services; "other" services in the context of summary type of service; MAX other types of claims file

PACE Program of All-Inclusive Care for the Elderly

PCCM primary care case management

PHP prepaid health plan

PRTF Psychiatric Residential Treatment Facility

PRWORA Personal Responsibility and Work Opportunity Reconciliation Act of 1996

PS [MAX] person summary [file]

PT physical therapy

QDWI Qualified Disabled and Working Individual

QI Qualified Individual

QMB Qualified Medicare Beneficiary

ResDAC Research Data Assistance Center

RX prescription drugs; MAX prescription drug claims file

SLMB Specified Low-Income Medicare Beneficiary

SPA state plan amendment

SSDI Social Security Disability Insurance

SSI Supplemental Security Income

TANF Temporary Assistance for Needy Families

T-MSIS Transformed Medicaid Statistical Information System

TOS type of service

UPL upper payment limit

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MAX
CENTERS FOR MEDICARE
& MEDICAID SERVICES


CMS
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MATHEMATICA
Policy Research