

MACStats: Medicaid and CHIP Data Book

December 2019



MACPAC

Medicaid and CHIP Payment
and Access Commission

About MACPAC

The Medicaid and CHIP Payment and Access Commission (MACPAC) is a non-partisan legislative branch agency that provides policy and data analysis and makes recommendations to Congress, the Secretary of the U.S. Department of Health and Human Services, and the states on a wide array of issues affecting Medicaid and the State Children's Health Insurance Program (CHIP). The U.S. Comptroller General appoints MACPAC's 17 commissioners, who come from diverse regions across the United States and bring broad expertise and a wide range of perspectives on Medicaid and CHIP.

MACPAC serves as an independent source of information on Medicaid and CHIP, publishing issue briefs and data reports throughout the year to support policy analysis and program accountability. The Commission's authorizing statute, 42 USC 1396, outlines a number of areas for analysis, including:

- payment;
- eligibility;
- enrollment and retention;
- coverage;
- access to care;
- quality of care; and
- the programs' interaction with Medicare and the health care system generally.

MACPAC's authorizing statute also requires the Commission to submit reports to Congress by March 15 and June 15 of each year. In carrying out its work, the Commission holds public meetings and regularly consults with state officials, congressional and executive branch staff, beneficiaries, health care providers, researchers, and policy experts.

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Introduction

This 2019 edition of the *MACStats: Medicaid and CHIP Data Book* presents the most current data available on Medicaid and the State Children’s Health Insurance Program (CHIP), two programs that provide a safety net for low-income populations who otherwise would not have access to health care coverage and that cover services other payers often do not cover.

The MACStats data book compiles the broad range of Medicaid and CHIP statistics that MACPAC regularly updates on macpac.gov into a single, end-of-year publication. Our purpose is to bring together in one place federal and state data on Medicaid and CHIP that come from multiple data sources and are often difficult to find.

The data book provides context for understanding these programs and how they fit in the larger health care system. For example: Medicaid and CHIP combined still account for a smaller share of total health care spending than Medicare, despite covering more people (Section 1). After experiencing high rates of growth in 2014 and 2015, Medicaid and CHIP enrollment decreased slightly over the past couple of years; declining by 1.2 percent in 2018 and 1.4 percent in 2019 (Exhibit 11). Managed care enrollment and spending continue to climb (Exhibits 17 and 29). And children whose primary coverage source is Medicaid or CHIP are reported to have well-child checkups at rates slightly less than those with private coverage, but more than those who are uninsured (Exhibit 40).

This 2019 edition includes reprints of 11 exhibits that display enrollment and spending by eligibility group that could not be updated from last year’s publication due the transition from the Medicaid Statistical Information System (MSIS) to the Transformed MSIS (T-MSIS). Although all states are now submitting T-MSIS data to the Centers for Medicare & Medicaid Services (CMS), these data have just recently become available for analysis. MACPAC is in the process of validating the T-MSIS data for completeness and accuracy, but we were not able to complete our assessment of the data

in time for publication. When we have completed our assessment on the usability of the data, we will provide updated tables on our website. For several of the tables that are reprinted, there are two versions: the (a) version provides fiscal year (FY) 2013 data and the (b) version provides FY 2014 data for the states that had sufficient data. For the (b) version FY 2014 exhibits, we have not published national totals due to the number of states excluded.

The pages that follow are divided into six sections:

- an overview with key statistics on Medicaid and CHIP;
- trends in Medicaid spending, enrollment, and share of state budgets;
- Medicaid and CHIP enrollment and spending, with information provided by state, service category, and eligibility group;
- Medicaid and CHIP eligibility;
- measures of beneficiary health, use of services, and access to care; and
- a technical guide.

The technical guide describes the data sources used in MACStats and the methods that MACPAC uses to analyze these data. It also provides guidance for interpreting the exhibits and explains how specific data—such as those on enrollment and spending—may differ from each other or from those published elsewhere.

We would like to thank the many individuals at CMS and our contractors—the State Health Access Data Assistance Center at the University of Minnesota and Acumen, LLC—who provided their insights and assistance. We would also like to thank Paula Gordon and Dave Rinaldo and his team at U.Group for providing valuable support in copyediting, formatting, and producing this data book.

SECTION 1

Overview— Key Statistics

Section 1: Overview—Key Statistics

Key Points

- In 2018, more than one-quarter of the U.S. population was enrolled in Medicaid or the State Children’s Health Insurance Program (CHIP) at some point during the year, 86.7 million in Medicaid and 9.4 million in CHIP (Exhibit 1).
- About 36.2 percent of children had Medicaid or CHIP coverage in 2018. Additionally, Medicaid and CHIP enrollees of all ages were more likely to be in fair or poor health than individuals who were covered by private insurance or who were uninsured (Exhibit 2).
- Over 40 percent of all individuals enrolled in Medicaid or CHIP in 2018 had family incomes below 100 percent of the federal poverty level (FPL). Almost 6 out of 10 (59.7 percent) individuals enrolled in Medicaid or CHIP had incomes of less than 138 percent FPL, the threshold used to determine eligibility for Medicaid in states that have expanded Medicaid to low-income adults (Exhibit 2).
- Medicaid and CHIP accounted for 17.2 percent of national health expenditures in calendar year 2017, less than either Medicare (20.2 percent) or private insurance (33.9 percent) (Exhibit 3).
- The share of the federal budget devoted to Medicaid and Medicare has grown steadily since the programs were enacted in 1965. Even so, in fiscal year 2018, Medicaid continued to account for a smaller share (9.5 percent) than Medicare (14.2 percent) (Exhibit 4).
- Medicaid spending as a share of state budgets varies depending on whether federal funds are included. Considering only the state-funded portion of state budgets (that is, the portion states must finance on their own through taxes and other means), Medicaid’s share was 16.0 percent in state fiscal year (SFY) 2017. When federal funds are included, Medicaid’s share was 28.9 percent in SFY 2017 (Exhibit 5).

EXHIBIT 1. Medicaid and CHIP Enrollment as a Percentage of the U.S. Population, 2018 (millions)

Population	Ever during FY 2018	Point in time during FY 2018	Point in time during CY 2018
	Estimates based on administrative data (CMS) ¹		Survey data (NHIS) ²
Medicaid enrollees	86.7 ³	74.6	Not available
CHIP enrollees	9.4 ⁴	6.7 ⁴	Not available
Totals for Medicaid and CHIP	96.1³	81.3	55.4
	Census Bureau data		Survey data (NHIS) ²
U.S. population	327.6 ⁵	327.8 ⁵	321.3
	Administrative and Census Bureau data		Survey data (NHIS) ²
Medicaid and CHIP enrollment as a percentage of U.S. population	29.3% ¹	24.8%	17.3%

Notes: FY is fiscal year. CY is calendar year. NHIS is National Health Interview Survey. Excludes the territories. Medicaid and CHIP enrollment numbers can vary for reasons including differences in the sources of data (e.g., administrative records versus survey interviews), categories of individuals included in the data (e.g., those receiving full versus limited benefits, those who are living in the community versus an institution such as a nursing facility), and the enrollment period examined (e.g., ever during the year versus at a point in time). For a more detailed discussion of enrollment numbers, see <https://www.macpac.gov/macstats/data-sources-and-methods/>.

¹ Estimates based on administrative data are from the President's budget. Point in time estimates are from the FY 2019 President's budget and ever-enrolled estimates are from the FY 2017 President's budget because the CMS Office of the Actuary (OACT) did not produce ever-enrolled estimates for the FY 2018 or FY 2019 President's budget. Medicaid and CHIP enrollment numbers obtained from administrative data include individuals who received limited benefits (e.g., emergency services only). Combining administrative totals from Medicaid and CHIP may cause some individuals to be double-counted if they were enrolled in both programs during the year. Overcounting of enrollees in the administrative data may occur for other reasons—for example, individuals may move and be enrolled in two states' Medicaid programs during the year. Excludes about 1.4 million individuals in the territories.

² NHIS data exclude individuals in active-duty military and in institutions such as nursing facilities; in addition, surveys such as the NHIS generally do not classify limited benefits as Medicaid or CHIP coverage. The NHIS reports a combined total for the Medicaid and CHIP populations. Respondents are also known to underreport Medicaid and CHIP coverage.

³ Ever-enrolled estimate was not available from CMS for the group of new adults enrolled under state expansions of Medicaid that began in January 2014; total reflects the point-in-time estimate from the FY 2018 President's budget for this group instead. As a result, the total is an underestimate of the number of people ever enrolled.

⁴ These estimates reflect FY 2017 CHIP enrollment because the FY 2019 President's budget did not include information for FY 2018.

⁵ The Census Bureau number in the ever-enrolled column was the estimated U.S. resident population as of September 2018 (the month with the largest count in FY 2018); the number of residents ever living in the United States during the year is not available. The Census Bureau point-in-time number is the average estimated monthly number of U.S. residents for FY 2018.

Source: MACPAC, 2019, analysis of the following: U.S. Bureau of the Census, 2019, *Monthly population estimates for the United States: April 1, 2010, to December 1, 2019, National totals: Vintage 2018*, <https://www2.census.gov/programs-surveys/popest/tables/2010-2018/national/totals/na-est2018-01.xlsx>; CMS, 2018, *Fiscal year 2019 justification of estimates for appropriations committees*, Baltimore, MD: CMS, <https://www.cms.gov/About-CMS/Agency-Information/PerformanceBudget/Downloads/FY2019-CJ-Final.pdf>; OACT, CMS, 2017a, e-mail to MACPAC staff, August 15; OACT, 2017b, e-mail to MACPAC staff, July 24; and NHIS data.

EXHIBIT 2. Characteristics of Non-Institutionalized Individuals by Age and Source of Health Coverage, 2018

Characteristic	Selected coverage source at time of interview, all ages ¹					Selected coverage source at time of interview, age 0–18 ¹			
	Total	Medicare	Private ²	Medicaid or CHIP ³	Uninsured ⁴	Total	Private ²	Medicaid or CHIP ³	Uninsured ⁴
Total (percent distribution across coverage sources)⁵	100.0%	17.6%	62.9%	17.3%	9.2%	100.0%	55.6%	36.2%	5.1%
Coverage									
Length of time with any coverage during year									
Full year	88.0*	98.8*	96.1*	93.5	–	92.8*	97.4*	95.5	–
Part year	6.2	1.2*	3.9*	6.5	29.3*	4.8	2.6*	4.5	43.0*
No coverage during year	5.8	–	–	–	70.7	2.3	–	–	57.0
Multiple coverage sources at time of interview									
Yes, any Medicare and Medicaid or CHIP combination ⁶	1.8*	10.0	–	10.2	–	†	–	†	–
Yes, any private and Medicaid or CHIP combination	0.6*	–	0.9*	3.3	–	1.5*	2.7*	4.1	–
Yes, any other combination	7.8*	44.0*	12.3*	0.8	–	–	–	–	–
No	89.9*	46.0*	86.8	85.7	100.0*	98.5*	97.3*	95.7	100.0*
Demographics									
Age									
0–18	24.0*	0.7*	21.2*	50.3	13.3*	100.0	100.0	100.0	100.0
19–64	60.0*	13.8*	66.3*	42.4	85.8*	–	–	–	–
65 or older	16.0*	85.5*	12.5*	7.3	0.9*	–	–	–	–
Gender									
Male	48.9*	45.6	49.0*	44.3	55.1*	51.1	50.8	51.5	50.9
Female	51.1*	54.4	51.0*	55.7	44.9*	48.9	49.2	48.5	49.1
Race									
Hispanic	18.4*	9.3*	13.1*	32.1	37.1*	25.5*	16.1*	38.7	37.2
White, non-Hispanic	61.3*	75.0*	68.7*	38.9	41.9	52.5*	65.6*	33.7	41.7*
Black, non-Hispanic	12.6*	10.3*	10.1*	21.2	14.1*	14.2*	9.5*	21.4	13.3*
Other non-white, non-Hispanic	7.7	5.4*	8.1	7.8	7.0	7.7*	8.8*	6.1	7.8

EXHIBIT 2. (continued)

Characteristic	Selected coverage source at time of interview, age 19–64 ¹					Selected coverage source at time of interview, age 65 or older ¹			
	Total	Medicare	Private ²	Medicaid or CHIP ³	Uninsured ⁴	Total	Medicare	Private ²	Medicaid or CHIP ³
Total (percent distribution across coverage sources)⁵	100.0%	4.0%	69.5%	12.2%	13.1%	100.0%	94.5%	49.1%	7.8%
Coverage									
Length of time with any coverage during year									
Full year	83.2*	97.1*	95.0*	90.5	–	98.6	99.1	99.6*	97.0
Part year	8.2	†	5.0*	9.5	27.7*	1.0	0.9	0.4	†
No coverage during year	8.6	–	–	–	72.3	0.5	–	–	–
Multiple coverage sources at time of interview									
Yes, any Medicare and Medicaid or CHIP combination ⁶	1.2*	30.1*	–	10.0	–	6.4*	6.8*	–	81.6
Yes, any private and Medicaid or CHIP combination	0.4*	–	0.5*	2.9	–	†	–	†	†
Yes, any other combination	0.8	19.2	1.1	†	–	45.7*	48.3*	93.0*	7.1
No	97.6*	50.7*	98.4*	86.4	100.0*	47.9*	44.9*	7.0*	11.2
Demographics									
Age									
0–18	–	–	–	–	–	–	–	–	–
19–64	100.0	100.0	100.0	100.0	100.0	–	–	–	–
65 or older	–	–	–	–	–	100.0	100.0	100.0	100.0
Gender									
Male	49.1*	51.3*	49.2*	37.9	55.8*	44.9*	44.6*	45.0*	32.2
Female	50.9*	48.7*	50.8*	62.1	44.2*	55.1*	55.4*	55.0*	67.8
Race									
Hispanic	18.1*	15.3*	13.7*	24.7	36.9*	8.7*	8.2*	4.9*	29.6
White, non-Hispanic	60.7*	61.5*	66.8*	44.9	42.1	76.4*	77.5*	84.4*	38.9
Black, non-Hispanic	12.9*	18.1	11.0*	21.5	14.2*	9.1*	8.9*	6.3*	18.4
Other non-white, non-Hispanic	8.3	5.1*	8.5	8.9	6.8	5.7*	5.4*	4.4*	13.2

EXHIBIT 2. (continued)

Characteristic	Selected coverage source at time of interview, all ages ¹					Selected coverage source at time of interview, age 0–18 ¹			
	Total	Medicare	Private ²	Medicaid or CHIP ³	Uninsured ⁴	Total	Private ²	Medicaid or CHIP ³	Uninsured ⁴
Education⁷									
Less than high school	11.0%*	15.8%*	5.1%*	27.0%	26.1%	–	–	–	–
High school diploma or GED certificate	24.3*	28.4*	20.5*	34.9	33.2	–	–	–	–
Some college	30.6	28.1	31.4*	28.7	26.0	–	–	–	–
College or graduate degree	34.0*	27.6*	42.9*	9.3	14.6*	–	–	–	–
Marital status⁷									
Married	53.4*	54.1*	59.7*	28.1	38.4*	–	–	–	–
Widowed	5.8	20.0*	4.3*	6.0	1.8*	–	–	–	–
Divorced or separated	11.0*	14.9*	9.0*	17.6	13.0*	–	–	–	–
Living with partner	7.6*	3.1*	7.0*	11.4	11.7	–	–	–	–
Never married	22.1*	8.0*	20.0*	37.0	35.1	–	–	–	–
Family income									
Has income less than 138 percent FPL	20.2*	20.1*	6.9*	59.7	36.5*	27.1%*	6.4%*	58.4%	31.4%*
Has income in ranges shown below									
Less than 100 percent FPL	12.7*	11.2*	3.8*	41.0	23.0*	17.9*	3.5*	39.9	21.1*
100–199 percent FPL	18.3*	22.7*	10.3*	36.7	30.8*	21.7*	10.3*	38.3	25.8*
200–399 percent FPL	28.8*	30.8*	31.1*	17.2	30.7*	29.1*	35.4*	17.7	36.3*
400 percent FPL or higher	40.0*	35.1*	54.7*	4.9	15.2*	31.2*	50.9*	3.8	16.6*
Other demographic characteristics									
Citizen of United States	93.4	97.5*	95.1*	93.7	77.3*	97.8	98.3	98.1	92.2*
Parent of a dependent child ⁷	27.2*	1.9*	29.1*	33.5	33.1	†	†	†	†
Currently working ⁷	63.7*	16.6*	74.9*	38.7	69.1*	2.1	2.6*	1.5	†
Veteran ⁷	8.8*	18.5*	6.8*	3.0	2.2	–	–	–	–
Receives SSI or SSDI	4.0*	12.9	1.2*	12.9	1.0*	1.3*	†	3.2	†
Health									
Current health status									
Excellent or very good	66.4*	41.8*	72.7*	58.8	60.0	85.5*	91.0*	77.5	78.5
Good	23.4	32.3*	20.8*	24.8	29.5*	12.7*	7.9*	19.2	18.8
Fair or poor	10.2*	25.8*	6.4*	16.4	10.5*	1.8*	1.1*	3.3	†



EXHIBIT 2. (continued)

Characteristic	Selected coverage source at time of interview, age 19–64 ¹					Selected coverage source at time of interview, age 65 or older ¹			
	Total	Medicare	Private ²	Medicaid or CHIP ³	Uninsured ⁴	Total	Medicare	Private ²	Medicaid or CHIP ³
Education⁷									
Less than high school	9.9%*	20.5%	4.4%*	23.8%	26.0%	15.1%*	15.1%*	9.0%*	46.3%
High school diploma or GED certificate	23.6*	35.6	19.4*	36.3	33.4	27.2	27.2	26.3	26.4
Some college	31.5	30.1	32.0	31.3	26.0*	27.6*	27.8*	28.7*	13.2
College or graduate degree	35.1*	13.8*	44.2*	8.6	14.6*	30.1*	29.9*	36.0*	14.1
Marital status⁷									
Married	52.3*	33.9*	59.1*	27.7	38.3*	57.5*	57.3*	63.2*	30.5
Widowed	1.6*	4.5*	1.3*	2.2	1.5	21.9*	22.4*	20.6*	27.8
Divorced or separated	10.4*	23.9*	8.6*	15.8	13.1*	13.6*	13.4*	11.0*	27.6
Living with partner	9.1*	8.8*	7.9*	12.9	11.8	2.2	2.2	1.7	2.8
Never married	26.7*	28.8*	23.1*	41.4	35.4*	4.8*	4.6*	3.5*	11.2
Family income									
Has income less than 138 percent FPL	18.4*	42.3*	7.0*	60.1	37.2*	16.6*	16.2*	7.4*	66.4
Has income in ranges below									
Less than 100 percent FPL	11.7*	26.6*	4.1*	41.5	23.1*	8.9*	8.5*	3.2*	45.6
100–199 percent FPL	16.4*	34.3	9.5*	35.4	31.8	20.4*	20.7*	14.9*	32.1
200–399 percent FPL	28.2*	24.6*	29.5*	17.0	30.0*	31.5*	32.0*	32.2*	14.6
400 percent FPL or higher	43.6*	14.2*	56.9*	5.7	15.0*	39.0*	38.7*	49.6*	7.5
Other demographic characteristics									
Citizen of United States	90.7	95.4*	93.5*	89.5	75.2*	97.0*	97.8*	98.3*	88.2
Parent of a dependent child ⁷	34.2*	10.7*	34.4*	39.2	33.5*	0.7	0.5	0.8	†
Currently working ⁷	75.8*	15.4*	84.7*	44.3	69.6*	18.3*	16.7*	22.8*	6.3
Veteran ⁷	5.7*	7.5*	4.6*	2.4	2.2	20.5*	20.3*	18.6*	6.5
Receives SSI or SSDI	5.1*	68.9*	1.5*	21.4	1.0*	4.1*	4.1*	1.2*	31.0
Health									
Current health status									
Excellent or very good	64.2*	17.6*	70.9*	43.6	57.3*	45.5*	45.4*	51.2*	17.4
Good	25.4*	30.3	22.8*	30.8	31.0	32.4	32.8*	32.4	28.5
Fair or poor	10.4*	52.2*	6.2*	25.6	11.7*	22.1*	21.8*	16.4*	54.1

EXHIBIT 2. (continued)

Notes: GED is General Equivalence Diploma. FPL is federal poverty level. SSI is Supplemental Security Income. SSDI is Social Security Disability Insurance. Percentage calculations for each item in the exhibit exclude individuals with missing and unknown values. Standard errors are available online in the Excel version of this exhibit at <https://www.macpac.gov/publication/characteristics-of-non-institutionalized-individuals-by-source-of-health-insurance/>. The individual components listed under the subcategories are not always mutually exclusive and may not sum to 100 percent. Due to differences in methodology (such as the wording of questions, length of recall periods, and prompts or probes used to elicit responses), estimates obtained from different survey data sources will vary. For example, the National Health Interview Survey (NHIS) is known to produce higher estimates of service use than the Medical Expenditure Panel Survey (MEPS). For purposes of comparing groups of individuals (as in this exhibit), the NHIS provides the most recent information available. For other purposes, such as measuring levels of use relative to a particular benchmark or goal, it may be appropriate to consult estimates from MEPS or another source.

* Difference from Medicaid or CHIP is statistically significant at the 0.05 level.

† Estimate is unreliable because it has a relative standard error greater than or equal to 30 percent.

– Dash indicates zero.

¹ Total includes all non-institutionalized individuals, regardless of coverage source. In this exhibit, the values across health insurance coverage types may not sum to 100 percent for each age group because individuals may have multiple sources of coverage and because not all types of coverage are displayed. Other MACStats exhibits apply a hierarchy to assign individuals with multiple coverage sources to a primary source, and may therefore have different results than those shown here. Coverage source is defined as of the time of the survey interview. Since an individual may have multiple coverage sources or changes over time, responses to survey questions may reflect characteristics or experiences associated with a coverage source other than the one assigned in this exhibit.

² Private health insurance coverage excludes plans that paid for only one type of service, such as accidents or dental care.

³ Medicaid or CHIP also includes persons covered by other state-sponsored health plans.

⁴ Individuals were defined as uninsured if they did not have any private health insurance, Medicaid, CHIP, Medicare, state-sponsored or other government-sponsored health plan, or military plan. Individuals were also defined as uninsured if they had only Indian Health Service coverage or only a private plan that paid for one type of service, such as accidents or dental care.

⁵ Components may not sum to 100 percent because individuals may have multiple sources of coverage and because not all types of coverage are displayed.

⁶ NHIS and other survey data underestimate the number of individuals dually enrolled in Medicare and Medicaid, in part because most surveys do not count those whose only Medicaid benefit is payment of Medicare premiums and cost sharing as having Medicaid coverage.

⁷ Information is limited to those age 19 or older.

Source: MACPAC, 2019, analysis of NHIS data.

EXHIBIT 3. National Health Expenditures by Type and Payer, 2017

Type of expenditure	Payer amount (millions)							
	Total	Medicaid	CHIP	Medicare	Private insurance	Other health insurance ¹	Other third party payers ²	Out of pocket
Total payer expenditures	\$3,492,077	\$581,864	\$18,194	\$705,859	\$1,183,910	\$114,391	\$522,404	\$365,455
Hospital care	1,142,593	193,923	4,650	282,943	455,328	64,912	106,914	33,923
Physician and clinical services	694,295	75,325	4,312	159,033	300,872	28,016	66,683	60,052
Dental services	129,099	12,531	2,069	868	58,210	1,958	460	53,003
Other professional services ³	96,634	7,494	385	24,741	32,961	–	7,184	23,869
Home health care	97,040	35,029	77	38,784	10,818	672	2,666	8,993
Other non-durable medical products ⁴	64,068	–	–	1,973	–	–	–	62,096
Prescription drugs	333,440	33,018	1,991	100,885	140,092	8,976	1,763	46,716
Durable medical equipment ⁵	54,416	7,866	184	8,125	11,384	–	866	25,991
Nursing care facilities and continuing care retirement communities ⁶	166,301	50,197	13	37,713	16,566	5,357	12,120	44,335
Other health, residential, and personal care services ⁷	183,119	105,908	1,509	4,964	13,615	1,011	49,633	6,479
Administration ⁸	274,517	60,573	3,004	45,829	144,064	3,488	17,558	–
Public health activity	88,934	–	–	–	–	–	88,934	–
Investment	167,621	–	–	–	–	–	167,621	–

EXHIBIT 3. (continued)

Type of expenditure	Share of total							
	Total	Medicaid	CHIP	Medicare	Private insurance	Other health insurance ¹	Other third party payers ²	Out of pocket
Total payer share of expenditures	100.0%	16.7%	0.5%	20.2%	33.9%	3.3%	15.0%	10.5%
Hospital care	100.0	17.0	0.4	24.8	39.9	5.7	9.4	3.0
Physician and clinical services	100.0	10.8	0.6	22.9	43.3	4.0	9.6	8.6
Dental services	100.0	9.7	1.6	0.7	45.1	1.5	0.4	41.1
Other professional services ³	100.0	7.8	0.4	25.6	34.1	–	7.4	24.7
Home health care	100.0	36.1	0.1	40.0	11.1	0.7	2.7	9.3
Other non-durable medical products ⁴	100.0	–	–	3.1	–	–	–	96.9
Prescription drugs	100.0	9.9	0.6	30.3	42.0	2.7	0.5	14.0
Durable medical equipment ⁵	100.0	14.5	0.3	14.9	20.9	–	1.6	47.8
Nursing care facilities and continuing care retirement communities ⁶	100.0	30.2	0.0	22.7	10.0	3.2	7.3	26.7
Other health, residential, and personal care services ⁷	100.0	57.8	0.8	2.7	7.4	0.6	27.1	3.5
Administration ⁸	100.0	22.1	1.1	16.7	52.5	1.3	6.4	–
Public health activity	100.0	–	–	–	–	–	100.0	–
Investment	100.0	–	–	–	–	–	100.0	–

Notes: Every five years National Health Expenditure Accounts undergo a comprehensive revision that includes the incorporation of newly available source data, methodological and definitional changes, and benchmark estimates from the U.S. Census Bureau's quinquennial Economic Census. The values shown here reflect the comprehensive revision made in 2014, and thus, the figures shown here may reflect methodological and definitional shifts within payer and service categories from prior publications of MACStats. For example, the 2014 methodology implemented a new method for allocating Medicaid managed care premiums to the goods and services categories for states that have a large percentage of Medicaid managed care spending. That change caused a downward revision for hospitals and home health and an upward revision for other service categories.

EXHIBIT 3. (continued)

– Dash indicates zero; 0.0% indicates an amount less than 0.05% that rounds to zero.

¹ U.S. Department of Defense and U.S. Department of Veterans Affairs.

² Includes all other public and private programs and expenditures except for out-of-pocket amounts.

³ The other professional services category includes services provided in establishments operated by health practitioners other than physicians and dentists, including those provided by private-duty nurses, chiropractors, podiatrists, optometrists, and physical, occupational, and speech therapists.

⁴ The other non-durable medical products category includes the retail sales of non-prescription drugs and medical sundries.

⁵ The durable medical equipment category includes retail sales of items such as contact lenses, eyeglasses, and other ophthalmic products; surgical and orthopedic products; hearing aids; wheelchairs; and medical equipment rentals.

⁶ The nursing care facilities and continuing care retirement communities category includes nursing and rehabilitative services provided in freestanding nursing home facilities that are generally provided for an extended period of time by registered or licensed practical nurses and other staff.

⁷ The other health, residential, and personal care category includes spending for Medicaid home- and community-based waivers, care provided in residential facilities for people with intellectual disabilities or mental health and substance abuse disorders, ambulance services, school health, and worksite health care.

⁸ The administrative category includes the administrative cost of health care programs (e.g., Medicare and Medicaid) and the net cost of private health insurance (administrative costs, as well as additions to reserves, rate credits and dividends, premium taxes, and plan profits or losses).

Sources: Office of the Actuary (OACT), CMS, 2018, *National health expenditures by type of service and source of funds: Calendar years 1960–2017*, Baltimore, MD: OACT, <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/NHE2017.zip>. OACT, 2018, *National health expenditure accounts: Methodology paper, 2017*, Baltimore, MD: OACT, <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/DSM-17.pdf>. OACT, 2014, *Summary of 2014 comprehensive revision to the national health expenditure accounts*, Baltimore, MD: OACT, <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/benchmark2014.pdf>.

EXHIBIT 4. Major Health Programs and Other Components of the Federal Budget as a Share of Federal Outlays, FYs 1965–2018

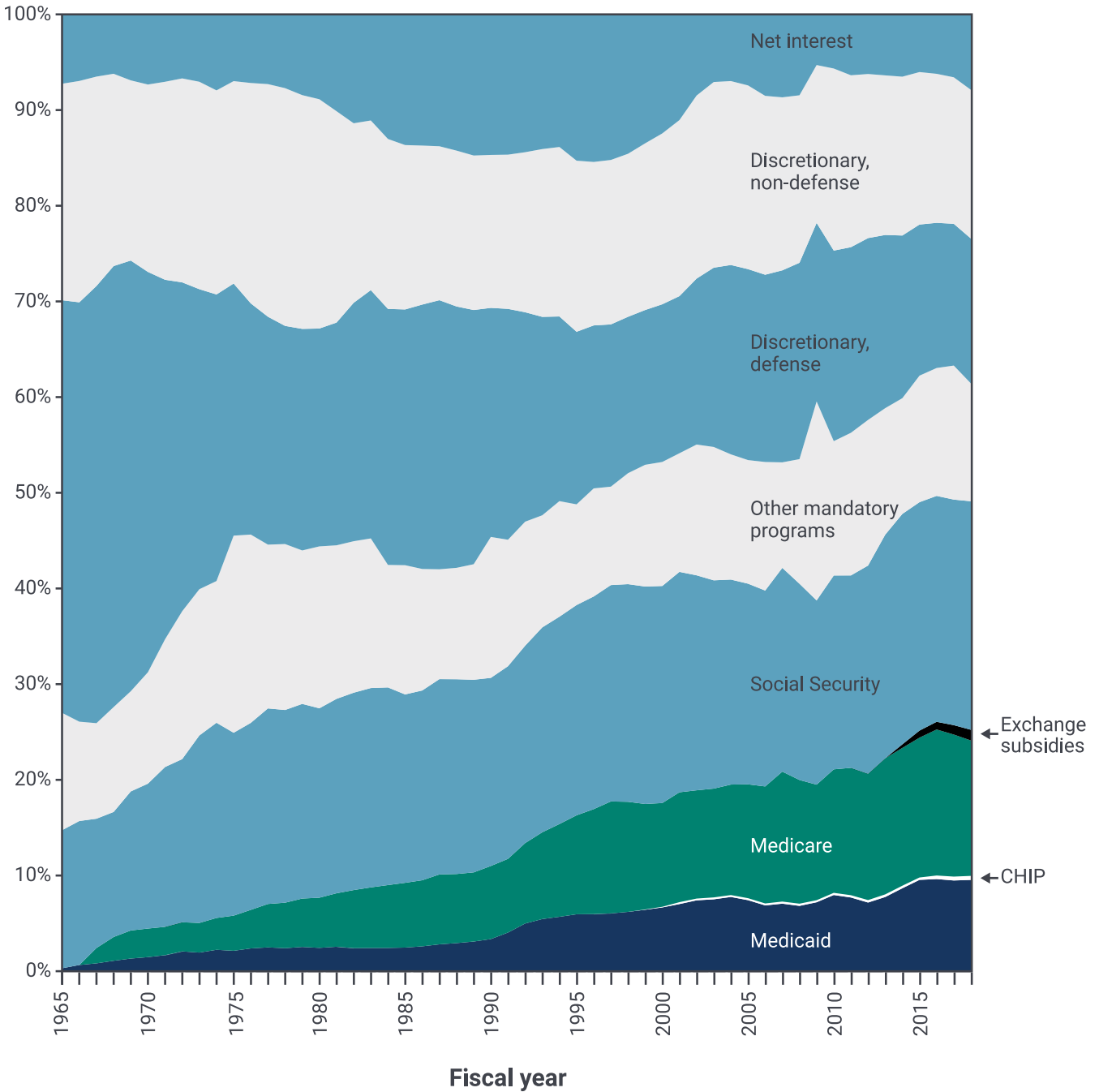


EXHIBIT 4. (continued)

Fiscal year	Mandatory programs						Discretionary programs		Net interest
	Medicaid	CHIP	Medicare	Exchange subsidies	Social Security	Other	Defense	Non-defense	
1965	0.2%	–	–	–	14.4%	12.3%	43.2%	22.6%	7.3%
1970	1.4	–	3.0%	–	15.2	11.6	41.9	19.6	7.3
1975	2.1	–	3.7	–	19.1	20.6	26.4	21.2	7.0
1980	2.4	–	5.2	–	19.8	16.9	22.8	24.0	8.9
1985	2.4	–	6.8	–	19.7	13.5	26.7	17.2	13.7
1990	3.3	–	7.6	–	19.7	14.7	24.0	16.0	14.7
1991	4.0	–	7.7	–	20.1	13.2	24.1	16.1	14.7
1992	4.9	–	8.4	–	20.6	13.0	21.9	16.7	14.4
1993	5.4	–	9.1	–	21.4	11.7	20.7	17.5	14.1
1994	5.6	–	9.7	–	21.7	12.1	19.3	17.7	13.9
1995	5.9	–	10.4	–	22.0	10.5	18.0	17.9	15.3
1996	5.9	–	11.0	–	22.2	11.3	17.0	17.1	15.4
1997	6.0	–	11.7	–	22.6	10.3	17.0	17.2	15.2
1998	6.1	0.0%	11.5	–	22.8	11.6	16.4	17.1	14.6
1999	6.3	0.0	11.0	–	22.7	12.7	16.2	17.4	13.5
2000	6.6	0.1	10.9	–	22.7	13.0	16.5	17.9	12.5
2001	6.9	0.2	11.5	–	23.0	12.4	16.4	18.4	11.1
2002	7.3	0.2	11.3	–	22.5	13.7	17.4	19.1	8.5
2003	7.4	0.2	11.4	–	21.8	13.9	18.7	19.4	7.1
2004	7.7	0.2	11.6	–	21.4	13.1	19.8	19.2	7.0
2005	7.4	0.2	11.9	–	21.0	12.9	20.0	19.2	7.4
2006	6.8	0.2	12.2	–	20.5	13.4	19.6	18.7	8.5
2007	7.0	0.2	13.6	–	21.3	11.0	20.1	18.1	8.7
2008	6.8	0.2	12.9	–	20.5	13.0	20.5	17.5	8.5
2009	7.1	0.2	12.1	–	19.3	20.8	18.7	16.5	5.3
2010	7.9	0.2	12.9	–	20.3	14.1	19.9	19.0	5.7
2011	7.6	0.2	13.3	–	20.1	14.9	19.4	18.0	6.4
2012	7.1	0.3	13.2	–	21.7	15.2	19.0	17.4	6.2
2013	7.7	0.3	14.2	–	23.4	13.2	18.1	16.7	6.4
2014	8.6	0.3	14.4	0.4%	24.1	12.1	17.0	16.6	6.5
2015	9.5	0.3	14.6	0.7	23.9	13.2	15.8	15.9	6.1
2016	9.6	0.4	15.3	0.8	23.6	13.4	15.2	15.6	6.2
2017	9.4	0.4	14.9	1.0	23.6	14.0	14.8	15.3	6.6
2018	9.5	0.4	14.2	1.1	23.9	12.3	15.2	15.5	7.9

Notes: FY is fiscal year. – Dash indicates zero; 0.0% indicates an amount less than 0.05% that rounds to zero.

Source: MACPAC, 2019, analysis of Office of Management and Budget (OMB), Tables 6.1, 8.5, and 8.7, in *Historical tables, budget of the United States Government, fiscal year 2020*, Washington, DC: OMB, <https://www.gpo.gov/fdsys/search/pagedetails.action?granuleId=&packageId=BUDGET-2020-TAB>.

EXHIBIT 5. Medicaid as a Share of State Total Budgets and State-Funded Budgets, SFY 2017

State	Total budget (including state and federal funds)				State-funded budget			
	Dollars (millions)	Total spending as a share of total budget ¹			Dollars (millions)	State-funded spending as a share of state-funded budget ¹		
		Medicaid	Elementary and secondary education	Higher education		Medicaid	Elementary and secondary education	Higher education
Total	\$1,954,844	28.9%	19.6%	10.1%	\$1,351,013	16.0%	24.5%	13.2%
Alabama	26,645	24.4	21.2	20.9	16,760	11.7	27.6	26.2
Alaska	9,744	20.8	17.1	8.1	5,981	10.7	24.1	11.0
Arizona	42,026	28.1	16.7	13.9	27,261	10.3	21.5	18.4
Arkansas	25,136	28.3	14.1	14.6	17,261	9.4	17.4	21.2
California	261,217	34.3	20.3	7.1	165,880	20.1	28.0	8.2
Colorado	36,530	23.6	24.8	14.5	27,410	13.0	30.9	18.1
Connecticut	31,719	23.3	12.8	9.3	25,388	14.9	13.9	10.5
Delaware	10,675	19.3	23.8	3.9	8,504	9.5	27.6	4.4
District of Columbia	12,556	23.7	20.6	1.2	9,114	9.0	25.7	1.5
Florida	76,381	33.1	18.3	9.8	50,061	21.0	24.5	14.8
Georgia	49,649	20.4	24.3	18.7	35,383	9.2	27.5	26.0
Hawaii	14,666	15.1	13.8	8.0	12,095	6.6	14.6	9.6
Idaho	7,471	26.3	26.4	9.6	4,790	15.1	35.4	14.9
Illinois	68,003	23.4	14.5	3.6	53,170	11.3	14.3	4.1
Indiana	31,928	36.2	28.9	6.1	19,507	14.7	42.0	10.0
Iowa	22,687	21.1	16.6	26.6	16,298	13.1	20.3	34.2
Kansas	15,573	21.3	29.5	18.0	11,814	12.6	34.8	20.8
Kentucky	32,802	30.2	18.0	21.8	20,448	10.8	24.5	31.5
Louisiana	28,422	35.7	18.4	9.2	17,263	17.6	23.6	14.7
Maine	8,248	32.3	17.4	3.8	5,647	18.2	21.6	5.5
Maryland	43,322	26.1	18.2	14.1	30,351	14.8	22.5	18.9
Massachusetts	55,544	27.8	13.3	2.5	43,143	16.6	14.8	3.1
Michigan	54,385	31.2	25.8	4.0	34,094	14.2	36.1	6.1
Minnesota	37,468	29.5	26.0	4.6	27,062	17.2	33.1	6.3
Mississippi	20,374	25.3	16.0	19.2	12,555	10.6	20.4	30.1



EXHIBIT 5. (continued)

State	Total budget (including state and federal funds)				State-funded budget			
	Dollars (millions)	Total spending as a share of total budget ¹			Dollars (millions)	State-funded spending as a share of state-funded budget ¹		
		Medicaid	Elementary and secondary education	Higher education		Medicaid	Elementary and secondary education	Higher education
Missouri	\$25,550	38.0%	22.8%	4.8%	\$17,364	26.1%	27.7%	7.0%
Montana	6,957	25.3	15.0	9.8	4,147	10.1	20.9	15.5
Nebraska	11,867	17.5	13.9	24.2	8,837	11.5	15.0	28.7
Nevada	13,914	25.5	15.1	6.4	9,521	8.8	19.2	9.4
New Hampshire	5,933	36.6	21.2	2.3	3,712	23.4	28.7	3.7
New Jersey	59,281	24.5	24.0	8.5	44,109	11.9	30.2	11.3
New Mexico	19,586	28.6	17.0	16.2	11,481	10.3	25.4	22.1
New York	157,015	32.6	19.4	6.7	104,030	16.8	25.7	9.9
North Carolina	48,166	29.4	22.6	13.2	33,388	15.4	28.1	18.8
North Dakota	6,792	16.4	17.5	17.8	5,176	8.2	20.1	21.2
Ohio	68,223	37.6	17.1	4.2	55,627	35.5	17.4	5.1
Oklahoma	23,262	22.9	14.8	24.4	16,076	14.6	17.2	29.1
Oregon	40,040	23.1	12.0	3.8	29,851	7.3	14.0	4.9
Pennsylvania	80,324	36.8	18.1	2.3	51,323	24.0	23.5	3.6
Rhode Island	8,850	29.8	15.2	12.9	5,873	18.8	19.5	19.2
South Carolina	24,553	26.7	19.8	20.0	16,369	11.9	23.7	29.2
South Dakota	4,227	21.1	16.5	18.3	2,807	13.1	18.8	25.1
Tennessee	32,840	33.7	18.3	14.2	20,579	21.2	23.7	22.3
Texas	111,090	29.3	25.5	15.7	74,835	16.6	32.0	18.0
Utah	14,223	18.7	26.2	13.6	10,414	8.9	31.5	18.5
Vermont	5,557	28.8	32.7	1.7	3,643	18.7	46.3	2.6
Virginia	50,302	18.6	15.1	14.7	39,994	11.9	16.4	15.6
Washington	44,684	26.9	23.6	14.4	32,414	13.0	30.1	19.8
West Virginia	17,019	24.0	13.9	11.3	12,705	7.6	15.9	15.0
Wisconsin	46,992	20.2	16.7	14.4	35,999	12.1	19.5	14.2
Wyoming	4,426	13.9	20.1	8.0	3,499	8.9	25.5	10.1

EXHIBIT 5. (continued)

Notes: SFY is state fiscal year. Total budget includes federal and all other funds. State-funded budget includes state general funds, other state funds, and bonds. Other state funds are amounts from revenue sources that are restricted by law for particular government functions or activities, which for Medicaid includes provider taxes and local funds. Medicaid, elementary and secondary education, and higher education represent the largest total budget shares among functions broken out separately by the National Association of State Budget Officers (NASBO). Functions not shown here are transportation, corrections, public assistance, and all other (includes hospitals, economic development, housing environmental programs, CHIP, parks and recreation, natural resources, and air and water transportation). Medicaid spending amounts exclude administrative costs but include Medicare Part D phased-down state contribution (also referred to as clawback) payments.

¹ Total and state-funded budget shares should be viewed with caution because they reflect varying state practices. For example, because federal reimbursements for Medicaid expenditures funded from the General Revenue Fund (GRF) are deposited into the GRF, Ohio's general revenue expenditures look higher and conversely make Ohio's federal expenditures look lower relative to most other states that don't follow this practice. In addition, in many states, some functions—particularly elementary and secondary education—may be partially funded outside of the state budget by local governments.

Source: NASBO, 2018, *2018 State expenditure report: Fiscal years 2016–2018*, Washington, DC: NASBO, https://higherlogicdownload.s3.amazonaws.com/NASBO/9d2d2db1-c943-4f1b-b750-0fca152d64c2/UploadedImages/SER%20Archive/2018_State_Expenditure_Report_S.pdf.

EXHIBIT 6. Federal Medical Assistance Percentages and Enhanced Federal Medical Assistance Percentages by State, FYs 2016–2020

State	FMAPs for Medicaid					E-FMAPs for CHIP				
	FY 2016 ¹	FY 2017 ¹	FY 2018 ¹	FY 2019 ¹	FY 2020 ¹	FY 2016 ²	FY 2017 ²	FY 2018 ²	FY 2019 ²	FY 2020 ³
Alabama	69.87%	70.16%	71.44%	71.88%	71.97%	100.00%	100.00%	100.00%	100.00%	91.88%
Alaska	50.00	50.00	50.00	50.00	50.00	88.00	88.00	88.00	88.00	76.50
Arizona	68.92	69.24	69.89	69.81	70.02	100.00	100.00	100.00	100.00	90.51
Arkansas	70.00	69.69	70.87	70.51	71.42	100.00	100.00	100.00	100.00	91.49
California	50.00	50.00	50.00	50.00	50.00	88.00	88.00	88.00	88.00	76.50
Colorado	50.72	50.02	50.00	50.00	50.00	88.50	88.01	88.00	88.00	76.50
Connecticut	50.00	50.00	50.00	50.00	50.00	88.00	88.00	88.00	88.00	76.50
Delaware	54.83	54.20	56.43	57.55	57.86	91.38	90.94	92.50	93.29	82.00
District of Columbia	70.00	70.00	70.00	70.00	70.00	100.00	100.00	100.00	100.00	90.50
Florida	60.67	61.10	61.79	60.87	61.47	95.47	95.77	96.25	95.61	84.53
Georgia	67.55	67.89	68.50	67.62	67.30	100.00	100.00	100.00	100.00	88.61
Hawaii	53.98	54.93	54.78	53.92	53.47	90.79	91.45	91.35	90.74	78.93
Idaho	71.24	71.51	71.17	71.13	70.34	100.00	100.00	100.00	100.00	90.74
Illinois	50.89	51.30	50.74	50.31	50.14	88.62	88.91	88.52	88.22	76.60
Indiana	66.60	66.74	65.59	65.96	65.84	99.62	99.72	98.91	99.17	87.59
Iowa	54.91	56.74	58.48	59.93	61.20	91.44	92.72	93.94	94.95	84.34
Kansas	55.96	56.21	54.74	57.10	59.16	92.17	92.35	91.32	92.97	82.91
Kentucky	70.32	70.46	71.17	71.67	71.82	100.00	100.00	100.00	100.00	91.77
Louisiana	62.21	62.28	63.69	65.00	66.86	96.55	96.60	97.58	98.50	88.30
Maine	62.67	64.38	64.34	64.52	63.80	96.87	98.07	98.04	98.16	86.16
Maryland	50.00	50.00	50.00	50.00	50.00	88.00	88.00	88.00	88.00	76.50
Massachusetts	50.00	50.00	50.00	50.00	50.00	88.00	88.00	88.00	88.00	76.50
Michigan	65.60	65.15	64.78	64.45	64.06	98.92	98.61	98.35	98.12	86.34
Minnesota	50.00	50.00	50.00	50.00	50.00	88.00	88.00	88.00	88.00	76.50
Mississippi	74.17	74.63	75.65	76.39	76.98	100.00	100.00	100.00	100.00	95.39
Missouri	63.28	63.21	64.61	65.40	65.65	97.30	97.25	98.23	98.78	87.46
Montana	65.24	65.56	65.38	65.54	64.78	98.67	98.89	98.77	98.88	86.85
Nebraska	51.16	51.85	52.55	52.58	54.72	88.81	89.30	89.79	89.81	79.80

EXHIBIT 6. (continued)

State	FMAPs for Medicaid					E-FMAPs for CHIP				
	FY 2016 ¹	FY 2017 ¹	FY 2018 ¹	FY 2019 ¹	FY 2020 ¹	FY 2016 ²	FY 2017 ²	FY 2018 ²	FY 2019 ²	FY 2020 ³
Nevada	64.93%	64.67%	65.75%	64.87%	63.93%	98.45%	98.27%	99.03%	98.41%	86.25%
New Hampshire	50.00	50.00	50.00	50.00	50.00	88.00	88.00	88.00	88.00	76.50
New Jersey	50.00	50.00	50.00	50.00	50.00	88.00	88.00	88.00	88.00	76.50
New Mexico	70.37	71.13	72.16	72.26	72.71	100.00	100.00	100.00	100.00	92.40
New York	50.00	50.00	50.00	50.00	50.00	88.00	88.00	88.00	88.00	76.50
North Carolina	66.24	66.88	67.61	67.16	67.03	99.37	99.82	100.00	100.00	88.42
North Dakota	50.00	50.00	50.00	50.00	50.05	88.00	88.00	88.00	88.00	76.54
Ohio	62.47	62.32	62.78	63.09	63.02	96.73	96.62	96.95	97.16	85.61
Oklahoma	60.99	59.94	58.57	62.38	66.02	95.69	94.96	94.00	96.67	87.71
Oregon	64.38	64.47	63.62	62.56	61.23	98.07	98.13	97.53	96.79	84.36
Pennsylvania	52.01	51.78	51.82	52.25	52.25	89.41	89.25	89.27	89.58	78.08
Rhode Island	50.42	51.02	51.45	52.57	52.95	88.29	88.71	89.02	89.80	78.57
South Carolina	71.08	71.30	71.58	71.22	70.70	100.00	100.00	100.00	100.00	90.99
South Dakota	51.61	54.94	55.34	56.71	57.62	89.13	91.46	91.74	92.70	81.83
Tennessee	65.05	64.96	65.82	65.87	65.21	98.54	98.47	99.07	99.11	87.15
Texas	57.13	56.18	56.88	58.19	60.89	92.99	92.33	92.82	93.73	84.12
Utah	70.24	69.90	70.26	69.71	68.19	100.00	100.00	100.00	100.00	89.23
Vermont	53.90	54.46	53.47	53.89	53.86	90.73	91.12	90.43	90.72	79.20
Virginia	50.00	50.00	50.00	50.00	50.00	88.00	88.00	88.00	88.00	76.50
Washington	50.00	50.00	50.00	50.00	50.00	88.00	88.00	88.00	88.00	76.50
West Virginia	71.42	71.80	73.24	74.34	74.94	100.00	100.00	100.00	100.00	93.96
Wisconsin	58.23	58.51	58.77	59.37	59.36	93.76	93.96	94.14	94.56	83.05
Wyoming	50.00	50.00	50.00	50.00	50.00	88.00	88.00	88.00	88.00	76.50
American Samoa	55.00	55.00	55.00	55.00	55.00	91.50	91.50	91.50	91.50	80.00
Guam	55.00	55.00	55.00	55.00	55.00	91.50	91.50	91.50	91.50	80.00
N. Mariana Islands	55.00	55.00	55.00	55.00	55.00	91.50	91.50	91.50	91.50	80.00
Puerto Rico	55.00	55.00	55.00	55.00	55.00	91.50	91.50	91.50	91.50	80.00
Virgin Islands	55.00	55.00	55.00	55.00	55.00	91.50	91.50	91.50	91.50	80.00



EXHIBIT 6. (continued)

Notes: FMAP is federal medical assistance percentage. E-FMAP is enhanced FMAP. FY is fiscal year. The federal government’s share of most Medicaid service costs is determined by the FMAP, with some exceptions. For Medicaid administrative costs, the federal share does not vary by state and is generally 50 percent. The E-FMAP determines the federal share of both service and administrative costs for CHIP, subject to the availability of funds from a state’s federal allotments for CHIP.

FMAPs for Medicaid are generally calculated based on a formula that compares each state’s per capita income to U.S. per capita income and provides a higher federal match for states with lower per capita incomes, subject to a statutory minimum (50 percent) and maximum (83 percent). The general formula for a given state is:

$$\text{FMAP} = 1 - [(\text{state per capita income squared} \div \text{U.S. per capita income squared}) \times 0.45].$$

Medicaid exceptions to this formula include the District of Columbia (set in statute at 70 percent) and the territories (set in statute at 55 percent). Other Medicaid exceptions apply to certain services, providers, or situations (e.g., services provided through an Indian Health Service facility receive an FMAP of 100 percent). E-FMAPs for CHIP are calculated by reducing the state share under regular FMAPs for Medicaid by 30 percent, then increasing it by a set number of percentage points determined by statute (footnotes 2 and 3).

¹ For certain newly eligible individuals under the Medicaid expansion beginning in 2014, there is an increased FMAP (100 percent in 2014 through 2016, phasing down to 90 percent in 2020 and subsequent years). An increased FMAP is also available for certain states that expanded eligibility to low-income parents and non-pregnant adults without children prior to enactment of the Patient Protection and Affordable Care Act (ACA, P.L. 111-148, as amended).

² Under the ACA, beginning on October 1, 2015, and ending on September 30, 2019, the E-FMAP is increased by 23 percentage points, not to exceed 100 percent, for all states.

³ Under the Healthy Kids Act (P.L. 115-120), beginning on October 1, 2019, and ending on September 30, 2020, the E-FMAP is increased by 11.5 percentage points, not to exceed 100 percent, for all states.

Source: U.S. Department of Health and Human Services, *Federal Register* notices for FYs 2016–2020.

SECTION 2

Trends

Section 2: Trends

Key Points

- Medicaid spending and enrollment are affected by federal and state policy choices as well as economic factors (Exhibits 8–10). For example, spending and enrollment both grew around the recessions of 2001 and 2007–2009 and slowed as economic conditions subsequently improved. More recently, Medicaid enrollment and spending in fiscal year (FY) 2014 and beyond grew in part due to expanded eligibility under the Patient Protection and Affordable Care Act (ACA, P.L. 111-148, as amended).
- After increasing for several years after the ACA, enrollment in Medicaid and the State Children’s Health Insurance Program (CHIP) has decreased slightly over the past two years. Medicaid and CHIP enrollment decreased by about 1.4 percent from July 2018 to July 2019 after decreasing by about 1.2 percent from July 2017 to July 2018. Growth rates continue to vary by state; in 2019, enrollment decreased in the majority of states (34 states and the District of Columbia) (Exhibit 11).
- Medicaid enrollment trends vary by eligibility group. Adults (excluding those eligible on the basis of disability) generally experience larger enrollment increases during periods of economic recession than other eligibility groups. For example, from FY 2008 to FY 2013, enrollment for adults grew on average 5.8 percent annually, compared to 3.0 percent annually for children (excluding those eligible on the basis of disability) and individuals qualifying for Medicaid on the basis of disability. Individuals age 65 and older generally have the slowest growth rate regardless of time period (Exhibit 7).
- Medicaid’s share of state-funded budgets (excluding federal funds) and total state budgets (including federal funds) has varied over time. In state fiscal year 2015, Medicaid’s share of total state budgets increased, but its share of state-funded budgets decreased slightly—the decrease can be attributed to 100 percent federal funding made available for low-income adults not otherwise eligible on the basis of disability, who became newly eligible for Medicaid under the ACA (Exhibit 13).
- Medicaid and CHIP expenditures as a share of national health expenditures are projected to grow from 16.8 percent in 2018 to about 17.1 percent in 2027. Medicare’s share is projected to increase from 20.5 percent to 24.1 percent during the same time period (Exhibit 12).

EXHIBIT 7. Medicaid Beneficiaries (Persons Served) by Eligibility Group, FYs 1975–2013 (thousands)

Fiscal year	Total	Children	Adults	Disabled	Aged	Unknown
1975	22,007	9,598	4,529	2,464	3,615	1,801
1976	22,815	9,924	4,773	2,669	3,612	1,837
1977	22,832	9,651	4,785	2,802	3,636	1,958
1978	21,965	9,376	4,643	2,718	3,376	1,852
1979	21,520	9,106	4,570	2,753	3,364	1,727
1980	21,605	9,333	4,877	2,911	3,440	1,044
1981	21,980	9,581	5,187	3,079	3,367	766
1982	21,603	9,563	5,356	2,891	3,240	553
1983	21,554	9,535	5,592	2,921	3,372	134
1984	21,607	9,684	5,600	2,913	3,238	172
1985	21,814	9,757	5,518	3,012	3,061	466
1986	22,515	10,029	5,647	3,182	3,140	517
1987	23,109	10,168	5,599	3,381	3,224	737
1988	22,907	10,037	5,503	3,487	3,159	721
1989	23,511	10,318	5,717	3,590	3,132	754
1990	25,255	11,220	6,010	3,718	3,202	1,105
1991	27,967	12,855	6,703	4,033	3,341	1,035
1992	31,150	15,200	7,040	4,487	3,749	674
1993	33,432	16,285	7,505	5,016	3,863	763
1994	35,053	17,194	7,586	5,458	4,035	780
1995	36,282	17,164	7,604	5,858	4,119	1,537
1996	36,118	16,739	7,127	6,221	4,285	1,746
1997	34,872	15,791	6,803	6,129	3,955	2,195
1998	40,096	18,969	7,895	6,637	3,964	2,631
1999	39,748	18,233	7,446	6,690	3,698	3,682
2000	41,212	18,528	8,538	6,688	3,640	3,817
2001	45,164	20,181	9,707	7,114	3,812	4,349
2002	46,839	21,487	10,847	7,182	3,789	3,534

EXHIBIT 7. (continued)

Fiscal year	Total	Children	Adults	Disabled	Aged	Unknown
2003	50,716	23,742	11,530	7,664	4,041	3,739
2004	54,250	25,415	12,325	8,123	4,349	4,037
2005	56,276	25,979	12,431	8,205	4,395	5,266
2006	56,264	26,358	12,495	8,334	4,374	4,703
2007	55,210	26,061	12,264	8,423	4,044	4,418
2008	56,962	26,479	12,739	8,685	4,147	4,912
2009	60,880	28,344	14,245	9,031	4,195	5,066
2010	63,730	30,024	15,368	9,341	4,289	4,709
2011	65,831	30,175	16,069	9,609	4,331	5,646
2012	65,584	30,467	16,483	9,836	4,376	4,423
2013 ¹	67,516	30,703	16,889	10,123	4,500	5,301

Notes: FY is fiscal year. Excludes Medicaid-expansion CHIP and the territories. Beneficiaries (enrollees for whom payments are made) are shown here because they provide the only historical time series data directly available prior to FY 1990. Most current analyses of individuals in Medicaid reflect enrollees. For additional discussion, see <https://www.macpac.gov/macstats/data-sources-and-methods/>. The increase in FY 1998 reflects a change in how Medicaid beneficiaries were counted: beginning in FY 1998, a Medicaid-eligible person who received coverage only for managed care benefits was included in this series as a beneficiary.

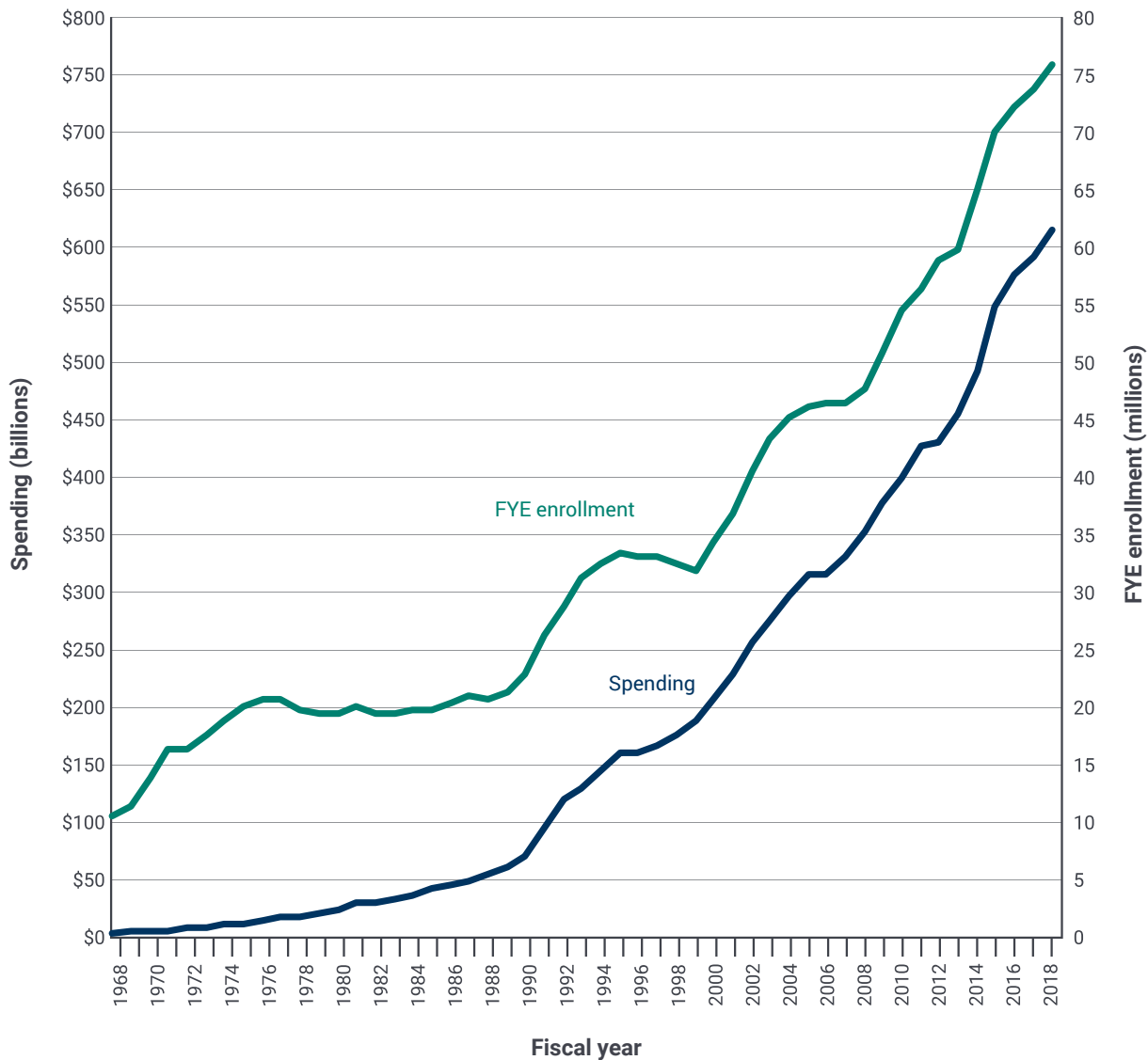
Children and adults who qualify for Medicaid on the basis of a disability are included in the disabled category. In addition, although disability is not a basis of eligibility for aged individuals, states may report some enrollees age 65 and older in the disabled category. Unlike the majority of MACStats, this exhibit does not recode individuals age 65 and older who are reported as disabled, due to lack of detail in the historical data. Generally, individuals whose eligibility group is unknown are persons who were enrolled in the prior year but had a Medicaid claim paid in the current year.

For MACPAC's analysis, Medicaid enrollees were assigned a unique national identification number using an algorithm that incorporates state-specific ID numbers and beneficiary characteristics such as date of birth and gender. The national enrollment counts shown here are unduplicated using this national ID.

¹ Values have not been updated from those published in the December 2017 data book due to the unavailability of more recent Medicaid Statistical Information System (MSIS) or Transformed MSIS data. FY 2013 values were updated from those published in the December 2016 data book. This table could not be updated to reflect the number of beneficiaries in FY 2014 due to insufficient MSIS data for several states.

Sources: For FYs 1999–2013: MACPAC, 2017, analysis of MSIS data. For FYs 1975–1998: CMS, Table 13.4: Number of Medicaid persons served (beneficiaries), by eligibility group: fiscal years 1975–2008, in *Medicare & Medicaid statistical supplement, 2010 edition*, https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MedicareMedicaidStatSupp/Downloads/2010_Section13.pdf#Table%2013.4.

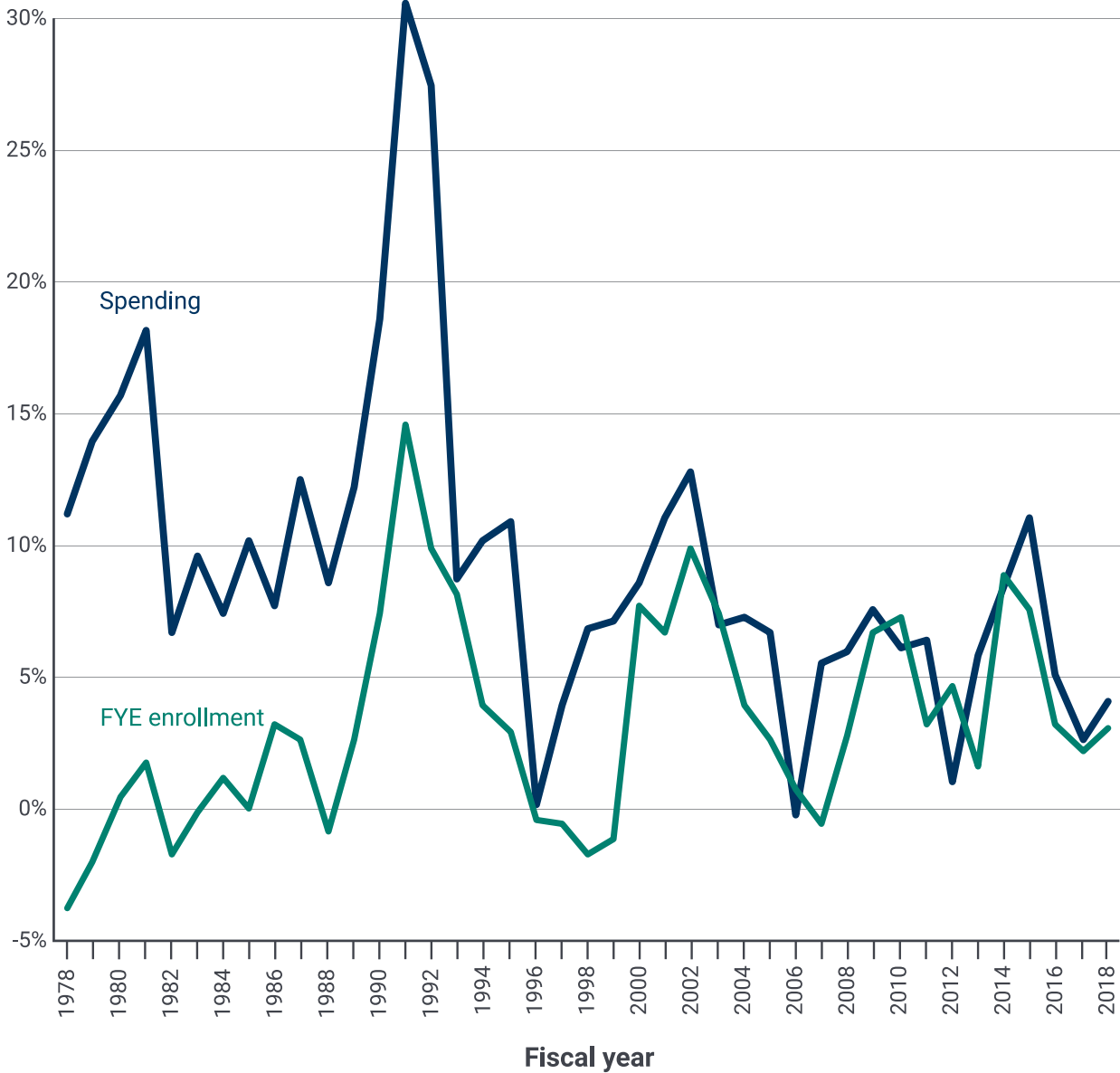
EXHIBIT 8. Medicaid Enrollment and Spending, FYs 1968–2018



Notes: FY is fiscal year. FYE is full-year equivalent, which also may be referred to as average monthly enrollment. All numbers exclude CHIP-financed coverage. Data prior to FY 1977 have been adjusted to the current federal fiscal year basis (October 1 through September 30). The amounts shown in this exhibit may differ from those published elsewhere due to slight differences in the timing of data and the treatment of certain adjustments. The amounts may also differ from prior versions of MACStats due to changes in methodology by the CMS Office of the Actuary (OACT). Spending consists of federal and state Medicaid expenditures for benefits and administration, excluding the Vaccines for Children program. Enrollment counts are FYEs and, for fiscal years prior to FY 1990, have been estimated from counts of persons served (see <https://www.macpac.gov/macstats/data-sources-and-methods/> for a discussion of how enrollees are counted). Enrollment data for FYs 2013–2018 are projected; those for FYs 1999–2018 include estimates for Puerto Rico and the Virgin Islands.

Sources: For FY 2018 spending: MACPAC, 2019, analysis of CMS-64 financial management report net expenditure data as of June 17, 2019. For FY 2018 enrollment: CMS, 2018, *Fiscal year 2019 justification of estimates for appropriations committees*, Baltimore, MD: CMS, <https://www.cms.gov/About-CMS/Agency-Information/PerformanceBudget/Downloads/FY2019-CJ-Final.pdf>. OACT, CMS, 2018, 2017 *Actuarial report on the financial outlook of Medicaid*, Baltimore, MD: OACT, <https://www.cms.gov/Research-Statistics-Data-and-Systems/Research/ActuarialStudies/Downloads/MedicaidReport2017.pdf>. OACT, 2017, data compilation provided to MACPAC, July 24.

EXHIBIT 9. Annual Growth in Medicaid Enrollment and Spending, FYs 1978–2018



Notes: FY is fiscal year. FYE is full-year equivalent, which also may be referred to as average monthly enrollment. All numbers exclude CHIP-financed coverage. Data prior to FY 1977 have been adjusted to the current federal fiscal year basis (October 1 through September 30). The amounts shown in this exhibit may differ from those published elsewhere due to slight differences in the timing of data and the treatment of certain adjustments. The amounts may also differ from prior versions of MACStats due to changes in methodology by the CMS Office of the Actuary (OACT). Spending consists of federal and state Medicaid expenditures for benefits and administration, excluding the Vaccines for Children program. Enrollment counts are FYEs and, for fiscal years prior to FY 1990, have been estimated from counts of persons served (see <https://www.macpac.gov/macstats/data-sources-and-methods/> for a discussion of how enrollees are counted). Enrollment data for FYs 2013–2018 are projected; those for FYs 1999–2018 include estimates for Puerto Rico and the Virgin Islands.

Sources: For FY 2018 spending: MACPAC, 2019, analysis of CMS-64 financial management report net expenditure data as of June 17, 2019. For FY 2018 enrollment: CMS, 2018, *Fiscal year 2019 justification of estimates for appropriations committees*, Baltimore, MD: CMS, <https://www.cms.gov/About-CMS/Agency-Information/PerformanceBudget/Downloads/FY2019-CJ-Final.pdf>. OACT, CMS, 2018, *2017 Actuarial report on the financial outlook of Medicaid*, Baltimore, MD: OACT, <https://www.cms.gov/Research-Statistics-Data-and-Systems/Research/ActuarialStudies/Downloads/MedicaidReport2017.pdf>. OACT, 2017, data compilation provided to MACPAC, July 24.

EXHIBIT 10. Medicaid Enrollment and Total Spending Levels and Annual Growth, FYs 1968–2018

Fiscal year	Spending (billions)	FYE enrollment (millions)	Spending per FYE enrollee	Annual growth		
				Spending	FYE enrollment	Spending per FYE enrollee
1968	\$4	\$10.6	\$343	52.4%	42.9%	6.7%
1969	4	11.5	381	21.1	8.9	11.3
1970	5	14.0	365	15.9	21.3	-4.4
1971	7	16.3	401	28.5	16.9	9.9
1972	8	16.5	484	22.4	1.3	20.9
1973	9	17.6	534	17.0	6.2	10.2
1974	11	19.0	567	15.1	8.3	6.3
1975	13	20.2	651	21.8	6.1	14.8
1976	15	20.7	720	13.6	2.7	10.6
1977	17	20.7	830	15.3	0.1	15.3
1978	19	20.0	959	11.2	-3.8	15.6
1979	22	19.6	1,115	14.0	-2.0	16.3
1980	25	19.6	1,285	15.7	0.4	15.2
1981	30	20.0	1,493	18.2	1.7	16.2
1982	32	19.6	1,620	6.7	-1.7	8.5
1983	35	19.6	1,779	9.6	-0.2	9.9
1984	37	19.8	1,890	7.4	1.2	6.2
1985	41	19.8	2,081	10.2	0.0	10.2
1986	44	20.5	2,172	7.7	3.2	4.4
1987	50	21.0	2,382	12.5	2.6	9.6
1988	54	20.8	2,609	8.6	-0.9	9.5
1989	61	21.4	2,850	12.1	2.6	9.3
1990	72	22.9	3,147	18.6	7.4	10.4
1991	94	26.3	3,587	30.6	14.6	14.0
1992	120	28.9	4,161	27.4	9.8	16.0
1993	131	31.2	4,182	8.7	8.1	0.5
1994	144	32.4	4,434	10.1	3.9	6.0
1995	159	33.4	4,779	10.9	2.9	7.8
1996	160	33.2	4,804	0.1	-0.4	0.5
1997	166	33.0	5,025	3.9	-0.6	4.6
1998	177	32.5	5,462	6.8	-1.7	8.7

EXHIBIT 10. (continued)

Fiscal year	Spending (billions)	FYE enrollment (millions)	Spending per FYE enrollee	Annual growth		
				Spending	FYE enrollment	Spending per FYE enrollee
1999	\$190	\$32.1	\$5,924	7.1%	-1.2%	8.5%
2000	206	34.5	5,972	8.6	7.7	0.8
2001	229	36.9	6,213	11.0	6.7	4.0
2002	258	40.5	6,380	12.8	9.8	2.7
2003	276	43.5	6,352	6.9	7.4	-0.4
2004	296	45.2	6,560	7.3	3.9	3.3
2005	316	46.3	6,819	6.6	2.6	3.9
2006	315	46.7	6,751	-0.3	0.7	-1.0
2007	332	46.4	7,157	5.4	-0.5	6.0
2008	352	47.7	7,383	5.9	2.7	3.2
2009	379	50.9	7,443	7.6	6.7	0.8
2010	402	54.5	7,361	6.1	7.2	-1.1
2011	427	56.3	7,582	6.3	3.2	3.0
2012	431	58.9	7,313	0.9	4.6	-3.5
2013	456	59.8	7,621	5.8	1.5	4.2
2014	495	65.1	7,597	8.5	8.8	-0.3
2015	549	70.0	7,841	11.0	7.6	3.2
2016	577	72.2	7,993	5.1	3.1	1.9
2017	592	73.8	8,024	2.6	2.2	0.4
2018 ¹	616	76.0	8,106	4.0	3.0	1.0

Notes: FY is fiscal year. FYE is full-year equivalent, which also may be referred to as average monthly enrollment. All numbers exclude CHIP-financed coverage. Data prior to FY 1977 have been adjusted to the current federal fiscal year basis (October 1 through September 30). The amounts shown in this exhibit may differ from those published elsewhere due to slight differences in the timing of data and the treatment of certain adjustments. The amounts may also differ from prior versions of MACStats due to changes in methodology by the CMS Office of the Actuary (OACT). Spending consists of federal and state Medicaid expenditures for benefits and administration, excluding the Vaccines for Children program. Enrollment counts are FYEs and, for fiscal years prior to FY 1990, have been estimated from counts of persons served (see <https://www.macpac.gov/macstats/data-sources-and-methods/> for a discussion of how enrollees are counted). Enrollment data for FYs 2013–2018 are projected; those for FYs 1999–2018 include estimates for Puerto Rico and the Virgin Islands.

¹ Due to the unavailability of more recent data from OACT, we derived estimates from a number of sources. Enrollment was derived from the FY 2019 President's budget. Because the President's budget excluded the territories, we added an estimated 1.4 million enrollees in the territories based on the OACT 2017 actuarial report (OACT 2018). Spending reported here reflects FY 2018 amounts reported on the CMS-64 net financial management report (FMR).

Sources: For FY 2018 spending: MACPAC, 2019, analysis of CMS-64 FMR net expenditure data as of June 17, 2019. For FY 2018 enrollment: CMS, 2018, *Fiscal year 2019 justification of estimates for appropriations committees*, Baltimore, MD: CMS, <https://www.cms.gov/About-CMS/Agency-Information/PerformanceBudget/Downloads/FY2019-CJ-Final.pdf>. OACT, CMS, 2018, *2017 Actuarial report on the financial outlook of Medicaid*, Baltimore, MD: OACT, <https://www.cms.gov/Research-Statistics-Data-and-Systems/Research/ActuarialStudies/Downloads/MedicaidReport2017.pdf>. OACT, 2017, data compilation provided to MACPAC, July 24. MACPAC, July 24.

EXHIBIT 11. Full-Benefit Medicaid and CHIP Enrollment, Selected Months in 2013–2019

State	Number of individuals enrolled					Annual and cumulative growth			
	July–September 2013 average	July 2016	July 2017	July 2018	July 2019	July 2016 to July 2017	July 2017 to July 2018	July 2018 to July 2019	July–September 2013 average to July 2019
Total	56,533,472¹	73,628,614	74,318,227	73,408,771	72,373,894	0.9%	-1.2%	-1.4%	26.0%²
Alabama	799,176 ³	896,741	892,956	904,059	922,278	-0.4	1.2	2.0	15.4
Alaska	122,334	162,869	196,121	211,609	223,117	20.4	7.9	5.4	82.4
Arizona	1,201,770	1,699,635	1,745,097	1,688,791	1,715,655	2.7	-3.2	1.6	42.8
Arkansas	556,851	889,082	909,062	878,537	855,214	2.2	-3.4	-2.7	53.6
California	7,755,381 ⁴	12,201,179	12,277,389	12,059,138	11,743,500	0.6	-1.8	-2.6	51.4
Colorado	783,420	1,362,887	1,399,170	1,337,830	1,284,430	2.7	-4.4	-4.0	64.0
Connecticut	–	753,413	799,837 ⁵	845,276	857,415	6.2	5.7	1.4	–
Delaware	223,324	236,248	244,960	247,466	248,021	3.7	1.0	0.2	11.1
District of Columbia	235,786 ⁶	258,918 ⁶	261,683	258,839	256,417	1.1	-1.1	-0.9	8.7
Florida	3,695,306	3,620,085 ⁷	4,357,190	4,229,664	4,168,312	20.4	-2.9	-1.5	12.8
Georgia	1,535,090	1,775,301	1,754,492	1,874,411	1,848,553	-1.2	6.8	-1.4	20.4
Hawaii	288,357	341,072	346,435	337,722	328,393	1.6	-2.5	-2.8	13.9
Idaho	238,150	291,057	294,571	274,741	265,493	1.2	-6.7	-3.4	11.5
Illinois	2,626,943 ⁸	3,118,055	3,073,670	2,974,380	2,843,003	-1.4	-3.2	-4.4	8.2
Indiana	1,120,674 ⁹	1,481,425 ⁹	1,494,850	1,448,302	1,461,778	0.9	-3.1	0.9	30.4
Iowa	493,515	613,386	666,420	683,936	697,504	8.6	2.6	2.0	41.3
Kansas	378,160	422,549	403,231	386,547	370,250	-4.6	-4.1	-4.2	-2.1
Kentucky	606,805	1,223,869	1,256,677	1,241,612	1,208,968	2.7	-1.2	-2.6	99.2
Louisiana	1,019,787	1,308,428	1,449,244	1,449,055	1,362,789	10.8	-0.0	-6.0	33.6
Maine	–	273,367	266,623	266,526	261,362	-2.5	-0.0	-1.9	–
Maryland	856,297	1,236,465	1,306,788	1,312,271	1,326,315	5.7	0.4	1.1	54.9
Massachusetts	1,296,359	1,677,180	1,627,506	1,609,281	1,572,581	-3.0	-1.1	-2.3	21.3
Michigan	1,912,009	2,304,480 ^{10,11}	2,380,232 ¹²	2,355,527 ¹²	2,305,227 ¹²	3.3	-1.0	-2.1	20.6
Minnesota	873,040 ¹³	1,047,507	1,065,061	1,086,267	1,046,325	1.7	2.0	-3.7	19.8
Mississippi	637,229	696,139	656,733	628,519	620,982	-5.7	-4.3	-1.2	-2.5
Missouri	846,084	961,073 ¹⁴	967,477	933,441	832,109	0.7	-3.5	-10.9	-1.7
Montana	148,974	220,378	262,329	280,638	270,280	19.0	7.0	-3.7	81.4

EXHIBIT 11. (continued)

State	Number of individuals enrolled					Annual and cumulative growth			
	July–September 2013 average	July 2016	July 2017	July 2018	July 2019	July 2016 to July 2017	July 2017 to July 2018	July 2018 to July 2019	July–September 2013 average to July 2019
Nebraska	244,600	241,723	245,909	248,379	246,175	1.7%	1.0%	-0.9%	0.6%
Nevada	332,560	609,435	633,838	655,533	632,838	4.0	3.4	-3.5	90.3
New Hampshire	127,082	189,484	187,798	185,233	178,761	-0.9	-1.4	-3.5	40.7
New Jersey	1,283,851	1,782,594	1,780,482	1,789,619	1,722,602	-0.1	0.5	-3.7	34.2
New Mexico	457,678	761,033	781,857	728,449	730,037	2.7	-6.8	0.2	59.5
New York	5,678,417	6,417,388 ^{8,11}	6,421,323 ¹¹	6,507,744 ¹¹	6,518,512 ¹¹	0.1	1.3	0.2	14.8
North Carolina	1,595,952	2,059,981	1,789,708	1,772,526	1,738,840	-13.1	-1.0	-1.9	9.0
North Dakota	69,980 ¹⁵	89,460	93,148	93,970	89,895	4.1	0.9	-4.3	28.5
Ohio	2,130,322	2,976,705	2,963,166	2,727,989	2,639,320	-0.5	-7.9	-3.3	23.9
Oklahoma	790,051	787,331	802,957	788,159	782,645	2.0	-1.8	-0.7	-0.9
Oregon	626,356 ¹⁶	1,036,984	989,582	972,808	986,744	-4.6	-1.7	1.4	57.5
Pennsylvania	2,386,046	2,861,112	2,947,533	2,989,593	2,962,254	3.0	1.4	-0.9	24.1
Rhode Island	190,833	284,455	313,103	311,231	301,142	10.1	-0.6	-3.2	57.8
South Carolina	889,744	1,021,192	1,032,955	1,030,392	1,037,023	1.2	-0.2	0.6	16.6
South Dakota	115,501	119,252	118,132	117,558	115,822	-0.9	-0.5	-1.5	0.3
Tennessee	1,244,516	1,632,972	1,484,821	1,443,541	1,455,231	-9.1	-2.8	0.8	16.9
Texas	4,203,449	4,744,278	4,434,104	4,355,227	4,202,466	-6.5	-1.8	-3.5	-0.0
Utah	294,029 ⁹	312,936 ⁹	307,267 ¹⁷	296,702 ¹⁷	309,995 ¹⁷	-1.8	-3.4	4.5	5.4
Vermont	161,081	179,421	168,455	162,726	154,546	-6.1	-3.4	-5.0	-4.1
Virginia	935,434	984,787	1,015,609	1,046,260	1,336,892	3.1	3.0	27.8	42.9
Washington	1,117,576	1,782,418	1,789,309	1,745,561	1,710,797	0.4	-2.4	-2.0	53.1
West Virginia	354,544	572,107	563,596	543,289	528,876	-1.5	-3.6	-2.7	49.2
Wisconsin	985,531 ¹⁸	1,045,160	1,037,696	1,032,239	1,040,306	-0.7	-0.5	0.8	5.6
Wyoming	67,518	63,618	60,075	59,658	55,904	-5.6	-0.7	-6.3	-17.2

EXHIBIT 11. (continued)

Notes: Enrollment excludes individuals with limited benefits, such as those who receive only Medicaid coverage of Medicare premiums and cost sharing, family planning services, or emergency coverage due to non-citizen status (state-specific exceptions are noted below). The July–September 2013 period shown here serves as a baseline from before the Patient Protection and Affordable Care Act (P.L. 111-148, as amended) was implemented, representing the number of people covered by Medicaid and CHIP prior to the start of open enrollment for exchange plans in October 2013 and the state expansions of Medicaid for adults that began in January 2014. Some data are preliminary or estimated, and all data are subject to change as states may revise their submissions at any time. See data sources for full details.

– Dash indicates that state did not report data; 0.0% or -0.0% indicates an amount between 0.05% and -0.05% that rounds to zero.

- ¹ Excludes two states not reporting data.
- ² Percentage calculated based only on states reporting data for both periods.
- ³ Data are for September 2013 only.
- ⁴ Includes approximately 650,000 individuals transferred from the Low Income Health Program Section 1115 demonstration.
- ⁵ May not include all enrollees.
- ⁶ Includes individuals receiving limited benefits who are dually eligible for Medicare and Medicaid and individuals enrolled in the locally funded DC Health Alliance.
- ⁷ Excludes Supplemental Security Income beneficiaries enrolled in Medicaid.
- ⁸ Includes retroactive enrollment.
- ⁹ Includes individuals receiving limited benefits who are dually eligible for Medicare and Medicaid.
- ¹⁰ Does not include share of cost and full benefit 1115 waiver enrollees.
- ¹¹ Includes partial-benefit enrollees.
- ¹² Does not include all full-benefit Medicaid enrollees.
- ¹³ May include duplicates.
- ¹⁴ Does not include all individuals funded under Title XXI or enrollees in a premium grace period.
- ¹⁵ Data are for July 2013 only.
- ¹⁶ Includes emergency Medicaid population.
- ¹⁷ Includes enrollees in other financial assistance programs not enrolled in Medicaid or CHIP.
- ¹⁸ Excludes retroactive enrollment.

Source: MACPAC, 2019, analysis of CMS, 2019, State Medicaid and CHIP applications, eligibility determinations, and enrollment data, accessed on November 8, 2019, <https://data.medicaid.gov/Enrollment/State-Medicaid-and-CHIP-Applications-Eligibility-D/n5ce-jxme>; CMS, 2016, Medicaid and CHIP August and September 2016 application, eligibility, and enrollment data, <http://www.medicaid.gov/medicaid-chip-program-information/program-information/downloads/august-and-september-2016-enrollment-data.zip>.

EXHIBIT 12. Historical and Projected National Health Expenditures by Payer for Selected Years, CYs 1970–2027

Calendar year	Total (billions)	Payer amount (billions) and share of total											
		Medicaid and CHIP		Medicare		Private insurance		Other health insurance ¹		Other third-party payers ²		Out of pocket	
Historical													
1970	\$75	\$5	7.1%	\$8	10.3%	\$15	20.8%	\$3	4.4%	\$18	23.9%	\$25	33.5%
1975	133	13	10.1	16	12.3	31	22.9	6	4.5	30	22.3	37	28.0
1980	255	26	10.2	37	14.6	69	27.1	10	3.8	55	21.5	58	22.8
1985	443	41	9.2	72	16.2	131	29.6	15	3.4	88	19.9	96	21.6
1990	721	74	10.2	110	15.3	234	32.4	21	3.0	144	20.0	138	19.1
1995	1,022	145	14.2	184	18.0	325	31.8	27	2.6	195	19.1	145	14.2
2000	1,369	203	14.9	225	16.4	458	33.5	33	2.4	251	18.4	199	14.5
2005	2,024	317	15.7	340	16.8	701	34.6	56	2.8	346	17.1	264	13.0
2010	2,599	409	15.7	520	20.0	864	33.3	84	3.2	422	16.2	300	11.5
2011	2,691	419	15.6	545	20.2	899	33.4	88	3.3	430	16.0	310	11.5
2012	2,798	436	15.6	568	20.3	930	33.2	90	3.2	456	16.3	319	11.4
2013	2,882	459	15.9	590	20.5	947	32.9	92	3.2	468	16.2	326	11.3
2014	3,031	511	16.9	619	20.4	1,001	33.0	99	3.3	470	15.5	331	10.9
2015	3,206	557	17.4	649	20.2	1,070	33.4	106	3.3	483	15.1	341	10.6
2016	3,361	582	17.3	677	20.1	1,136	33.8	109	3.2	501	14.9	356	10.6
2017	3,492	600	17.2	706	20.2	1,184	33.9	114	3.3	522	15.0	365	10.5
Projected													
2018	\$3,647	\$614	16.8%	\$747	20.5%	\$1,238	33.9%	\$122	3.3%	\$547	15.0%	\$379	10.4%
2019	3,823	644	16.8	800	20.9	1,278	33.4	128	3.4	576	15.1	397	10.4
2020	4,031	676	16.8	858	21.3	1,344	33.3	135	3.4	603	14.9	415	10.3
2021	4,255	711	16.7	926	21.8	1,409	33.1	143	3.4	631	14.8	435	10.2

EXHIBIT 12. (continued)

Calendar year	Total (billions)	Payer amount (billions) and share of total											
		Medicaid and CHIP		Medicare		Private insurance		Other health insurance ¹		Other third-party payers ²		Out of pocket	
2022	\$4,502	\$755	16.8%	\$1,001	22.2%	\$1,476	32.8%	\$150	3.3%	\$660	14.7%	\$458	10.2%
2023	4,767	801	16.8	1,080	22.7	1,555	32.6	158	3.3	691	14.5	481	10.1
2024	5,049	849	16.8	1,166	23.1	1,638	32.5	165	3.3	724	14.3	506	10.0
2025	5,345	902	16.9	1,255	23.5	1,724	32.3	173	3.2	759	14.2	532	10.0
2026	5,651	964	17.1	1,341	23.7	1,810	32.0	182	3.2	795	14.1	559	9.9
2027	5,963	1,021	17.1	1,437	24.1	1,897	31.8	191	3.2	832	13.9	586	9.8

Notes: CY is calendar year. Components may not sum to total due to rounding. The latest projections begin after the latest historical year (2017) and go through 2027.

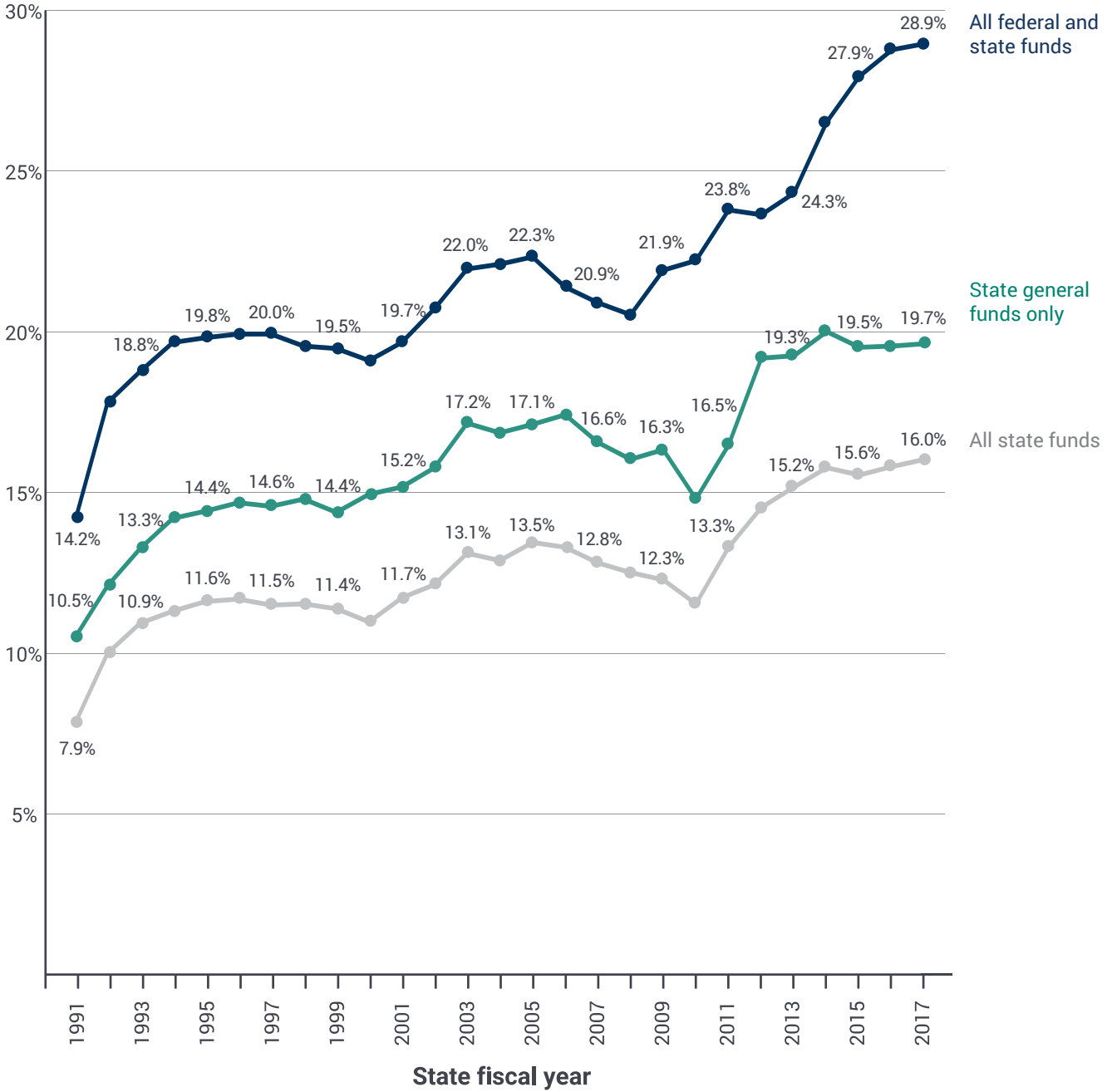
¹ U.S. Department of Defense and U.S. Department of Veterans Affairs.

² Includes all other public and private programs and expenditures except for out-of-pocket amounts.

Sources: For historical data: MACPAC, 2019, analysis of Office of the Actuary (OACT), CMS, 2018, *National health expenditures by type of service and source of funds: Calendar years 1960–2017*, <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/NHE2017.zip>. For projected data: MACPAC, 2019, analysis of OACT, 2019, *National health expenditure (NHE) amounts by type of expenditure and source of funds: Calendar years 1960–2027 in projections format, as of February 2019*, <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/NHE60-26.zip>; and OACT, 2019, *Table 17: Health insurance enrollment and enrollment growth rates, calendar years, 2011–2027*, <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/Proj2017Tables.zip>.

EXHIBIT 13. Medicaid as a Share of State Budgets Including and Excluding Federal Funds, SFYs 1991–2017

Section 2



MACStats

EXHIBIT 13. (continued)

State fiscal year	Medicaid as a share of all federal and state funds	Medicaid as a share of state general funds only	Medicaid as a share of all state funds
1991	14.2%	10.5%	7.9%
1992	17.8	12.1	10.0
1993	18.8	13.3	10.9
1994	19.7	14.2	11.3
1995	19.8	14.4	11.6
1996	19.9	14.7	11.7
1997	20.0	14.6	11.5
1998	19.6	14.8	11.6
1999	19.5	14.4	11.4
2000	19.1	15.0	11.0
2001	19.7	15.2	11.7
2002	20.7	15.8	12.2
2003	22.0	17.2	13.1
2004	22.1	16.9	12.9
2005	22.3	17.1	13.5
2006	21.4	17.4	13.3
2007	20.9	16.6	12.8
2008	20.5	16.0	12.5
2009	21.9	16.3	12.3
2010	22.2	14.8	11.6
2011	23.8	16.5	13.3
2012	23.6	19.2	14.5
2013	24.3	19.3	15.2
2014	26.5	20.0	15.8
2015	27.9	19.5	15.6
2016	28.7	19.6	15.8
2017	28.9	19.7	16.0

Notes: SFY is state fiscal year. Amounts shown here reflect the most recent information available in cases where data for a given year were published and then updated in a subsequent report.

The all federal and state funds category reflects amounts from any source. The state general funds only category reflects amounts from revenues raised through income, sales, and other broad-based state taxes and excludes federal funds. The all state funds category reflects amounts from any non-federal source; these include state general funds, other state funds (amounts from revenue sources that are restricted by law for particular government functions or activities, which for Medicaid includes provider taxes and local funds), and bonds (expenditures from the sale of bonds, generally for capital projects) and excludes federal funds.

Source: MACPAC, 2019, analysis of state expenditure reports from the National Association of State Budget Officers, <http://nasbo.org/mainsite/reports-data/state-expenditure-report/state-expenditure-archives>.

SECTION 3

Program Enrollment and Spending

Section 3: Program Enrollment and Spending

Key Points

- Total Medicaid spending was \$621 billion in fiscal year (FY) 2018 (Exhibit 16). Spending for the State Children's Health Insurance Program (CHIP) was \$17.5 billion (Exhibit 33).
- Almost half (48.4 percent) of Medicaid benefit spending in FY 2018 was for capitation payments for managed care, a slight decrease from 49.3 percent in the prior year (Exhibit 17).
- In FY 2013, individuals eligible on the basis of disability and enrollees age 65 and older accounted for about one-quarter of Medicaid enrollees but about two-thirds of program spending (Exhibits 14 and 21). Many of these individuals were users of long-term services and supports (LTSS). LTSS users across all eligibility groups accounted for only 5.9 percent of Medicaid enrollees but over 41.9 percent of all Medicaid spending (Exhibit 20).
- Most FY 2013 Medicaid spending for enrollees eligible on the basis of disability and enrollees age 65 and older was for LTSS; for children and adults eligible on a basis other than disability, most was for capitation payments to managed care plans (Exhibit 18).
- Medicaid benefit spending per enrollee varies substantially across states (Exhibits 22a and 22b). This variation reflects many factors, including the underlying costs of delivering health care services in specific geographic areas, the breadth of covered benefits, and enrollee characteristics, such as health status, that affect their use of services.
- Drug rebates reduced gross drug spending by almost 60 percent (59.5 percent) in FY 2018 (Exhibit 28). The majority (60.8 percent) of Medicaid gross spending for drugs occurred under managed care in FY 2018 (Exhibit 26).
- Disproportionate share hospital (DSH), upper payment limit, and other types of supplemental payments accounted for over half of fee-for-service payments to hospitals in FY 2018 (Exhibit 24).

EXHIBIT 14a. Medicaid Enrollment by State, Eligibility Group, and Dually Eligible Status, FY 2013 (thousands)

State	Total	Basis of eligibility ¹				Dually eligible status ²					
						All dually eligible enrollees		Dually eligible with full benefits		Dually eligible with limited benefits	
		Child	Adult	Disabled	Aged	Total	Age 65+	Total	Age 65+	Total	Age 65+
Total	70,161	32,270	20,477	10,516	6,898	10,850	6,361	7,877	4,647	2,973	1,714
Alabama	1,212	597	244	242	129	236	128	104	54	132	74
Alaska	136	74	35	17	10	16	9	15	8	1	0
Arizona	1,681	805	579	176	121	193	113	148	82	46	31
Arkansas	696	355	109	160	73	135	71	71	41	65	29
California	11,742	4,027	5,483	1,094	1,138	1,429	1,004	1,386	971	43	32
Colorado	896	500	194	137	65	104	59	74	44	30	16
Connecticut	858	331	325	81	122	174	117	84	49	90	68
Delaware	260	102	114	28	16	29	16	13	7	16	9
District of Columbia	246	84	102	39	21	29	18	28	17	0	0
Florida	4,313	2,145	943	662	563	817	529	402	279	416	250
Georgia ³	2,013	1,129	350	340	194	326	189	158	92	168	97
Hawaii	300	121	108	43	28	40	27	35	23	5	3
Idaho	288	175	44	48	21	37	17	21	9	16	8
Illinois	3,039	1,585	883	326	245	394	223	349	196	45	27
Indiana	1,250	667	260	221	102	190	89	123	61	66	28
Iowa	634	286	212	90	46	93	45	73	33	20	12
Kansas	442	262	61	81	39	75	36	48	25	27	12
Kentucky	927	450	139	238	99	192	96	104	55	88	42
Louisiana	1,284	623	293	245	122	217	120	116	63	100	58
Maine ³	371	132	104	72	63	106	62	61	29	45	34
Maryland	1,139	515	389	149	85	142	80	90	50	52	29
Massachusetts	1,547	442	518	396	191	307	162	281	137	26	24
Michigan	2,291	1,149	594	392	156	315	145	267	122	48	24
Minnesota	1,154	469	442	142	101	156	82	140	72	17	10
Mississippi	786	400	118	175	93	170	93	86	49	84	43

EXHIBIT 14a. (continued)

State	Total	Basis of eligibility ¹				Dually eligible status ²					
						All dually eligible enrollees		Dually eligible with full benefits		Dually eligible with limited benefits	
		Child	Adult	Disabled	Aged	Total	Age 65+	Total	Age 65+	Total	Age 65+
Missouri	1,122	571	238	218	94	189	89	164	76	25	13
Montana	142	81	23	25	14	27	14	17	9	10	5
Nebraska	262	147	47	43	25	46	23	40	20	5	3
Nevada	422	248	83	55	35	57	34	25	16	31	17
New Hampshire	166	92	23	33	17	37	16	23	10	14	6
New Jersey	1,190	635	195	198	162	239	150	210	131	29	19
New Mexico	660	354	186	74	46	78	46	42	25	35	20
New York	6,002	2,120	2,485	710	687	892	602	756	503	137	99
North Carolina	2,000	1,058	389	360	193	352	188	267	141	84	47
North Dakota	87	47	18	13	10	17	9	13	7	3	2
Ohio	2,645	1,133	890	417	203	383	188	249	129	134	58
Oklahoma	951	499	253	130	68	127	66	103	53	24	13
Oregon	760	367	210	114	69	121	67	72	41	49	25
Pennsylvania	2,567	1,097	487	722	261	469	249	385	200	85	50
Rhode Island	170	71	38	38	23	37	20	31	16	6	3
South Carolina	1,091	562	267	174	89	169	89	143	74	27	15
South Dakota	134	77	23	21	13	23	13	14	8	9	5
Tennessee	1,557	796	325	283	152	293	150	156	79	137	71
Texas	5,240	3,274	727	742	497	764	485	449	294	315	191
Utah	389	225	96	49	19	39	18	34	15	6	3
Vermont	206	69	88	26	23	38	22	29	16	9	6
Virginia	1,136	591	234	192	118	204	111	133	76	71	35
Washington	1,421	794	286	232	109	195	106	137	79	58	27
West Virginia	437	208	62	124	44	89	44	51	26	38	18
Wisconsin	1,254	492	440	179	143	178	87	154	71	24	16
Wyoming	89	58	13	12	6	12	6	7	4	5	3



EXHIBIT 14a. (continued)

Notes: FY is fiscal year. Enrollment numbers generally include individuals ever enrolled in Medicaid-financed coverage during the year, even if for a single month; however, in the event individuals were also enrolled in CHIP-financed Medicaid coverage (i.e., Medicaid-expansion CHIP) during the year, they are excluded if their most recent enrollment month was in Medicaid-expansion CHIP. Numbers exclude individuals enrolled only in Medicaid-expansion CHIP during the year and enrollees in the territories. Values have not been updated from those published in the December 2017 data book due to the unavailability of more recent Medicaid Statistical Information System (MSIS) or Transformed MSIS data.

For MACPAC’s analysis, Medicaid enrollees were assigned a unique national identification number using an algorithm that incorporates state-specific ID numbers and beneficiary characteristics such as date of birth and gender. The state and national enrollment counts shown here are unduplicated using this national ID. Categories may not sum to total for each state due to rounding. In addition, the sum of the state totals exceeds the national total because individuals may be enrolled in more than one state during the year.

0 indicates an amount less than 500 that rounds to zero.

- ¹ Children and adults under age 65 who qualify for Medicaid on the basis of disability are included in the disabled category. About 746,000 enrollees age 65 and older are identified in the data as disabled; because disability is not an eligibility pathway for individuals age 65 and older, MACPAC recodes these enrollees as aged.
- ² Dually eligible enrollees are covered by both Medicaid and Medicare; those with limited benefits receive only Medicaid assistance with Medicare premiums and cost sharing.
- ³ State had a change in total enrollment of 10 percent or more over the prior year. These data may reflect data anomalies in the submission of MSIS data for the current or prior years; if so, data may be updated in future MSIS submissions by states. MSIS data anomalies have been compiled and reported by Mathematica Policy Research; the data anomalies report can be found at <http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MedicaidDataSourcesGenInfo/downloads/anomalies1.pdf>.

Source: MACPAC, 2017, analysis of MSIS data as of December 2016.

EXHIBIT 14b. Medicaid Enrollment by State, Eligibility Group, and Dually Eligible Status, FY 2014 (thousands)

State ¹	Total	Basis of eligibility ²				Dually eligible status ³					
						All dually eligible enrollees		Dually eligible with full benefits		Dually eligible with limited benefits	
		Child	Adult ⁴	Disabled	Aged	Total	Age 65+	Total	Age 65+	Total	Age 65+
Arizona	1,671	810	557	177	127	202	119	152	86	49	33
Arkansas	866	377	257	159	74	137	71	70	41	67	30
California	14,309	4,238	7,783	1,091	1,197	1,505	1,056	1,463	1,024	43	32
Connecticut	921	340	372	82	128	182	123	86	50	96	73
Georgia	2,109	1,200	362	349	198	336	194	158	92	178	102
Idaho	303	182	49	50	23	40	18	22	9	18	9
Iowa	685	287	263	89	46	94	46	74	33	20	13
Louisiana	1,281	629	289	241	122	220	121	116	62	103	59
Massachusetts	1,924	467	873	392	192	319	167	293	143	26	24
Michigan	2,542	1,112	882	390	159	323	148	272	124	51	24
Minnesota	1,305	509	540	137	118	162	85	146	76	17	10
Mississippi	782	392	120	177	93	172	92	85	48	86	44
New Jersey	1,702	676	667	195	165	250	153	221	133	29	20
New York	6,502	2,212	2,880	698	713	917	619	773	516	144	104
Ohio	2,949	1,166	1,183	396	204	382	188	247	128	135	59
Oklahoma	930	485	247	131	68	128	65	103	52	25	13
Oregon	1,102	395	523	112	72	125	70	75	43	50	26
Pennsylvania	2,625	1,114	513	730	268	480	255	392	204	88	51
South Carolina	1,181	594	325	173	89	174	91	147	75	27	16
South Dakota	137	79	23	21	13	23	13	14	8	9	5
Tennessee	1,522	769	325	279	149	289	148	154	77	135	70
Utah	423	251	103	50	20	41	19	35	16	6	3
Vermont	209	70	89	26	25	38	22	30	16	8	6
Washington	1,839	815	715	197	113	204	111	141	81	63	29
West Virginia	605	219	231	110	45	93	45	54	26	39	18
Wyoming	86	55	13	12	6	12	6	7	4	5	3

EXHIBIT 14b. (continued)

Notes: FY is fiscal year. Enrollment numbers generally include individuals ever enrolled in Medicaid-financed coverage during the year, even if for a single month; however, in the event individuals were also enrolled in CHIP-financed Medicaid coverage (i.e., Medicaid-expansion CHIP) during the year, they are excluded if their most recent enrollment month was in Medicaid-expansion CHIP. Numbers exclude individuals enrolled only in Medicaid-expansion CHIP during the year and enrollees in the territories.

For MACPAC's analysis, Medicaid enrollees were assigned a unique national identification number using an algorithm that incorporates state-specific ID numbers and beneficiary characteristics such as date of birth and gender. The state enrollment counts shown here are unduplicated using this national ID. Categories may not sum to total for each state due to rounding.

- ¹ Several states did not submit complete Medicaid Statistical Information System (MSIS) data for FY 2014 due to the ongoing transition to Transformed MSIS (T-MSIS) and were excluded from this exhibit. In addition, a few states were excluded due to data reliability concerns regarding the completeness and quality of the submitted MSIS data. This exhibit includes only states that had sufficient FY 2014 MSIS data. Due to the number of states excluded, a national total is not provided. Values have not been updated from those published in the December 2017 data book due to the unavailability of more recent MSIS or T-MSIS data.
- ² Children and adults under age 65 who qualify for Medicaid on the basis of disability are included in the disabled category. About 528,000 enrollees age 65 and older are identified in the data as disabled; because disability is not an eligibility pathway for individuals age 65 and older, MACPAC recodes these enrollees as aged.
- ³ Dually eligible enrollees are covered by both Medicaid and Medicare; those with limited benefits receive only Medicaid assistance with Medicare premiums and cost sharing.
- ⁴ Includes the new adult group made eligible under Section 1902(a)(10)(A)(i)(VIII) of the Social Security Act by the Patient Protection and Affordable Care Act (P.L. 111-148, as amended).

Source: MACPAC, 2017, analysis of MSIS data as of December 2016.

EXHIBIT 15a. Medicaid Full-Year Equivalent Enrollment by State and Eligibility Group, FY 2013 (thousands)

State	Total		Child		Adult		Disabled		Aged	
	All enrollees	Full-benefit enrollees ¹	All enrollees	Full-benefit enrollees ¹	All enrollees	Full-benefit enrollees ¹	All enrollees	Full-benefit enrollees ¹	All enrollees	Full-benefit enrollees ¹
Total	58,109	50,801	27,327	27,026	15,060	10,736	9,644	8,516	6,078	4,524
Alabama	968	728	480	480	165	39	212	162	110	46
Alaska	111	110	61	61	25	25	16	16	9	9
Arizona	1,359	1,235	648	636	442	373	161	147	108	78
Arkansas	601	478	310	304	82	23	144	113	65	38
California	9,307	6,761	3,340	3,160	3,907	1,599	1,023	1,013	1,036	990
Colorado ²	718	690	406	406	145	142	111	99	56	43
Connecticut	731	649	291	291	257	255	75	56	108	47
Delaware	213	184	85	84	88	74	26	18	14	7
District of Columbia ³	215	215	74	74	85	85	37	37	19	19
Florida	3,386	2,909	1,727	1,719	581	478	586	440	492	272
Georgia ²	1,593	1,387	894	894	221	164	307	244	171	85
Hawaii	252	248	107	107	82	82	39	37	25	22
Idaho	230	216	142	142	27	27	43	36	18	11
Illinois	2,677	2,555	1,412	1,412	746	666	302	285	217	192
Indiana	1,030	954	564	564	184	168	197	161	85	61
Iowa	516	458	236	234	157	119	83	77	39	28
Kansas	352	328	209	209	38	38	72	59	33	23
Kentucky	770	692	375	375	90	90	217	176	88	51
Louisiana	1,128	953	563	563	228	146	226	186	111	57
Maine ²	322	280	115	114	85	84	65	55	56	26
Maryland	963	891	448	447	305	278	137	117	74	48
Massachusetts ³	1,302	1,206	370	357	402	348	363	361	167	140
Michigan	1,877	1,753	971	963	418	345	355	334	132	111
Minnesota	901	863	383	380	314	293	131	125	74	65
Mississippi	654	549	328	328	84	55	159	122	83	45

EXHIBIT 15a. (continued)

State	Total		Child		Adult		Disabled		Aged	
	All enrollees	Full-benefit enrollees ¹	All enrollees	Full-benefit enrollees ¹	All enrollees	Full-benefit enrollees ¹	All enrollees	Full-benefit enrollees ¹	All enrollees	Full-benefit enrollees ¹
Missouri	917	812	480	480	176	91	183	173	77	68
Montana	114	103	65	65	15	13	22	18	11	7
Nebraska	213	208	124	124	30	30	38	36	21	18
Nevada	318	292	191	191	52	51	47	35	29	15
New Hampshire	136	124	79	79	14	14	28	22	14	9
New Jersey	986	959	541	541	122	120	181	172	143	125
New Mexico	566	476	307	307	150	91	67	54	41	23
New York	5,115	4,821	1,815	1,783	2,010	1,885	672	637	617	516
North Carolina	1,646	1,502	902	901	250	182	325	291	169	128
North Dakota	65	62	36	36	10	10	11	10	8	6
Ohio	2,211	1,913	978	973	689	515	373	305	170	120
Oklahoma	745	661	405	405	164	101	117	107	60	48
Oregon	625	557	295	289	167	147	104	83	60	38
Pennsylvania	2,159	1,964	914	913	375	257	646	613	225	182
Rhode Island	4	4	4	4	4	4	4	4	4	4
South Carolina	926	805	489	488	201	104	157	147	79	66
South Dakota	107	100	63	63	14	14	19	15	11	7
Tennessee	1,320	1,200	682	682	249	249	255	198	133	71
Texas	4,081	3,674	2,590	2,590	389	252	669	564	433	268
Utah	286	280	170	170	58	57	42	40	16	14
Vermont	170	162	58	58	67	67	24	22	20	15
Virginia	935	822	496	496	163	114	173	141	102	71
Washington	1,168	1,038	678	677	195	116	202	174	94	71
West Virginia	354	322	166	166	40	40	110	93	38	23
Wisconsin	1,049	931	413	398	346	266	165	157	125	111
Wyoming	68	62	44	44	8	7	11	9	5	3

EXHIBIT 15a. (continued)

Notes: FY is fiscal year. Full-year equivalent (FYE) may also be referred to as average monthly enrollment. Enrollment numbers generally include individuals ever enrolled in Medicaid-financed coverage during the year, even if for a single month; however, in the event individuals were also enrolled in CHIP-financed Medicaid coverage (i.e., Medicaid-expansion CHIP) during the year, they are excluded if their most recent enrollment month was in Medicaid-expansion CHIP. Numbers exclude individuals enrolled only in Medicaid-expansion CHIP during the year and enrollees in the territories. Children and adults under age 65 who qualify for Medicaid on the basis of disability are included in the disabled category. About 746,000 enrollees age 65 and older are identified in the data as disabled; because disability is not an eligibility pathway for individuals age 65 and older, MACPAC recodes these enrollees as aged. Values have not been updated from those published in the December 2017 data book due to the unavailability of more recent Medicaid Statistical Information System (MSIS) or Transformed MSIS data.

For MACPAC's analysis, Medicaid enrollees were assigned a unique national identification number using an algorithm that incorporates state-specific ID numbers and beneficiary characteristics such as date of birth and gender. The state and national enrollment counts shown here are unduplicated using this national ID. Categories may not sum to total for each state due to rounding. In addition, the sum of the state totals exceeds the national total because individuals may be enrolled in more than one state during the year.

- ¹ In this exhibit, full-benefit enrollees columns exclude enrollees reported by states in the MSIS as receiving coverage of only emergency services, family planning services, or assistance with Medicare premiums and cost sharing.
- ² State had a change in total FYE enrollees of 10 percent or more over the prior year. These data may reflect data anomalies in the submission of MSIS data for the current or prior years; if so, data may be updated in future MSIS submissions by states. MSIS data anomalies have been compiled and reported by Mathematica Policy Research; the data anomalies report can be found at <http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MedicaidDataSourcesGenInfo/downloads/anomalies1.pdf>.
- ³ When compared to the December 2015 edition of this table, District of Columbia and Massachusetts had a change in total FYE enrollees of 10 percent or more over the prior year. However, both states have since updated their 2012 enrollment total and no longer have a change of 10 percent or more.
- ⁴ State was excluded due to data reliability concerns regarding completeness of monthly claims and enrollment data.

Source: MACPAC, 2017, analysis of MSIS data as of December 2016.

EXHIBIT 15b. Medicaid Full-Year Equivalent Enrollment by State and Eligibility Group, FY 2014 (thousands)

State ¹	Total		Child		Adult ²		Disabled		Aged	
	All enrollees	Full-benefit enrollees ³	All enrollees	Full-benefit enrollees ³	All enrollees	Full-benefit enrollees ³	All enrollees	Full-benefit enrollees ³	All enrollees	Full-benefit enrollees ³
Arizona	1,317	1,190	654	643	387	318	162	147	113	82
Arkansas	673	585	336	335	126	100	146	113	66	38
California	11,057	8,559	3,588	3,423	5,336	3,063	1,037	1,027	1,095	1,045
Connecticut	757	670	283	283	286	284	75	55	113	48
Georgia	1,682	1,496	972	971	224	194	312	246	175	85
Idaho	245	230	152	152	29	28	45	37	19	12
Iowa	548	493	236	234	189	153	84	77	40	29
Louisiana	1,142	966	577	577	231	153	222	180	111	56
Massachusetts	1,603	1,497	398	384	665	603	369	367	171	144
Michigan	2,010	1,859	946	934	570	475	359	336	136	114
Minnesota	1,033	996	427	425	399	380	128	122	78	69
Mississippi	687	577	346	345	92	63	164	125	85	44
New Jersey	1,371	1,343	576	575	468	467	181	173	146	128
New York	5,445	5,166	1,872	1,850	2,269	2,156	663	626	641	534
Ohio	2,463	2,187	1,030	1,025	890	739	368	299	176	123
Oklahoma	742	664	407	407	159	102	117	107	59	48
Oregon	911	831	342	336	401	373	105	83	63	40
Pennsylvania	2,183	1,987	912	911	386	269	654	619	231	187
South Carolina	1,018	861	525	525	254	121	159	148	80	66
South Dakota	109	101	64	64	14	14	19	15	11	7
Tennessee	1,359	1,236	694	694	273	273	258	200	134	70
Utah	300	294	182	182	58	58	43	40	17	14
Vermont	176	169	62	62	68	68	24	22	22	16
Washington	1,448	1,327	692	685	477	417	181	152	98	73
West Virginia	477	442	182	182	153	153	103	84	40	23
Wyoming	70	64	45	45	9	8	11	9	5	3

EXHIBIT 15b. (continued)

Notes: FY is fiscal year. Full-year equivalent (FYE) may also be referred to as average monthly enrollment. Enrollment numbers generally include individuals ever enrolled in Medicaid-financed coverage during the year, even if for a single month; however, in the event individuals were also enrolled in CHIP-financed Medicaid coverage (i.e., Medicaid-expansion CHIP) during the year, they are excluded if their most recent enrollment month was in Medicaid-expansion CHIP. Numbers exclude individuals enrolled only in Medicaid-expansion CHIP during the year and enrollees in the territories. Children and adults under age 65 who qualify for Medicaid on the basis of disability are included in the disabled category. About 528,000 enrollees age 65 and older are identified in the data as disabled; because disability is not an eligibility pathway for individuals age 65 and older, MACPAC recodes these enrollees as aged. Values have not been updated from those published in the December 2017 data book due to the unavailability of more recent Medicaid Statistical Information System (MSIS) or Transformed MSIS (T-MSIS) data.

For MACPAC's analysis, Medicaid enrollees were assigned a unique national identification number using an algorithm that incorporates state-specific ID numbers and beneficiary characteristics such as date of birth and gender. The state enrollment counts shown here are unduplicated using this national ID. Categories may not sum to total for each state due to rounding.

¹ Several states did not submit complete MSIS data for FY 2014 due to the ongoing transition to T-MSIS and were excluded from this exhibit. In addition, a few states were excluded due to data reliability concerns regarding the completeness and quality of the submitted MSIS data. This exhibit includes only states that had sufficient FY 2014 MSIS data. Due to the number of states excluded, a national total is not provided.

² Includes the new adult group made eligible under Section 1902(a)(10)(A)(i)(VIII) of the Social Security Act by the Patient Protection and Affordable Care Act (P.L. 111-148, as amended).

³ In this exhibit, full-benefit enrollees columns exclude enrollees reported by states in the MSIS as receiving coverage of only emergency services, family planning services, or assistance with Medicare premiums and cost sharing.

Source: MACPAC, 2017, analysis of MSIS data as of December 2016.

EXHIBIT 16. Medicaid Spending by State, Category, and Source of Funds, FY 2018 (millions)

State ¹	Benefits			State program administration			Total Medicaid		
	Total	Federal	State	Total	Federal	State	Total	Federal	State
Alabama	\$5,546	\$3,976	\$1,570	\$222	\$136	\$85	\$5,768	\$4,113	\$1,655
Alaska	2,033	1,468	566	163	100	63	2,196	1,567	629
Arizona	12,132	9,241	2,891	275	185	90	12,407	9,426	2,981
Arkansas	6,308	4,910	1,398	401	276	125	6,709	5,186	1,523
California	83,158	51,226	31,932	5,738	3,383	2,355	88,896	54,608	34,287
Colorado	8,926	5,351	3,574	410	258	152	9,336	5,609	3,727
Connecticut	8,176	4,893	3,283	395	268	127	8,571	5,161	3,410
Delaware	2,238	1,444	794	89	53	36	2,327	1,497	830
District of Columbia	2,805	2,069	736	172	104	68	2,977	2,173	803
Florida	22,893	14,214	8,680	854	492	362	23,747	14,705	9,042
Georgia	10,839	7,446	3,394	559	361	198	11,399	7,807	3,592
Hawaii	2,213	1,469	744	98	69	29	2,311	1,539	772
Idaho	1,901	1,354	547	123	82	41	2,024	1,436	588
Illinois	22,195	12,891	9,304	916	574	342	23,111	13,465	9,646
Indiana	11,242	7,891	3,350	555	358	197	11,796	8,249	3,547
Iowa	4,828	3,171	1,657	164	112	52	4,992	3,283	1,709
Kansas	3,438	1,890	1,548	165	111	54	3,602	2,001	1,601
Kentucky	9,801	7,646	2,155	313	233	79	10,114	7,879	2,235
Louisiana	10,836	7,739	3,097	387	268	119	11,223	8,008	3,215
Maine	2,687	1,731	955	154	106	48	2,841	1,838	1,003
Maryland	11,417	6,934	4,483	450	284	166	11,868	7,219	4,649
Massachusetts	17,655	9,693	7,962	1,044	624	421	18,700	10,317	8,383
Michigan	16,287	11,613	4,674	799	543	256	17,086	12,156	4,930
Minnesota	12,325	7,035	5,290	806	493	313	13,130	7,528	5,602
Mississippi	5,279	3,998	1,280	165	108	57	5,444	4,106	1,338
Missouri	10,296	6,713	3,584	413	265	148	10,709	6,977	3,732
Montana	1,830	1,422	408	91	60	30	1,921	1,482	439
Nebraska	2,127	1,122	1,005	107	76	32	2,234	1,198	1,037
Nevada	3,922	2,941	982	205	142	62	4,127	3,083	1,044
New Hampshire	2,150	1,266	884	123	84	39	2,273	1,350	923
New Jersey	14,843	8,832	6,011	863	518	345	15,707	9,350	6,357
New Mexico	5,112	4,043	1,069	221	143	78	5,333	4,186	1,147

EXHIBIT 16. (continued)

State ¹	Benefits			State program administration			Total Medicaid		
	Total	Federal	State	Total	Federal	State	Total	Federal	State
New York	\$73,030	\$39,662	\$33,368	\$2,233	\$1,319	\$914	\$75,263	\$40,981	\$34,282
North Carolina	13,339	9,035	4,305	722	504	218	14,061	9,539	4,522
North Dakota	1,222	745	477	120	84	36	1,342	829	513
Ohio	21,744	14,941	6,803	951	607	345	22,695	15,547	7,148
Oklahoma	4,433	2,692	1,742	226	144	82	4,659	2,836	1,824
Oregon	8,877	6,504	2,373	504	319	185	9,381	6,823	2,558
Pennsylvania	29,864	17,613	12,251	895	561	333	30,758	18,174	12,584
Rhode Island	2,620	1,547	1,073	164	111	53	2,784	1,658	1,125
South Carolina	6,006	4,311	1,695	351	236	114	6,357	4,548	1,809
South Dakota	866	517	348	48	27	21	914	545	369
Tennessee	9,681	6,419	3,261	620	417	204	10,301	6,836	3,465
Texas	37,585	21,484	16,102	1,377	845	533	38,963	22,328	16,634
Utah	2,422	1,704	718	154	103	50	2,575	1,807	769
Vermont	1,596	934	662	174	115	58	1,770	1,049	721
Virginia	9,562	4,768	4,794	378	242	136	9,940	5,010	4,930
Washington	12,094	7,542	4,551	734	417	317	12,827	7,959	4,868
West Virginia	3,854	3,035	819	143	103	40	3,997	3,138	859
Wisconsin	8,769	5,186	3,583	412	251	160	9,180	5,437	3,743
Wyoming	595	313	282	74	54	20	669	367	302
Subtotal (states)	\$585,600	\$366,586	\$219,014	\$27,714	\$17,327	\$10,387	\$613,314	\$383,913	\$229,401
American Samoa	34	19	15	2	1	0	35	20	15
Guam	82	54	28	4	3	1	86	56	30
Northern Mariana Islands	44	25	20	1	0	0	45	25	20
Puerto Rico	2,393	2,197	196	100	93	7	2,494	2,291	203
Virgin Islands	59	53	6	18	17	1	77	70	7
Subtotal (states and territories)	\$588,213	\$368,934	\$219,279	\$27,839	\$17,441	\$10,397	\$616,051	\$386,375	\$229,676
MFCU	-	-	-	352	264	88	352	264	88
Medicaid survey and certification of nursing and intermediate care facilities	-	-	-	346	259	86	346	259	86
Vaccines for Children program	-	-	-	-	-	-	4,389	4,389	-
Total	\$588,213	\$368,934	\$219,279	\$28,536	\$17,965	\$10,572	\$621,138²	\$391,287²	\$229,850



EXHIBIT 16. (continued)

Notes: FY is fiscal year. MFCU is Medicaid Fraud Control Unit. Total federal spending shown here (\$391,287 million) will differ from total federal outlays shown in FY 2020 budget documents due to slight differences in the timing of data for the states and the treatment of certain adjustments. Federal spending in the territories is capped; however, territories report their total spending regardless of whether they have reached their caps. As a result, federal spending shown here may exceed the amounts actually paid to the territories. State shares for MFCUs and survey and certification are MACPAC estimates based on 75 percent federal match. State-level estimates for these items are available but are not shown here. The Vaccines for Children (VFC) program is authorized in the Medicaid statute but is operated as a separate program; 100 percent federal funding finances the purchase of vaccines for children who are enrolled in Medicaid, uninsured, or privately insured without vaccine coverage. Spending on administration is only for state programs; federal oversight spending is not included.

– Dash indicates zero; \$0 indicates an amount less than \$0.5 million that rounds to zero.

¹ Not all states had certified their CMS-64 financial management report (FMR) submissions as of June 17, 2019. California’s fourth quarter submissions were not certified. Figures presented in this exhibit may change if states revise their expenditure data after this date.

² Amounts exceed the sum of benefits and state program administration columns due to the inclusion of the VFC program.

Sources: For state and territory spending: MACPAC, 2019, analysis of CMS-64 FMR net expenditure data as of June 17, 2019. For all other spending (MFCUs, survey and certification, VFC program): CMS, 2019, *Fiscal year 2020 justification of estimates for appropriations committees*, Baltimore, MD: CMS, <https://www.cms.gov/About-CMS/Agency-Information/PerformanceBudget/Downloads/FY2020-CJ-Final.pdf>.

EXHIBIT 17. Total Medicaid Benefit Spending by State and Category, FY 2018 (millions)

State ¹	Total spending on benefits	Fee for service									Managed care and premium assistance	Medicare premiums and coinsurance	Collections
		Hospital	Physician	Dental	Other practitioner	Clinic and health center	Other acute services	Drugs	Institutional LTSS	Home and community-based LTSS			
Alabama	\$5,546	\$2,134	\$435	\$69	\$66	\$96	\$504	\$257	\$1,019	\$505	\$138	\$343	-\$21
Alaska	2,033	599	166	97	39	380	150	60	200	330	0	31	-20
Arizona	12,132	1,379	51	5	8	84	506	5	91	2	9,645	363	-6
Arkansas	6,308	1,209	340	30	26	58	908	148	979	602	1,801	335	-128
California	83,158	12,770	784	927	20	2,188	9,450	1,138	3,870	12,393	37,367	2,969	-717
Colorado	8,926	2,777	860	113	–	956	386	419	829	988	1,499	178	-78
Connecticut ²	8,176	2,505	449	158	217	350	571	403	1,620	1,889	-0	505	-492
Delaware	2,238	86	12	38	1	2	85	2	52	143	1,768	52	-3
District of Columbia	2,805	368	50	18	4	167	171	86	356	557	974	60	-8
Florida	22,893	2,210	532	3	19	199	884	247	1,176	1,336	14,698	1,746	-155
Georgia	10,839	3,156	378	23	35	20	685	294	1,514	1,271	3,025	495	-57
Hawaii ³	2,213	7	0	34	0	24	-0	2	11	130	2,003	50	-47
Idaho	1,901	527	126	–	29	35	197	52	287	416	183	69	-18
Illinois	22,195	4,173	280	45	126	152	809	43	1,824	1,640	12,682	525	-103
Indiana	11,242	637	87	28	10	474	326	67	2,742	1,442	5,206	287	-64
Iowa	4,828	211	41	34	2	39	151	3	89	81	4,112	152	-88
Kansas ⁴	3,438	192	5	0	0	1	84	-1	112	0	2,964	109	-28
Kentucky	9,801	363	25	3	4	209	386	41	1,196	867	6,475	261	-29
Louisiana	10,836	508	38	0	–	31	257	56	1,498	747	7,467	368	-135
Maine	2,687	596	83	22	48	192	491	76	498	535	4	230	-87
Maryland	11,417	1,045	127	141	61	157	1,299	321	1,395	1,449	5,129	371	-79
Massachusetts	17,655	2,803	321	278	34	287	1,584	309	1,693	3,398	6,552	577	-181
Michigan	16,287	1,356	308	41	14	269	639	418	2,124	695	10,006	571	-155
Minnesota ⁴	12,325	665	207	19	196	130	1,058	-84	1,231	3,221	5,895	226	-441
Mississippi	5,279	631	113	5	10	31	261	32	1,076	443	2,422	271	-17
Missouri	10,296	2,523	9	6	13	332	735	643	1,362	2,055	2,333	395	-110
Montana	1,830	689	129	59	52	47	269	94	220	224	24	47	-25
Nebraska	2,127	62	6	7	0	1	46	39	449	456	1,052	56	-48
Nevada	3,922	598	146	90	25	58	456	125	335	258	1,673	182	-23
New Hampshire ⁴	2,150	275	11	23	2	5	181	-1	437	326	867	36	-12

EXHIBIT 17. (continued)

State ¹	Total spending on benefits	Fee for service									Managed care and premium assistance	Medicare premiums and coinsurance	Collections
		Hospital	Physician	Dental	Other practitioner	Clinic and health center	Other acute services	Drugs	Institutional LTSS	Home and community-based LTSS			
New Jersey	\$14,843	\$1,564	\$58	\$2	\$8	\$405	\$869	\$12	\$1,694	\$1,354	\$8,679	\$427	-\$229
New Mexico	5,112	440	26	11	51	5	69	8	32	405	3,931	153	-20
New York	73,030	9,441	295	41	174	1,167	5,551	2,088	7,439	7,443	39,427	1,731	-1,767
North Carolina	13,339	4,324	939	309	124	295	1,294	633	1,473	796	2,895	496	-237
North Dakota	1,222	149	40	14	15	16	46	22	372	241	301	15	-8
Ohio	21,744	1,194	195	31	9	82	1,486	48	2,305	3,660	12,327	596	-190
Oklahoma	4,433	1,553	449	92	30	361	356	429	685	543	129	174	-367
Oregon	8,877	544	31	3	36	285	337	65	479	2,029	4,894	227	-53
Pennsylvania	29,864	1,597	60	18	2	53	517	33	4,497	6,161	16,316	792	-182
Rhode Island ⁴	2,620	352	8	8	0	56	448	-3	161	0	1,532	67	-10
South Carolina	6,006	1,081	110	132	13	103	334	32	856	665	2,654	246	-219
South Dakota	866	237	61	22	3	72	62	25	185	169	1	36	-9
Tennessee	9,681	483	32	169	0	61	448	396	255	684	6,757	451	-54
Texas ⁵	37,585	5,085	168	-193	158	21	5,757	118	1,962	2,433	21,376	1,313	-613
Utah	2,422	277	72	28	4	11	145	62	364	352	1,079	54	-28
Vermont ⁴	1,596	27	-	-	-	-	1,505	-136	124	72	-	4	-1
Virginia ⁴	9,562	1,211	116	152	28	60	907	-15	585	1,724	4,555	298	-61
Washington	12,094	775	58	174	14	745	735	84	1,069	2,502	5,604	434	-100
West Virginia	3,854	228	39	10	7	15	195	333	809	501	1,581	156	-20
Wisconsin	8,769	811	40	61	26	325	725	402	868	1,201	4,052	336	-79
Wyoming	595	134	36	11	17	38	23	23	151	146	8	13	-7
Subtotal (states)	\$585,600	\$78,561	\$8,953	\$3,414	\$1,782	\$11,149	\$45,340	\$9,952	\$56,652	\$71,481	\$286,065	\$19,879	-\$7,628
American Samoa	34	21	-	-	-	2	9	0	-	-	-	1	-
Guam	82	26	9	3	0	1	29	12	1	0	-	2	-
N. Mariana Islands	44	24	-	2	-	4	8	4	-	3	-	1	-
Puerto Rico	2,393	200	-	-	-	-	39	-	-	-	2,154	-	-
Virgin Islands	59	29	6	2	1	1	6	12	-	0	-	1	-
Total (states and territories)	\$588,213	\$78,862	\$8,968	\$3,420	\$1,784	\$11,156	\$45,430	\$9,981	\$56,652	\$71,485	\$288,219	\$19,884	-\$7,628
Percent of total, exclusive of collections	-	13.2%	1.5%	0.6%	0.3%	1.9%	7.6%	1.7%	9.5%	12.0%	48.4%	3.3%	-

EXHIBIT 17. (continued)

Notes: FY is fiscal year. LTSS is long-term services and supports. Includes federal and state funds. Service category definitions and spending amounts shown here may differ from other CMS data sources, such as the Medicaid Statistical Information System (MSIS). The specific services included in each category have changed over time and therefore may not be directly comparable to earlier editions of MACStats. Collections includes third-party liability, estate, and other recoveries.

– Dash indicates zero; \$0 or -\$0 indicates an amount between \$0.5 million and -\$0.5 million that rounds to zero.

Additional detail on categories:

- Hospital includes inpatient, outpatient, critical access hospital, and emergency hospital services, as well as related disproportionate share hospital (DSH) payments.
- Physician includes physician and surgical services, both regular payments and those associated with the primary care physician payment increase.
- Clinic and health center includes non-hospital outpatient clinic, rural health clinic, federally qualified health center (FQHC), and freestanding birth center.
- Other acute services includes lab or X-ray; sterilizations; abortions; early and periodic screening, diagnostic, and treatment (EPSDT) screenings; emergency services for unauthorized aliens; non-emergency transportation; physical, occupational, speech, and hearing therapy; prosthetics, dentures, and eyeglasses; U.S. Preventive Services Task Force (USPSTF) grade A or B preventive services and Advisory Committee on Immunization Practices (ACIP) vaccines; other diagnostic screening and preventive services; school-based services; health home with chronic conditions; tobacco cessation for pregnant women; private duty nursing; case management (excluding primary care case management); rehabilitative services; hospice; and other care not otherwise categorized.
- Drugs are net of rebates.
- Institutional LTSS includes nursing facility, intermediate care facility for individuals with intellectual disabilities, and mental health facility.
- Home- and community-based LTSS includes home health, waiver and state plan services, personal care, and certified community behavioral health clinic.
- Managed care and premium assistance includes comprehensive and limited-benefit managed care plans, primary care case management, employer-sponsored premium assistance programs, and Programs of All-Inclusive Care for the Elderly. Comprehensive plans account for over 90 percent of spending in the managed care category. Managed care also includes rebates for drugs provided by managed care plans and managed care payments associated with the primary care physician payment increase, Community First Choice option, USPSTF grade A or B preventive services, ACIP vaccines, and certified community behavioral health clinic.

¹ Not all states had certified their CMS-64 financial management report (FMR) submissions as of June 17, 2019. California's fourth quarter submissions were not certified. Figures presented in this exhibit may change if states revise their expenditure data after this date.

² Connecticut reports negative spending for managed care and premium assistance due to prior period adjustments on managed care drug rebates.

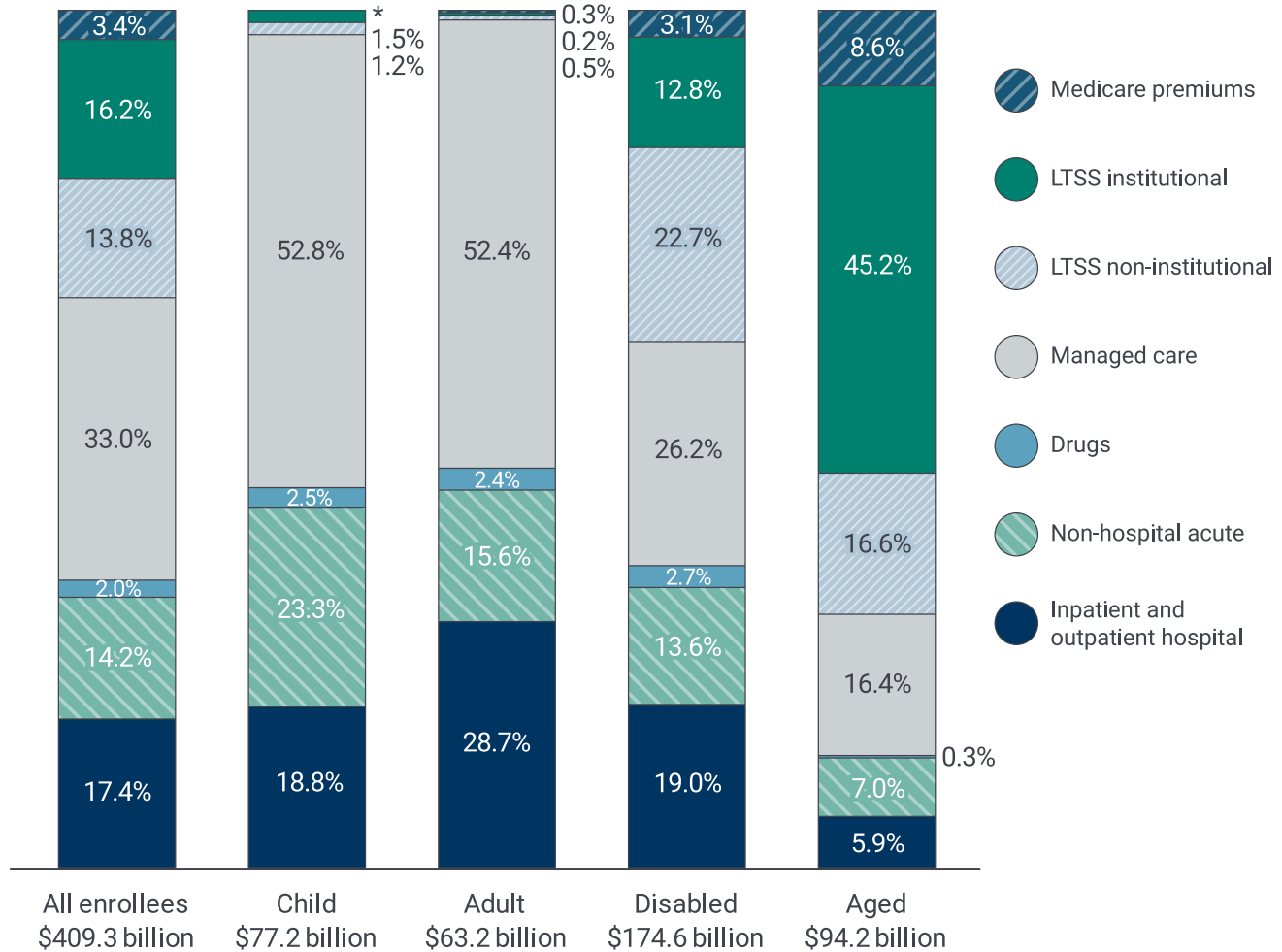
³ Hawaii reports negative spending for other acute due to prior period adjustments on other care not otherwise categorized.

⁴ State reports negative fee-for-service (FFS) drug spending after the application of drug rebates. The negative net amount may reflect prior period adjustments, a difference in the timing of payments and rebates after a shift of some FFS drug spending into Medicaid managed care, or the state not separately reporting the FFS and managed care drug rebates. Vermont shows negative drug spending because it reports most of its benefit spending under other care services in its CMS-64 submission.

⁵ Texas reports negative spending for dental due to large prior period adjustments for dental services.

Source: MACPAC, 2019, analysis of CMS-64 FMR net expenditure data as of June 17, 2019.

EXHIBIT 18. Distribution of Medicaid Benefit Spending by Eligibility Group and Service Category, FY 2013¹

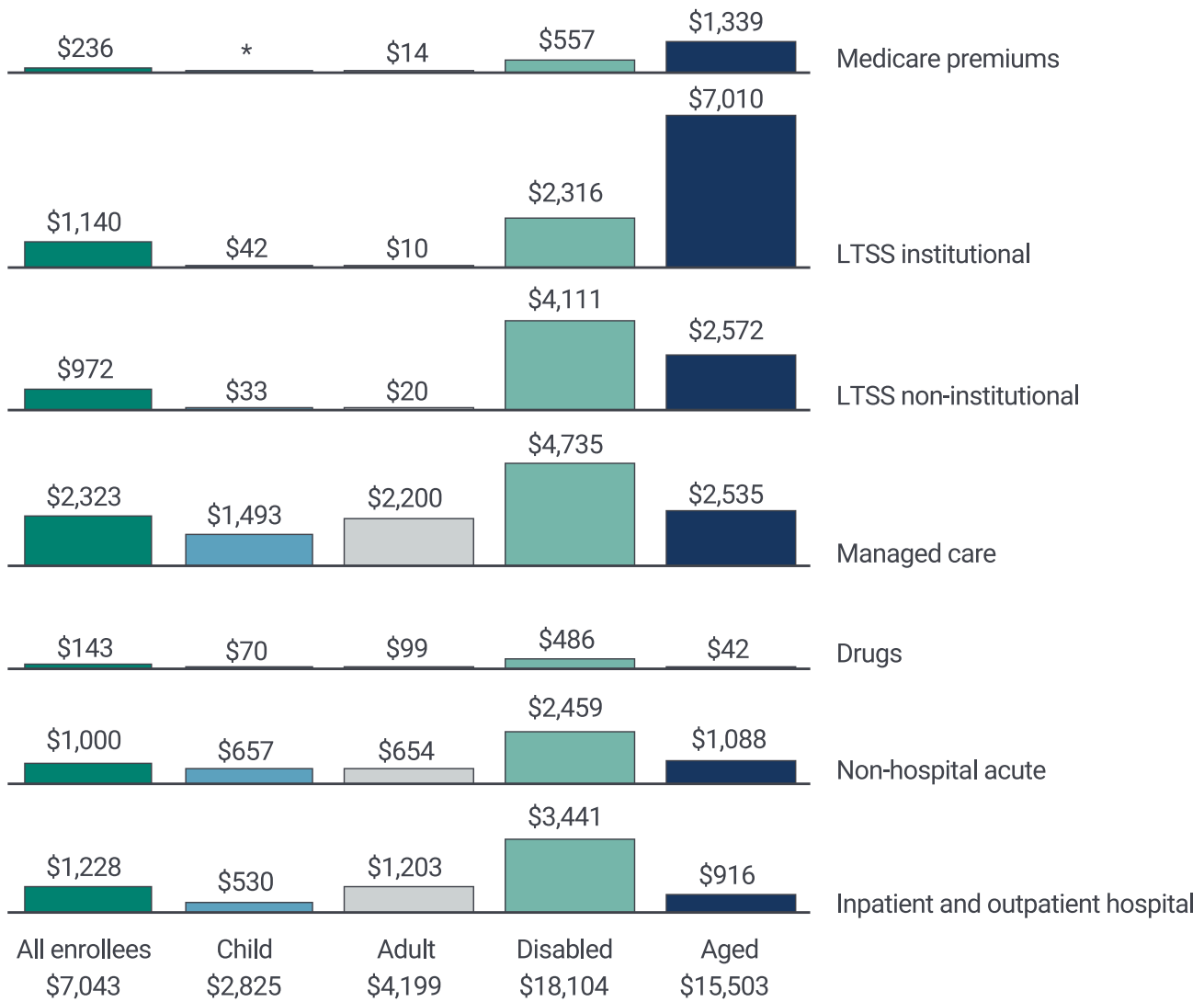


Notes: FY is fiscal year. LTSS is long-term services and supports. Includes federal and state funds. Excludes spending for administration, the territories, and Medicaid-expansion CHIP enrollees. Children and adults under age 65 who qualify for Medicaid on the basis of disability are included in the disabled category. About 746,000 enrollees age 65 and older are identified in the data as disabled; given that disability is not an eligibility pathway for individuals age 65 and older, MACPAC recodes these enrollees as aged. Amounts are fee for service unless otherwise noted. Benefit spending from Medicaid Statistical Information System (MSIS) data has been adjusted to reflect CMS-64 totals. Due to changes in both methods and data, figures shown here are not directly comparable to earlier years. With regard to methods, spending totals now exclude disproportionate share hospital and certain incentive and uncompensated care pool payments made under Section 1115 waiver expenditure authority, which were previously included prior to the December 2015 data book. See <https://www.macpac.gov/macstats/data-sources-and-methods/> for additional information. Excludes Rhode Island due to data reliability concerns regarding completeness of monthly claims and enrollment data.

* Values less than 0.1 percent are not shown.

¹ Values have not been updated from those published in the December 2017 data book due to the unavailability of more recent MSIS or Transformed MSIS data. This exhibit could not be updated to FY 2014 due to insufficient MSIS data for several states.

Source: MACPAC, 2017, analysis of MSIS data as of December 2016 and CMS-64 financial management report net expenditure data from CMS as of June 2016.

EXHIBIT 19. Medicaid Benefit Spending per Full-Year Equivalent Enrollee by Eligibility Group and Service Category, FY 2013¹


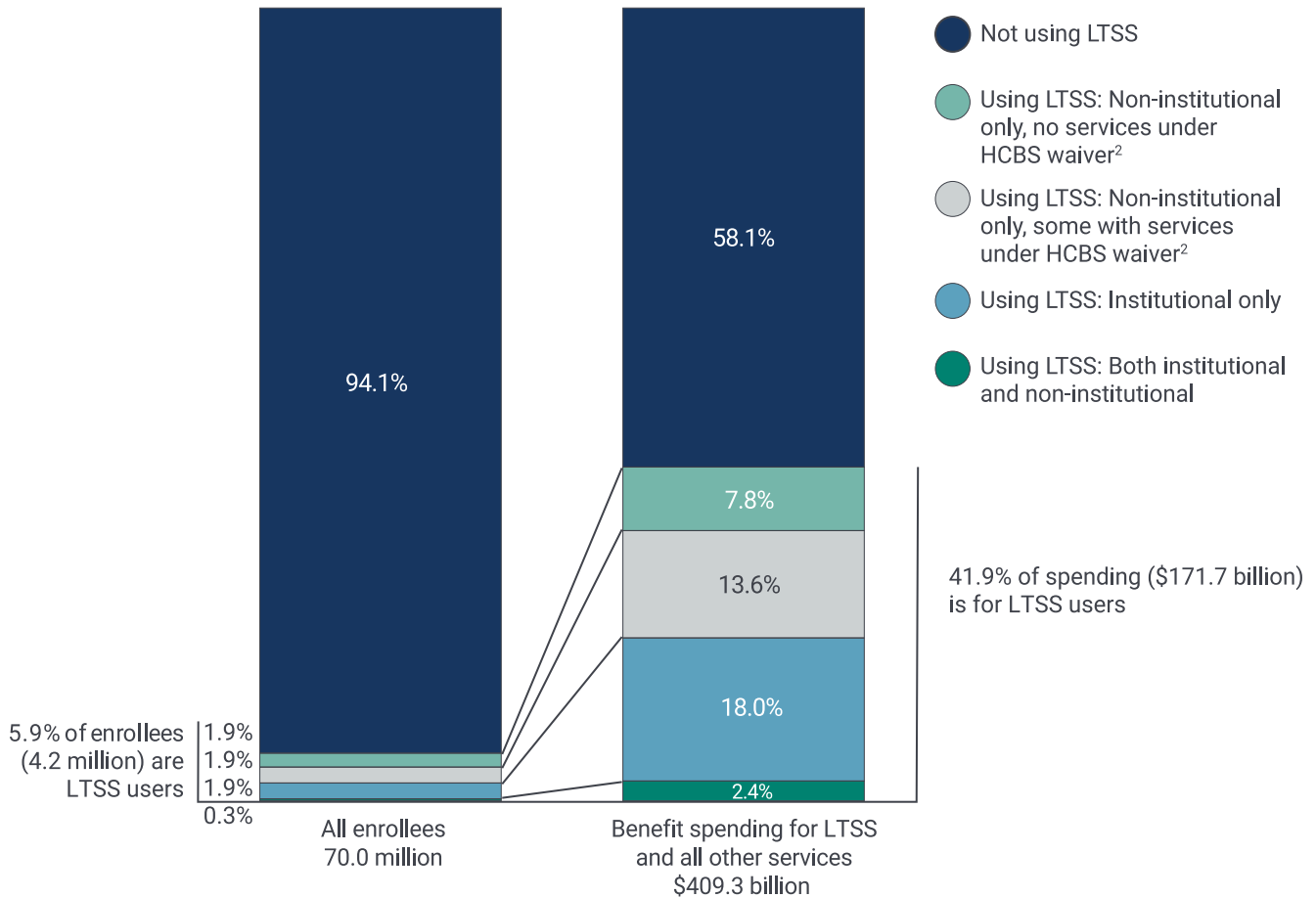
Notes: FY is fiscal year. LTSS is long-term services and supports. Includes federal and state funds. Excludes spending for administration, the territories, and Medicaid-expansion CHIP enrollees. Children and adults under age 65 who qualify for Medicaid on the basis of disability are included in the disabled category. About 746,000 enrollees age 65 and older are identified in the data as disabled; given that disability is not an eligibility pathway for individuals age 65 and older, MACPAC recodes these enrollees as aged. Amounts are fee for service unless otherwise noted, and they reflect all enrollees, including those with limited benefits. Benefit spending from Medicaid Statistical Information System (MSIS) data has been adjusted to reflect CMS-64 totals. Due to changes in both methods and data, figures shown here are not directly comparable to earlier years. With regard to methods, spending totals now exclude disproportionate share hospital and certain incentive and uncompensated care pool payments made under Section 1115 waiver expenditure authority, which were previously included prior to the December 2015 data book. See <https://www.macpac.gov/macstats/data-sources-and-methods/> for additional information. Excludes Rhode Island due to data reliability concerns regarding completeness of monthly claims and enrollment data.

* Values less than \$1 are not shown.

¹ Values have not been updated from those published in the December 2017 data book due to the unavailability of more recent MSIS or Transformed MSIS data. This exhibit could not be updated to FY 2014 due to insufficient MSIS data for several states.

Source: MACPAC, 2017, analysis of MSIS data as of December 2016 and CMS-64 financial management report net expenditure data from CMS as of June 2016.

EXHIBIT 20. Distribution of Medicaid Enrollment and Benefit Spending by Users and Non-Users of Long-Term Services and Supports, FY 2013¹



Notes: FY is fiscal year. LTSS is long-term services and supports. HCBS is home and community-based services. Includes federal and state funds. Excludes spending on administration, the territories, and Medicaid-expansion CHIP enrollees. Benefit spending from Medicaid Statistical Information System (MSIS) data has been adjusted to reflect CMS-64 totals, and enrollment counts are unduplicated using unique national identification numbers. Due to changes in both methods and data, figures shown here are not directly comparable to earlier years. With regard to methods, spending totals now exclude disproportionate share hospital payments and certain incentive and uncompensated care pool payments made under Section 1115 waiver expenditure authority, which were included prior to the December 2015 data book. See <https://www.macpac.gov/macstats/data-sources-and-methods/> for additional information.

LTSS users are defined here as enrollees using at least one LTSS service during the year under a fee-for-service arrangement. (The data do not allow a breakout of LTSS services delivered through managed care.) For example, an enrollee with a short stay in a nursing facility for rehabilitation following a hospital discharge and an enrollee with permanent residence in a nursing facility would both be counted as LTSS users. Excludes Rhode Island due to data reliability concerns regarding completeness of monthly claims and enrollment data.

¹ Values have not been updated from those published in the December 2017 data book due to the unavailability of more recent MSIS or Transformed MSIS data. This exhibit could not be updated to FY 2014 due to insufficient MSIS data for several states.

² All states have HCBS waiver programs that provide a range of LTSS for targeted populations of non-institutionalized enrollees who require institutional levels of care. Based on a comparison with CMS-372 data (a state-reported source containing aggregate spending and enrollment for HCBS waivers), the number of HCBS waiver enrollees may be underreported in the MSIS.

Source: MACPAC, 2017, analysis of MSIS data as of December 2016 and CMS-64 financial management report net expenditure data from CMS as of June 2016.

EXHIBIT 21a. Medicaid Spending by State, Eligibility Group, and Dually Eligible Status, FY 2013 (millions)

State	Total	Basis of eligibility ¹				Dually eligible status ²					
		Child	Adult	Disabled	Aged	All dually eligible enrollees		Dually eligible with full benefits		Dually eligible with limited benefits	
						Total	Age 65+	Total	Age 65+	Total	Age 65+
Total	\$409,266	18.9%	15.5%	42.7%	23.0%	\$146,091	60.4%	\$139,820	60.7%	\$6,271	53.5%
Alabama	4,568	23.7	9.9	41.9	24.6	1,651	67.1	1,414	69.2	237	54.7
Alaska	1,335	27.4	16.3	36.1	20.1	399	57.2	398	57.2	1	69.3
Arizona	7,586	24.0	28.5	33.7	13.7	1,611	57.3	1,553	57.1	57	62.4
Arkansas	4,141	25.0	4.9	47.4	22.7	1,494	60.9	1,346	63.4	148	38.0
California	57,297	17.3	17.9	40.8	24.0	18,105	67.4	17,635	67.4	471	68.8
Colorado	4,898	21.3	15.0	42.5	21.1	1,585	61.3	1,544	61.7	41	46.5
Connecticut	6,452	15.6	24.0	31.3	29.0	2,985	59.2	2,810	58.8	175	65.1
Delaware	1,552	19.1	31.5	32.0	17.4	465	56.0	431	56.8	34	46.0
District of Columbia	2,232	11.2	20.9	47.9	20.0	610	61.3	609	61.3	1	36.2
Florida	17,232	19.0	14.0	40.9	26.1	6,706	63.0	5,867	64.4	839	53.2
Georgia	8,530	24.1	13.0	41.4	21.5	2,634	67.2	2,372	68.9	262	51.8
Hawaii	1,524	14.1	22.0	35.3	28.6	578	71.8	568	72.0	10	62.8
Idaho	1,648	21.7	11.6	47.5	19.2	403	46.5	368	47.1	35	40.2
Illinois	15,211	24.1	17.6	38.0	20.4	4,725	57.8	4,637	58.0	88	49.5
Indiana	7,630	16.8	12.4	46.0	24.9	3,145	57.8	2,947	59.3	198	35.7
Iowa	3,649	17.3	10.6	49.3	22.7	1,682	48.9	1,643	48.7	39	56.6
Kansas	2,441	22.9	7.8	46.6	22.8	945	55.5	893	56.6	52	37.4
Kentucky	5,606	22.9	11.0	47.3	18.8	1,678	60.6	1,517	62.3	161	45.4
Louisiana	6,380	17.1	12.0	50.7	20.2	2,166	57.6	1,975	58.2	191	51.3
Maine	2,850	14.2	16.1	44.8	24.8	1,264	55.3	1,149	54.0	115	67.5
Maryland	7,647	19.2	20.3	41.0	19.5	2,323	59.4	2,188	60.1	135	49.0
Massachusetts	12,338	12.1	13.7	47.3	26.9	5,512	57.0	5,471	56.7	40	94.7
Michigan	11,998	18.6	16.1	45.8	19.5	3,804	58.8	3,699	59.1	105	48.0
Minnesota	8,873	15.8	22.3	41.6	20.2	3,430	50.1	3,403	50.1	27	51.0
Mississippi	4,518	20.3	9.9	45.5	24.4	1,711	64.0	1,504	66.7	207	44.2
Missouri	8,248	23.6	9.2	49.3	17.9	2,695	49.7	2,637	49.8	58	46.6
Montana	989	25.2	10.7	39.0	25.1	387	64.0	363	65.1	24	47.1
Nebraska	1,788	18.6	10.6	46.2	24.6	787	51.3	778	51.3	9	52.5
Nevada	1,742	28.7	13.2	43.2	14.8	385	60.3	331	62.0	55	49.9
New Hampshire	1,162	23.5	6.1	38.0	32.4	607	59.0	585	59.7	22	40.5
New Jersey	9,266	15.5	8.4	46.7	29.3	4,491	56.9	4,448	56.8	43	66.1

EXHIBIT 21a. (continued)

State	Total	Basis of eligibility ¹				Dually eligible status ²					
						All dually eligible enrollees		Dually eligible with full benefits		Dually eligible with limited benefits	
		Child	Adult	Disabled	Aged	Total	Age 65+	Total	Age 65+	Total	Age 65+
New Mexico	\$3,270	38.3%	26.0%	32.2%	3.6%	\$351	31.2%	\$301	27.3%	\$50	54.6%
New York	50,354	10.6	21.6	38.9	28.9	21,470	63.3	21,169	63.2	301	70.7
North Carolina	11,298	23.1	13.6	45.6	17.8	3,499	56.7	3,361	57.1	138	47.5
North Dakota	783	16.7	8.4	43.2	31.6	429	56.9	424	57.0	5	46.1
Ohio	16,154	15.0	17.1	44.8	23.0	5,899	56.9	5,627	57.8	272	38.1
Oklahoma	4,754	28.8	15.6	38.9	16.7	1,380	53.7	1,348	53.8	33	51.3
Oregon	4,782	16.9	22.7	37.8	22.6	1,637	63.8	1,551	64.9	86	44.3
Pennsylvania	20,245	16.1	6.7	52.9	24.3	7,719	61.5	7,588	61.6	131	54.8
Rhode Island	³	³	³	³	³	³	³	³	³	³	³
South Carolina	4,449	23.0	15.8	41.4	19.7	1,500	58.5	1,470	58.5	29	56.0
South Dakota	765	23.4	11.7	44.2	20.8	284	54.9	265	55.6	20	44.9
Tennessee	7,617	23.2	14.4	39.5	22.9	2,885	59.1	2,684	60.1	201	45.2
Texas	24,417	30.2	6.9	43.4	19.6	7,330	63.5	6,596	63.6	733	62.6
Utah	2,101	28.8	17.1	43.8	10.2	559	36.8	551	36.7	8	40.3
Vermont	1,431	⁴	⁴	⁴	⁴	⁴	⁴	⁴	⁴	⁴	⁴
Virginia	7,105	21.1	11.4	45.7	21.8	2,575	54.4	2,446	55.0	129	41.7
Washington	7,805	22.2	15.0	44.0	18.8	2,338	61.2	2,215	62.2	123	41.8
West Virginia	2,949	16.8	9.6	50.1	23.6	1,120	61.1	1,054	62.1	66	46.4
Wisconsin	7,105	11.9	15.7	43.7	28.8	3,522	56.3	3,484	56.3	39	57.6
Wyoming	554	20.4	8.8	45.3	25.6	277	50.7	257	51.3	19	41.4

Notes: FY is fiscal year. Includes federal and state funds. Excludes spending for administration, the territories, and Medicaid-expansion CHIP enrollees. Benefit spending from Medicaid Statistical Information System (MSIS) data has been adjusted to reflect CMS-64 totals. Due to changes in both methods and data, figures shown here are not directly comparable to earlier years. With regard to methods, spending totals now exclude disproportionate share hospital (DSH) and certain incentive and uncompensated care pool payments made under Section 1115 waiver expenditure authority, which were included prior to the December 2015 data book. See <https://www.macpac.gov/macstats/data-sources-and-methods/> for additional information. Values have not been updated from those published in the December 2017 data book due to the unavailability of more recent MSIS or Transformed MSIS data.

¹ Children and adults under age 65 who qualify for Medicaid on the basis of disability are included in the disabled category. About 746,000 enrollees age 65 and older are identified in the data as disabled; because disability is not an eligibility pathway for individuals age 65 and older, MACPAC recodes these enrollees as aged.

² Dually eligible enrollees are covered by both Medicaid and Medicare; those with limited benefits receive Medicaid assistance only with Medicare premiums and cost sharing.

³ State was excluded due to data reliability concerns regarding the completeness of monthly claims and enrollment data.

⁴ Due to large differences in the way Vermont reports spending in CMS-64 and in MSIS, MACPAC's adjustment methodology is applied only to total Medicaid spending.

Source: MACPAC, 2017, analysis of MSIS data as of December 2016 and CMS-64 financial management report net expenditure data as of June 2016.

EXHIBIT 21b. Medicaid Spending by State, Eligibility Group, and Dually Eligible Status, FY 2014 (millions)

State ¹	Total	Basis of eligibility ²				Dually eligible status ³					
		Child	Adult ⁴	Disabled	Aged	All dually eligible enrollees		Dually eligible with full benefits		Dually eligible with limited benefits	
						Total	Age 65+	Total	Age 65+	Total	Age 65+
Arizona	\$8,757	25.0%	23.9%	36.4%	14.6%	\$2,080	55.5%	\$2,004	55.3%	\$76	61.2%
Arkansas	4,858	27.9	8.9	42.1	21.2	1,596	61.9	1,444	64.4	152	37.7
California	58,116	16.9	24.2	36.1	22.9	17,321	67.7	16,906	67.7	415	70.6
Connecticut	7,082	16.3	27.9	29.7	26.1	2,944	58.9	2,732	58.5	212	64.0
Georgia	9,051	26.9	13.7	39.3	20.0	2,624	66.9	2,353	68.6	271	51.7
Idaho	1,584	23.4	11.5	45.6	19.5	402	46.8	368	47.2	33	42.4
Iowa	3,993	16.1	18.0	44.4	21.5	1,712	49.7	1,671	49.5	41	56.6
Louisiana	6,233	18.5	12.6	49.3	19.5	2,064	57.5	1,878	58.0	185	52.3
Massachusetts	13,338	11.2	20.4	42.5	26.0	5,543	59.1	5,502	58.8	41	95.2
Michigan	13,019	19.2	19.2	43.7	17.8	3,785	58.8	3,682	59.3	103	42.1
Minnesota	10,013	17.4	24.3	39.3	19.0	3,678	49.4	3,650	49.3	28	55.0
Mississippi	4,662	20.8	10.4	45.7	23.1	1,700	62.8	1,483	65.6	217	43.9
New Jersey	11,235	14.6	20.6	39.6	25.3	4,664	57.2	4,624	57.1	41	67.1
New York	48,190	11.0	23.7	34.7	30.5	19,985	68.5	19,685	68.5	300	71.6
Ohio	18,909	16.5	25.8	39.1	18.6	5,678	54.9	5,429	55.7	249	37.4
Oklahoma	4,922	28.9	15.4	39.0	16.6	1,408	54.3	1,374	54.4	35	50.1
Oregon	6,555	14.2	37.9	28.0	19.9	1,892	66.7	1,801	67.7	92	46.9
Pennsylvania	22,666	17.8	7.1	52.2	22.9	8,146	61.2	8,008	61.3	138	54.3
South Carolina	5,058	24.4	17.4	39.8	18.3	1,597	58.1	1,567	58.2	29	56.6
South Dakota	783	24.2	12.0	43.5	20.3	287	54.6	266	55.2	20	47.0
Tennessee	8,480	26.5	17.7	39.4	16.4	2,512	53.7	2,307	54.3	205	46.8
Utah	2,062	29.4	15.4	43.4	11.8	598	39.6	588	39.6	9	38.1
Vermont	1,465	5	5	5	5	5	5	5	5	5	5
Washington	10,022	15.2	41.2	28.2	15.4	2,466	61.2	2,336	62.2	130	43.7
West Virginia	3,275	16.3	21.0	40.8	21.9	1,154	61.2	1,085	62.3	70	44.9
Wyoming	547	20.8	8.0	45.9	25.3	282	49.0	259	49.4	23	43.9



EXHIBIT 21b. (continued)

Notes: FY is fiscal year. Includes federal and state funds. Excludes spending for administration, the territories, and Medicaid-expansion CHIP enrollees. Benefit spending from Medicaid Statistical Information System (MSIS) data has been adjusted to reflect CMS-64 totals. Due to changes in both methods and data, figures shown here are not directly comparable to earlier years. With regard to methods, spending totals now exclude disproportionate share hospital and certain incentive and uncompensated care pool payments made under Section 1115 waiver expenditure authority, which were included prior to the December 2015 data book. See <https://www.macpac.gov/macstats/data-sources-and-methods/> for additional information.

¹ Values have not been updated from those published in the December 2017 data book due to the unavailability of more recent MSIS or Transformed MSIS (T-MSIS) data. Several states did not submit complete MSIS data for FY 2014 due to the ongoing transition to T-MSIS and were excluded from this exhibit. In addition, a few states were excluded due to data reliability concerns regarding the completeness and quality of the submitted MSIS data. This exhibit includes only states that had sufficient FY 2014 MSIS data. Due to the number of states excluded, a national total is not provided.

² Children and adults under age 65 who qualify for Medicaid on the basis of disability are included in the disabled category. About 528,000 enrollees age 65 and older are identified in the data as disabled; because disability is not an eligibility pathway for individuals age 65 and older, MACPAC recodes these enrollees as aged.

³ Dually eligible enrollees are covered by both Medicaid and Medicare; those with limited benefits receive Medicaid assistance only with Medicare premiums and cost sharing.

⁴ Includes the new adult group made eligible under Section 1902(a)(10)(A)(i)(VIII) of the Social Security Act by the Patient Protection and Affordable Care Act (P.L. 111-148, as amended).

⁵ Due to large differences in the way Vermont reports spending in CMS-64 and in MSIS, MACPAC's adjustment methodology is applied only to total Medicaid spending.

Source: MACPAC, 2017, analysis of MSIS data as of December 2016 and CMS-64 financial management report net expenditure data as of June 2016.

EXHIBIT 22a. Medicaid Benefit Spending per Full-Year Equivalent Enrollee by State and Eligibility Group, FY 2013

State	Total		Child		Adult		Disabled		Aged	
	All enrollees	Full-benefit enrollees ¹	All enrollees	Full-benefit enrollees ¹	All enrollees	Full-benefit enrollees ¹	All enrollees	Full-benefit enrollees ¹	All enrollees	Full-benefit enrollees ¹
Total	\$7,043	\$7,742	\$2,825	\$2,842	\$4,199	\$5,149	\$18,104	\$20,077	\$15,503	\$19,950
Alabama	4,717	5,598	2,252	2,252	2,731	5,077	9,001	11,092	10,173	21,493
Alaska	12,061	12,102	5,957	5,957	8,879	8,869	30,736	31,013	29,998	31,101
Arizona	5,582	5,821	2,810	2,844	4,894	5,337	15,920	16,495	9,666	12,321
Arkansas	6,890	8,206	3,338	3,374	2,473	6,080	13,598	16,603	14,555	23,224
California	6,156	7,898	2,960	3,090	2,624	4,564	22,866	22,826	13,279	13,364
Colorado ²	6,819	6,922	2,574	2,558	5,072	4,822	18,779	20,628	18,399	23,590
Connecticut	8,830	9,671	3,463	3,465	6,036	6,075	26,992	35,009	17,353	37,286
Delaware	7,272	8,110	3,476	3,500	5,547	6,206	19,352	25,982	18,766	38,639
District of Columbia ³	10,366	10,338	3,373	3,373	5,466	5,382	29,100	29,127	23,326	23,401
Florida	5,090	5,420	1,899	1,880	4,155	3,978	12,038	15,048	9,120	14,733
Georgia ²	5,355	5,819	2,301	2,300	5,000	5,633	11,530	13,929	10,713	19,895
Hawaii	6,046	6,097	2,017	2,015	4,066	4,058	13,961	14,402	17,696	19,529
Idaho	7,176	7,446	2,515	2,511	7,099	7,002	18,368	21,352	17,741	26,761
Illinois	5,683	5,854	2,595	2,595	3,582	3,794	19,133	20,049	14,305	15,856
Indiana	7,409	7,743	2,270	2,270	5,128	5,361	17,836	20,940	22,232	29,935
Iowa	7,078	7,647	2,674	2,679	2,471	2,405	21,626	23,183	21,130	28,468
Kansas	6,944	7,249	2,671	2,669	5,004	4,771	15,782	18,719	16,956	23,749
Kentucky	7,279	7,848	3,422	3,416	6,835	6,749	12,236	14,526	11,954	19,363
Louisiana	5,654	6,354	1,937	1,937	3,350	4,361	14,321	16,844	11,616	20,667
Maine ²	8,856	9,754	3,538	3,542	5,392	5,422	19,495	22,395	12,556	24,275
Maryland	7,937	8,195	3,278	3,266	5,094	4,851	22,912	26,128	20,151	29,613
Massachusetts ³	9,474	10,088	4,022	4,129	4,192	4,581	16,106	16,156	19,864	23,377
Michigan	6,394	6,729	2,301	2,316	4,615	5,375	15,482	16,252	17,646	20,479
Minnesota	9,842	10,181	3,671	3,682	6,309	6,619	28,098	29,370	24,397	27,425
Mississippi	6,904	7,625	2,792	2,791	5,305	5,864	12,902	15,905	13,237	22,683

EXHIBIT 22a. (continued)

State	Total		Child		Adult		Disabled		Aged	
	All enrollees	Full-benefit enrollees ¹	All enrollees	Full-benefit enrollees ¹	All enrollees	Full-benefit enrollees ¹	All enrollees	Full-benefit enrollees ¹	All enrollees	Full-benefit enrollees ¹
Missouri	8,993	9,844	4,056	4,057	4,310	6,303	22,183	23,268	19,046	21,326
Montana	8,712	9,309	3,811	3,811	7,139	8,031	17,630	20,683	21,624	33,225
Nebraska	8,415	8,553	2,688	2,688	6,443	6,434	21,633	22,598	20,859	23,663
Nevada	5,471	5,670	2,623	2,607	4,469	4,196	16,151	20,401	8,790	15,030
New Hampshire	8,560	9,163	3,457	3,458	4,895	4,897	15,604	19,755	26,630	39,062
New Jersey	9,394	9,559	2,658	2,657	6,392	6,130	23,943	24,975	19,069	21,495
New Mexico	5,781	6,443	4,074	4,072	5,669	7,682	15,620	18,925	2,841	3,826
New York	9,845	10,208	2,943	2,964	5,412	5,463	29,115	30,495	23,594	27,536
North Carolina	6,864	7,322	2,893	2,891	6,126	7,631	15,867	17,404	11,853	15,128
North Dakota	12,053	12,544	3,662	3,662	6,303	6,298	31,115	34,815	31,199	39,329
Ohio	7,307	8,175	2,483	2,488	4,010	4,989	19,415	23,046	21,856	30,057
Oklahoma	6,377	6,952	3,385	3,384	4,509	6,100	15,796	17,129	13,360	16,100
Oregon	7,649	8,340	2,747	2,793	6,505	7,039	17,429	21,218	17,991	27,696
Pennsylvania	9,377	10,128	3,563	3,561	3,603	4,560	16,591	17,337	21,911	26,665
Rhode Island	4	4	4	4	4	4	4	4	4	4
South Carolina	4,803	5,266	2,093	2,095	3,499	5,120	11,740	12,406	11,127	13,054
South Dakota	7,117	7,445	2,831	2,831	6,198	6,124	18,024	21,554	14,190	20,838
Tennessee	5,771	6,180	2,594	2,594	4,411	4,413	11,776	14,620	13,078	23,318
Texas	5,982	6,307	2,846	2,835	4,306	5,380	15,820	18,117	11,045	15,884
Utah	7,356	7,365	3,573	3,565	6,227	5,903	21,793	22,902	13,381	15,345
Vermont	8,427	5	5	5	5	5	5	5	5	5
Virginia	7,603	8,319	3,021	3,020	4,970	6,316	18,762	22,254	15,115	20,760
Washington	6,679	6,989	2,554	2,539	6,000	6,884	17,010	19,124	15,688	19,816
West Virginia	8,332	8,957	2,972	2,972	7,143	7,140	13,423	15,467	18,278	29,247
Wisconsin	6,775	7,423	2,041	2,078	3,214	3,742	18,821	19,622	16,393	18,208
Wyoming	8,142	8,489	2,550	2,567	6,134	6,549	23,675	27,442	26,897	42,923

EXHIBIT 22a. (continued)

Notes: FY is fiscal year. Full-year equivalent (FYE) may also be referred to as average monthly enrollment. Includes federal and state funds. Excludes spending for administration, the territories, and Medicaid-expansion CHIP enrollees. Children and adults under age 65 who qualify for Medicaid on the basis of disability are included in the disabled category. About 746,000 enrollees age 65 and older are identified in the data as disabled; because disability is not an eligibility pathway for individuals age 65 and older, MACPAC recodes these enrollees as aged. Benefit spending from Medicaid Statistical Information System (MSIS) data has been adjusted to reflect CMS-64 totals. Due to changes in both methods and data, figures shown here are not directly comparable to earlier years. With regard to methods, spending totals now exclude disproportionate share hospital (DSH) and certain incentive and uncompensated care pool payments made under Section 1115 waiver expenditure authority, which were included prior to the December 2015 data book. See <https://www.macpac.gov/macstats/data-sources-and-methods/> for additional information. Values have not been updated from those published in the December 2017 data book due to the unavailability of more recent MSIS or Transformed MSIS data.

¹ In this table, full-benefit enrollees excludes those reported by states in MSIS as receiving coverage of only emergency services, family planning services, or assistance with Medicare premiums and cost sharing.

² State had a change in FYE enrollees of 10 percent or more over the prior year. These data may reflect data anomalies in the submission of MSIS data; if so, data may be updated in future MSIS submissions. MSIS data anomalies have been compiled and reported by Mathematica Policy Research; the data anomalies report can be found at <http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MedicaidDataSourcesGenInfo/downloads/anomalies1.pdf>.

³ When compared to the December 2015 edition of this table, District of Columbia and Massachusetts had a change in total FYE enrollees of 10 percent or more over the prior year. However, both states have since updated their 2012 enrollment total and no longer have a change of 10 percent or more.

⁴ State was excluded due to data reliability concerns regarding the completeness of monthly claims and enrollment data.

⁵ Due to large differences in the way Vermont reports spending in CMS-64 and in MSIS, MACPAC's adjustment methodology is only applied to total Medicaid spending.

Source: MACPAC, 2017, analysis of MSIS data as of December 2016 and CMS-64 financial management report net expenditure data as of June 2016.

EXHIBIT 22b. Medicaid Benefit Spending per Full-Year Equivalent Enrollee by State and Eligibility Group, FY 2014

State ¹	Total		Child		Adult ²		Disabled		Aged	
	All enrollees	Full-benefit enrollees ³	All enrollees	Full-benefit enrollees ³	All enrollees	Full-benefit enrollees ³	All enrollees	Full-benefit enrollees ³	All enrollees	Full-benefit enrollees ³
Arizona	\$6,652	\$7,092	\$3,350	\$3,384	\$5,418	\$6,155	\$19,686	\$21,091	\$11,301	\$14,650
Arkansas	7,213	7,965	4,028	4,037	3,427	3,921	14,009	17,292	15,678	25,418
California	5,256	6,461	2,730	2,836	2,631	3,913	20,236	20,222	12,129	12,268
Connecticut	9,352	10,252	4,086	4,087	6,910	6,942	27,869	36,835	16,348	35,659
Georgia	5,381	5,803	2,509	2,507	5,542	5,965	11,415	13,923	10,376	19,614
Idaho	6,464	6,731	2,432	2,429	6,338	6,253	16,125	18,915	16,104	25,147
Iowa	7,285	7,833	2,730	2,737	3,809	4,123	21,153	22,722	21,541	29,170
Louisiana	5,460	6,166	2,003	2,003	3,394	4,564	13,848	16,556	10,952	20,031
Massachusetts	8,319	8,817	3,758	3,873	4,086	4,409	15,359	15,414	20,190	23,680
Michigan	6,476	6,854	2,646	2,666	4,385	4,962	15,879	16,733	17,117	19,937
Minnesota	9,693	9,950	4,080	4,090	6,084	6,257	30,629	32,027	24,521	27,316
Mississippi	6,786	7,493	2,806	2,806	5,296	5,825	12,955	16,105	12,624	22,117
New Jersey	8,194	8,305	2,846	2,845	4,938	4,883	24,519	25,637	19,438	21,971
New York	8,850	9,126	2,844	2,857	5,037	5,062	25,214	26,497	22,974	26,901
Ohio	7,676	8,388	3,025	3,031	5,483	6,200	20,112	24,166	19,992	27,790
Oklahoma	6,630	7,205	3,500	3,501	4,784	6,478	16,370	17,747	13,778	16,611
Oregon	7,196	7,703	2,726	2,770	6,181	6,504	17,576	21,491	20,638	31,887
Pennsylvania	10,385	11,202	4,412	4,408	4,181	5,168	18,099	18,941	22,504	27,371
South Carolina	4,969	5,586	2,352	2,353	3,465	5,544	12,684	13,420	11,624	13,720
South Dakota	7,202	7,553	2,955	2,955	6,527	6,509	17,969	21,573	14,065	20,744
Tennessee	6,242	6,693	3,242	3,242	5,494	5,495	12,969	16,186	10,351	18,480
Utah	6,882	6,920	3,331	3,327	5,488	5,315	20,858	21,939	14,580	16,773
Vermont	8,309	4	4	4	4	4	4	4	4	4
Washington	6,923	7,180	2,205	2,211	8,657	9,107	15,627	18,040	15,751	20,280
West Virginia	6,867	7,253	2,931	2,931	4,510	4,508	13,030	15,456	18,070	29,506
Wyoming	7,853	8,137	2,525	2,539	5,125	5,498	23,497	27,432	25,472	40,383

EXHIBIT 22b. (continued)

Notes: FY is fiscal year. Full-year equivalent (FYE) may also be referred to as average monthly enrollment. Includes federal and state funds. Excludes spending for administration, the territories, and Medicaid-expansion CHIP enrollees. Children and adults under age 65 who qualify for Medicaid on the basis of disability are included in the disabled category. About 528,000 enrollees age 65 and older are identified in the data as disabled; because disability is not an eligibility pathway for individuals age 65 and older, MACPAC recodes these enrollees as aged. Benefit spending from Medicaid Statistical Information System (MSIS) data has been adjusted to reflect CMS-64 totals. Due to changes in both methods and data, figures shown here are not directly comparable to earlier years. With regard to methods, spending totals now exclude disproportionate share hospital and certain incentive and uncompensated care pool payments made under Section 1115 waiver expenditure authority, which were included prior to the December 2015 data book. See <https://www.macpac.gov/macstats/data-sources-and-methods/> for additional information.

¹ Values have not been updated from those published in the December 2017 data book due to the unavailability of more recent MSIS or Transformed MSIS (TMSIS) data. Several states did not submit complete MSIS data for FY 2014 due to the ongoing transition to T-MSIS and were excluded from this exhibit. In addition, a few states were excluded due to data reliability concerns regarding the completeness and quality of the submitted MSIS data. This exhibit includes only states that had sufficient FY 2014 MSIS data. Due to the number of states excluded, a national total is not provided.

² Includes the new adult group made eligible under Section 1902(a)(10)(A)(i)(VIII) of the Social Security Act by the Patient Protection and Affordable Care Act (P.L. 111-148, as amended).

³ In this table, full-benefit enrollees excludes those reported by states in MSIS as receiving coverage of only emergency services, family planning services, or assistance with Medicare premiums and cost sharing.

⁴ Due to large differences in the way Vermont reports spending in CMS-64 and in MSIS, MACPAC's adjustment methodology is only applied to total Medicaid spending.

Source: MACPAC, 2017, analysis of MSIS data as of December 2016 and CMS-64 financial management report net expenditure data as of June 2016.

EXHIBIT 23. Medicaid Benefit Spending per Full-Year Equivalent Enrollee for Newly Eligible Adult and All Enrollees by State, FY 2018

State ¹	All Medicaid enrollees			Newly eligible adults ²		
	FYE enrollees	Medicaid benefit spending	Spending per FYE enrollee	FYE enrollees	Medicaid benefit spending	Spending per FYE enrollee
Alabama	1,020,971	\$5,546,416,592	\$5,432	–	–	–
Alaska	200,463	2,033,389,399	10,143	44,851	\$412,669,215	\$9,201
Arizona	1,892,534	12,132,120,126	6,411	108,595	424,591,280	3,910
Arkansas	922,201	6,308,079,740	6,840	290,116	1,872,582,919	6,455
California	13,009,653	83,157,886,480	6,392	3,796,364	22,170,190,631	5,840
Colorado	1,300,214	8,925,796,867	6,865	408,580	1,993,706,346	4,880
Connecticut	923,046	8,175,809,143	8,857	224,227	1,833,776,688	8,178
Delaware	210,809	2,237,920,184	10,616	10,214	57,892,612	5,668
District of Columbia	261,870	2,804,976,949	10,711	70,047	428,604,396	6,119
Florida	3,918,357	22,893,250,365	5,843	–	–	–
Georgia	1,962,066	10,839,404,783	5,524	–	–	–
Hawaii	327,254	2,213,115,909	6,763	22,267	519,083,282	23,312
Idaho	305,531	1,901,290,685	6,223	–	–	–
Illinois	2,868,889	22,194,828,973	7,736	627,597	3,721,448,234	5,930
Indiana	1,335,324	11,241,808,216	8,419	313,974	1,924,504,341	6,130
Iowa	598,695	4,828,425,247	8,065	147,365	978,782,150	6,642
Kansas	368,932	3,437,703,549	9,318	–	–	–
Kentucky	1,338,971	9,801,380,491	7,320	477,450	2,887,970,272	6,049
Louisiana	1,643,278	10,835,742,015	6,594	476,625	2,704,355,206	5,674
Maine	255,722	2,686,772,711	10,507	–	–	–
Maryland	1,224,179	11,417,338,026	9,327	309,929	2,693,035,908	8,689
Massachusetts	1,803,838	17,655,414,020	9,788	–	–	–
Michigan	2,430,094	16,286,594,101	6,702	628,235	3,594,837,971	5,722
Minnesota	1,093,185	12,324,543,789	11,274	204,519	1,810,709,590	8,853
Mississippi	691,357	5,278,728,403	7,635	–	–	–

EXHIBIT 23. (continued)

State ¹	All Medicaid enrollees			Newly eligible adults ²		
	FYE enrollees	Medicaid benefit spending	Spending per FYE enrollee	FYE enrollees	Medicaid benefit spending	Spending per FYE enrollee
Missouri	958,368	\$10,296,294,908	\$10,744	–	–	–
Montana	255,103	1,830,172,657	7,174	94,999	\$681,129,606	\$7,170
Nebraska	245,562	2,126,639,801	8,660	–	–	–
Nevada	598,696	3,922,474,284	6,552	214,049	1,253,342,851	5,855
New Hampshire	189,370	2,150,375,296	11,355	55,477	439,060,242	7,914
New Jersey	1,693,695	14,843,185,053	8,764	565,131	3,170,043,095	5,609
New Mexico	849,252	5,112,309,656	6,020	253,704	1,429,268,324	5,634
New York ³	6,155,684	73,030,082,745	11,864	300,268	1,241,929,264	4,136
North Carolina	2,163,872	13,339,097,405	6,164	–	–	–
North Dakota	93,088	1,222,239,306	13,130	19,569	281,075,385	14,364
Ohio	2,987,926	21,743,887,373	7,277	626,009	4,073,079,109	6,506
Oklahoma	653,789	4,433,479,661	6,781	–	–	–
Oregon	959,621	8,877,365,993	9,251	382,318	2,399,579,893	6,276
Pennsylvania	2,769,217	29,863,557,849	10,784	749,510	4,776,404,357	6,373
Rhode Island	309,141	2,620,033,271	8,475	69,363	458,472,181	6,610
South Carolina	1,262,132	6,006,492,924	4,759	–	–	–
South Dakota	100,793	865,504,172	8,587	–	–	–
Tennessee	1,584,944	9,680,798,504	6,108	–	–	–
Texas	4,290,578	37,585,413,327	8,760	–	–	–
Utah	297,754	2,421,929,601	8,134	–	–	–
Vermont	177,352	1,595,969,592	8,999	–	–	–
Virginia	1,058,055	9,562,002,903	9,037	–	–	–
Washington	1,784,350	12,093,602,904	6,778	562,270	3,000,406,280	5,336
West Virginia	540,396	3,854,175,868	7,132	167,423	1,006,738,740	6,013
Wisconsin	1,187,594	8,768,743,868	7,384	–	–	–
Wyoming	58,877	595,439,375	10,113	–	–	–

EXHIBIT 23. (continued)

State ¹	All Medicaid enrollees			Newly eligible adults ²		
	FYE enrollees	Medicaid benefit spending	Spending per FYE enrollee	FYE enrollees	Medicaid benefit spending	Spending per FYE enrollee
Subtotal (states)	75,132,640	\$585,600,005,059	\$7,794	12,221,043	\$74,239,270,368	\$6,075
American Samoa	27,898	33,648,007	1,206	–	–	–
Guam	35,955	82,077,146	2,283	–	–	–
Northern Mariana Islands	9,171	44,292,384	4,829	–	–	–
Puerto Rico	1,258,837	2,393,147,149	1,901	–	–	–
Virgin Islands	24,383	59,437,714	2,438	–	–	–
Total (states and territories)	76,488,885	\$588,212,607,459	\$7,690	12,221,043	\$74,239,270,368	\$6,075

Notes: FY is fiscal year. FYE is full-year equivalent. FYE may also be referred to as average monthly enrollment. Includes federal and state funds. Excludes spending for administration and Medicaid-expansion CHIP enrollees. Enrollment counts come from CMS-64 enrollment data and may differ from other data sources. Quarterly enrollment was tabulated from the most recent non-zero CMS-64 submission to account for any lag in reporting; this typically is the report submitted three quarters later (e.g., January–March 2018 enrollment was taken from the submission quarter ending December 31, 2018). Unlike other MACStats exhibits that show spending per FYE, this exhibit includes spending for disproportionate share hospital (DSH) and certain incentive and uncompensated care pool payments made under waiver expenditure authority of Section 1115 of the Social Security Act.

– Dash indicates zero.

¹ Not all states had certified their CMS-64 financial management report (FMR) submissions as of June 17, 2019. California's fourth quarter submissions were not certified. Figures presented in this exhibit may change if states revise their expenditure data after this date.

² Newly eligible adults include those enrollees who are newly eligible under Section 1902(a)(10)(A)(i)(VIII) of the Social Security Act and receive a federal matching rate of 95 percent for quarters in calendar year 2017 and 94 percent for quarters in calendar year 2018.

³ New York's CMS-64 quarterly enrollment data was missing the first three quarters of FY 2018 for both all enrollees and newly eligible adults. The FYE count displayed here is the average monthly enrollment based on the last quarter of enrollment.

Source: MACPAC, 2019, analysis of CMS-64 enrollment reports as of October 28, 2019, and CMS-64 FMR net expenditure data as of July 30, 2019.

EXHIBIT 24. Medicaid Supplemental Payments to Hospital Providers by State, FY 2018 (millions)

State ¹	Inpatient and outpatient hospitals ²				
	Total Medicaid payments	DSH payments	Non-DSH supplemental payments	Section 1115 waiver authority payments	Supplemental payments as % of total
Total	\$87,884.0	\$13,554.9	\$20,505.9	\$14,261.0	55.0%
Alabama	2,133.8	483.0	669.6	–	54.0
Alaska	599.1	2.5	–	–	0.4
Arizona ³	1,368.2	116.9	338.9	54.7	37.3
Arkansas	1,209.1	43.7	390.4	–	35.9
California ^{3,4}	16,644.4	590.8	8,050.0	3,874.4	75.2
Colorado	2,776.5	172.6	1,153.1	–	47.7
Connecticut ⁵	2,505.5	-39.6	751.4	–	28.4
Delaware	86.0	8.7	–	–	10.1
District of Columbia	367.6	39.1	35.3	–	20.2
Florida ³	2,210.4	237.2	207.9	794.9	56.1
Georgia	3,156.4	440.9	403.0	–	26.7
Hawaii ^{3,6}	6.6	–	1.0	-7.7	-99.9
Idaho	526.5	25.2	11.0	–	6.9
Illinois	4,173.5	245.9	1,200.2	–	34.7
Indiana	636.8	70.8	44.1	–	18.0
Iowa	210.7	82.7	1.4	–	39.9
Kansas ^{3,4}	114.5	76.5	1.1	–	67.8
Kentucky	363.3	182.3	19.9	–	55.6
Louisiana ⁷	507.6	1,171.8	118.4	–	254.2
Maine	595.9	–	85.8	–	14.4
Maryland	1,045.2	47.0	52.2	–	9.5
Massachusetts ^{3,4,8}	3,238.8	–	143.3	1,016.2	35.8
Michigan	1,356.1	462.5	440.1	–	66.6
Minnesota ⁸	665.1	67.2	48.7	71.3	28.2
Mississippi	631.0	226.5	–	–	35.9
Missouri ⁸	2,515.1	574.8	138.4	–	28.4
Montana	688.9	0.8	212.1	–	30.9
Nebraska	62.2	37.8	–	–	60.8
Nevada	597.7	79.1	200.4	–	46.8
New Hampshire ⁴	298.9	191.2	37.0	23.5	84.2
New Jersey ^{4,8}	1,563.7	423.9	–	384.6	51.7
New Mexico ^{3,4}	439.8	52.1	105.4	77.7	53.5
New York ⁴	11,117.2	3,523.9	1,446.2	1,675.7	59.8
North Carolina	4,324.0	375.1	1,788.5	–	50.0

EXHIBIT 24. (continued)

State ¹	Inpatient and outpatient hospitals ²				
	Total Medicaid payments	DSH payments	Non-DSH supplemental payments	Section 1115 waiver authority payments	Supplemental payments as % of total
North Dakota	\$148.6	\$0.2	\$1.0	–	0.8%
Ohio	1,194.1	–	488.1	–	40.9
Oklahoma	1,552.7	40.8	572.0	–	39.5
Oregon ⁴	543.5	40.9	129.7	\$89.8	47.9
Pennsylvania	1,597.5	648.2	396.0	–	65.4
Rhode Island	352.2	138.5	19.5	–	44.9
South Carolina	1,081.0	465.2	108.5	–	53.1
South Dakota	236.7	0.9	2.9	–	1.6
Tennessee ^{3, 8}	382.9	31.9	–	326.2	93.5
Texas ^{3, 4}	8,406.1	1,593.1	35.9	5,691.6	87.1
Utah	277.1	24.7	34.1	–	21.2
Vermont ⁴	30.8	27.4	–	3.3	100.0
Virginia	1,210.6	200.4	537.3	–	60.9
Washington ⁴	960.0	205.3	–	184.8	40.6
West Virginia	228.4	53.0	22.2	–	32.9
Wisconsin	811.3	70.5	32.3	–	12.7
Wyoming	134.5	0.5	31.3	–	23.6

Notes: FY is fiscal year. DSH is disproportionate share hospital. Includes federal and state funds. Section 1115 refers to Section 1115 of the Social Security Act (the Act). Excludes payments made under managed care arrangements. All amounts in this table are as reported by states in CMS-64 data during the fiscal year to obtain federal matching funds; amounts include expenditures for the current fiscal year and adjustments to expenditures for prior fiscal years, which may be positive or negative. Amounts reported by states for any given category (e.g., inpatient hospital) sometimes show substantial annual fluctuations. CMS began to require separate reporting of non-DSH supplemental payments in FY 2010 and continues to work with states to standardize this reporting. As a result, the information presented may not reflect a consistent classification of supplemental payment spending across states. Reporting is expected to improve over time.

– Dash indicates zero.

¹ Not all states had certified their CMS-64 financial management report (FMR) submissions as of June 17, 2019. California’s fourth quarter submissions were not certified. Figures presented in this exhibit may change if states revise their expenditure data after this date.

² Includes inpatient, outpatient, critical access hospital, and emergency hospital categories in the CMS-64 data. The CMS-64 instructions to states note that DSH payments are those made in accordance with Section 1923 of the Act. Non-DSH supplemental payments are described in the CMS-64 instructions to states as those made in addition to the standard fee schedule or other standard payment for a given service. They include payments made under institutional upper payment limit rules and payments to hospitals for graduate medical education. Section 1115 waiver authority payments include those made under uncompensated care pools, delivery system reform incentive payments (DSRIP), and other non-DSH supplemental payments that have been authorized under Section 1115 waivers. Because the majority of DSRIP payments go to hospitals, DSRIP payments that were reported as other care services on the CMS-64 were included in the Section 1115 waiver expenditure category and the total hospital payment category.

³ State made supplemental payments through an uncompensated care pool under Section 1115 waiver expenditure authority.

⁴ State made supplemental payments through a DSRIP or DSRIP-like program under Section 1115 waiver expenditure authority.

⁵ Connecticut reported negative DSH payments due to prior period adjustments.

⁶ Hawaii reported negative Section 1115 waiver authority payments due to prior period adjustments.

⁷ Louisiana reported negative base payments for inpatient hospital services due to prior period adjustments. This leads to supplemental payments being greater than total hospital spending and results in a percentage greater than 100 percent.

⁸ State made other supplemental payments, including graduate medical education, under Section 1115 waiver expenditure authority.

Source: MACPAC, 2019, analysis of CMS-64 Schedule C waiver report data as of October 21, 2019, and CMS-64 FMR net expenditure data as of June 17, 2019.

EXHIBIT 25. Medicaid Supplemental Payments to Non-Hospital Providers by State, FY 2018 (millions)

State ¹	Mental health facilities ²			Nursing facilities and ICF/IDs ³			Physicians and other practitioners ⁴		
	Total Medicaid payments	Supplemental payments	Supplemental payments as % of total	Total Medicaid payments	Supplemental payments	Supplemental payments as % of total	Total Medicaid payments	Supplemental payments	Supplemental payments as % of total
Total	\$6,112.3	\$3,065.5	50.2%	\$50,539.3	\$3,468.7	6.9%	\$10,420.7	\$1,315.1	12.6%
Alabama	87.0	0.8	0.9	932.1	–	–	462.0	–	–
Alaska	32.6	15.1	46.4	167.6	–	–	205.5	–	–
Arizona	33.6	28.5	84.8	57.4	8.7	15.2	56.6	–	–
Arkansas	111.4	0.8	0.7	867.8	–	–	363.5	37.5	10.3
California ⁵	676.2	-0.0	-0.0	3,193.3	288.1	9.0	799.5	150.0	18.8
Colorado	7.0	–	–	822.1	109.5	13.3	859.5	134.1	15.6
Connecticut	185.2	105.6	57.0	1,435.3	–	–	665.2	5.1	0.8
Delaware	17.9	5.7	31.7	34.2	–	–	12.7	–	–
District of Columbia	12.5	6.5	52.3	343.7	–	–	51.7	–	–
Florida ⁶	336.1	117.1	34.8	839.5	–	–	549.3	329.9	60.1
Georgia	8.6	–	–	1,505.3	134.7	8.9	413.5	39.7	9.6
Hawaii	–	–	–	10.6	2.4	22.4	0.2	–	–
Idaho	2.0	–	–	284.8	49.5	17.4	154.5	–	–
Illinois	188.4	89.3	47.4	1,635.2	–	–	387.7	–	–
Indiana	49.2	–	–	2,693.0	1,020.3	37.9	95.1	9.1	9.5
Iowa	4.4	–	–	84.6	–	–	41.8	18.0	43.1
Kansas	29.4	29.4	99.8	82.1	–	–	5.0	0.1	1.2
Kentucky	38.6	37.4	97.1	1,157.4	0.7	0.1	26.5	–	–
Louisiana	85.1	77.6	91.2	1,412.9	5.7	0.4	37.9	5.3	13.9
Maine	109.0	43.4	39.9	389.2	–	–	114.8	2.6	2.3
Maryland	175.0	53.7	30.7	1,220.5	–	–	173.1	–	–
Massachusetts ^{6,7}	205.4	81.8	39.8	1,488.0	–	–	336.5	0.2	0.1
Michigan	185.4	140.2	75.6	1,938.7	410.5	21.2	315.3	170.7	54.1
Minnesota	131.4	0.0	0.0	1,099.3	–	–	380.9	56.0	14.7
Mississippi	60.0	–	–	1,015.7	–	–	114.9	9.1	7.9
Missouri	232.5	207.6	89.3	1,129.7	–	–	21.9	–	–
Montana	25.4	–	–	194.4	24.2	12.4	179.6	–	–
Nebraska	1.8	1.8	100.0	447.3	20.3	4.5	6.6	–	–
Nevada	41.9	–	–	292.8	102.6	35.0	161.7	4.3	2.7



EXHIBIT 25. (continued)

State ¹	Mental health facilities ²			Nursing facilities and ICF/IDs ³			Physicians and other practitioners ⁴		
	Total Medicaid payments	Supplemental payments	Supplemental payments as % of total	Total Medicaid payments	Supplemental payments	Supplemental payments as % of total	Total Medicaid payments	Supplemental payments	Supplemental payments as % of total
New Hampshire	\$38.0	\$36.5	96.3%	\$398.8	\$96.0	24.1%	\$12.0	–	–
New Jersey	475.4	357.4	75.2	1,219.1	–	–	61.4	–	–
New Mexico	2.9	–	–	29.4	–	–	75.6	\$5.8	7.7%
New York	936.3	537.8	57.4	6,502.7	357.2	5.5	469.9	43.9	9.3
North Carolina	166.6	161.8	97.1	1,306.1	–	–	960.7	111.5	11.6
North Dakota	25.3	0.7	2.9	346.2	1.7	0.5	52.2	–	–
Ohio	93.5	93.4	99.9	2,211.5	–	–	204.1	43.2	21.1
Oklahoma	61.1	3.3	5.4	624.2	–	–	477.7	–	–
Oregon	24.8	20.0	80.4	454.4	–	–	64.9	–	–
Pennsylvania	383.8	294.8	76.8	4,112.9	609.8	14.8	60.8	–	–
Rhode Island	3.8	–	–	157.6	–	–	8.0	–	–
South Carolina	69.3	60.9	87.9	786.3	16.5	2.1	119.1	20.0	16.8
South Dakota	3.8	0.8	19.8	180.8	5.0	2.8	64.8	–	–
Tennessee	41.7	–	–	213.6	–	–	32.3	–	–
Texas ^{6,8}	296.9	292.5	98.5	1,665.4	5.1	0.3	315.6	56.2	17.8
Utah	16.2	–	–	348.3	83.0	23.8	76.0	18.0	23.7
Vermont	–	–	–	124.3	–	–	–	–	–
Virginia	123.7	7.3	5.9	461.2	14.1	3.1	144.1	34.8	24.2
Washington	183.2	137.2	74.9	886.2	9.3	1.0	72.2	9.8	13.6
West Virginia	59.9	18.9	31.5	749.4	–	–	42.9	0.2	0.4
Wisconsin	20.1	–	–	848.2	58.1	6.8	64.7	–	–
Wyoming	12.9	–	–	138.3	35.7	25.8	48.6	–	–

Notes: FY is fiscal year. ICF/ID is intermediate care facility for people with intellectual disabilities. Includes federal and state funds. Excludes payments made under managed care arrangements. All amounts in this table are as reported by states in CMS-64 data during the fiscal year to obtain federal matching funds; amounts include expenditures for the current fiscal year and adjustments to expenditures for prior fiscal years, which may be positive or negative. Amounts reported by states for any given category (e.g., nursing facility) sometimes show substantial annual fluctuations.

– Dash indicates zero; \$0.0 or -\$0.0 indicates an amount between \$0.05 million and -\$0.05 million that rounds to zero; 0.0% or -0.0% indicates an amount between 0.05% and -0.05% that rounds to zero.

EXHIBIT 25. (continued)

¹ Not all states had certified their CMS-64 financial management report (FMR) submissions as of June 17, 2019. California's fourth quarter submissions were not certified. Figures presented in this exhibit may change if states revise their expenditure data after this date.

² Includes inpatient psychiatric services for individuals under age 21 and inpatient hospital or nursing facility services for individuals age 65 and older in an institution for mental diseases. Supplemental payments include disproportionate share hospital (DSH) payments made in accordance with Section 1923 of the Social Security Act (the Act) as well as uncompensated care pool and other non-DSH supplemental payments made under waiver expenditure authority of Section 1115 of the Act. States are not instructed to break out non-DSH supplemental payments for mental health facilities.

³ Supplemental payments to nursing facilities and ICF/IDs include those made in addition to the standard fee schedule or other standard payments for a given service, including payments made under institutional upper payment limit rules and uncompensated care pools made under Section 1115 waiver expenditure authority.

⁴ Includes the physician and other practitioner categories in CMS-64 data; excludes additional categories (e.g., dental, nurse-midwife, nurse practitioner) for which states are not instructed to break out supplemental payments. Supplemental payments include those made in addition to the standard fee schedule payment as well as uncompensated care pool payments made under Section 1115 waiver expenditure authority. There is no regulatory upper payment limit for physicians and other practitioners (as there is for institutional providers).

⁵ California reported negative DSH payments to mental health facilities due to prior period adjustments.

⁶ State made payments to physicians and other practitioners through an uncompensated care pool under Section 1115 waiver expenditure authority.

⁷ State made non-DSH payments to mental health facilities through an uncompensated care pool or made other non-DSH supplemental payments under Section 1115 waiver expenditure authority.

⁸ State made payments to nursing facilities through an uncompensated care pool under Section 1115 waiver expenditure authority.

Source: MACPAC, 2019, analysis of CMS-64 Schedule C waiver report data as of October 21, 2019, and CMS-64 FMR net expenditure data as of June 17, 2019.

EXHIBIT 26. Medicaid Gross Spending for Drugs by Delivery System and Brand or Generic Status, FY 2018 (millions)

State	Total				Fee for service				Managed care			
	Total	Brand ¹	Generic ²	Unknown ³	Total	Brand ¹	Generic ²	Unknown ³	Total	Brand ¹	Generic ²	Unknown ³
Total⁴	\$60,829.9	82.2%	17.7%	0.1%	\$23,825.3	84.5%	15.5%	0.1%	\$37,004.6	80.7%	19.2%	0.1%
Alabama	712.7	83.4	16.6	0.0	712.7	83.4	16.6	0.0	–	–	–	–
Alaska	126.4	81.4	18.2	0.4	126.4	81.4	18.2	0.4	–	–	–	–
Arizona	1,228.4	79.9	20.0	0.1	18.9	95.3	4.7	0.0	1,209.5	79.7	20.2	0.1
Arkansas	357.7	79.0	20.9	0.1	357.7	79.0	20.9	0.1	–	–	–	–
California	8,203.9	82.4	17.5	0.0	4,389.4	88.3	11.7	0.0	3,814.4	75.7	24.2	0.0
Colorado	866.3	84.6	15.0	0.3	840.6	84.8	14.8	0.3	25.7	78.8	21.2	0.0
Connecticut	1,243.6	86.5	13.5	0.0	1,243.6	86.5	13.5	0.0	–	–	–	–
Delaware ⁵	45.8	83.2	16.8	0.0	2.8	83.9	16.0	0.1	43.1	83.2	16.8	0.0
District of Columbia	252.4	89.7	10.3	0.0	188.3	93.7	6.3	0.0	64.1	77.9	22.1	0.0
Florida	2,482.4	86.4	13.6	0.0	192.5	91.3	8.7	0.0	2,289.9	86.0	14.0	0.0
Georgia	1,120.8	78.1	21.8	0.1	690.3	85.8	14.1	0.0	430.5	65.6	34.2	0.2
Hawaii	197.9	80.6	19.4	0.0	0.1	–	100.0	–	197.9	80.7	19.3	0.0
Idaho	199.7	83.0	16.9	0.0	199.7	83.0	16.9	0.0	–	–	–	–
Illinois	1,713.9	82.8	17.2	0.0	405.8	84.2	15.8	0.0	1,308.1	82.4	17.6	0.0
Indiana	1,623.3	79.5	20.5	0.0	311.7	88.1	11.9	0.0	1,311.6	77.5	22.5	0.0
Iowa	269.1	86.3	13.6	0.0	10.6	75.8	24.2	0.0	258.5	86.8	13.2	0.0
Kansas	294.2	78.6	21.4	0.0	0.5	73.0	26.9	0.1	293.7	78.6	21.4	0.0
Kentucky	1,122.0	76.9	23.0	0.2	61.5	76.4	23.0	0.6	1,060.5	76.9	23.0	0.2
Louisiana	1,110.5	78.4	21.6	0.1	55.8	78.2	21.8	0.0	1,054.7	78.4	21.6	0.1
Maine	220.0	86.2	13.8	0.0	220.0	86.2	13.8	0.0	–	–	–	–
Maryland	1,158.7	84.9	15.1	0.0	591.6	86.1	13.9	0.0	567.2	83.7	16.3	0.0
Massachusetts	1,385.5	84.0	15.8	0.2	618.2	83.2	16.5	0.3	767.4	84.6	15.3	0.1
Michigan	2,089.8	80.8	19.0	0.2	1,137.7	84.6	15.3	0.0	952.1	76.2	23.4	0.4
Minnesota	869.0	78.0	21.9	0.0	163.9	74.8	25.1	0.1	705.0	78.8	21.2	0.0
Mississippi	446.4	77.1	22.9	0.0	80.0	80.6	19.4	0.0	366.4	76.3	23.6	0.0
Missouri	1,255.7	72.6	27.3	0.1	1,255.7	72.6	27.3	0.1	–	–	–	–
Montana	230.4	81.3	18.6	0.0	230.4	81.3	18.6	0.0	–	–	–	–
Nebraska	176.2	79.9	20.1	0.0	0.2	68.5	31.5	–	176.0	79.9	20.0	0.0

EXHIBIT 26. (continued)

State	Total				Fee for service				Managed care			
	Total	Brand ¹	Generic ²	Unknown ³	Total	Brand ¹	Generic ²	Unknown ³	Total	Brand ¹	Generic ²	Unknown ³
Nevada	\$463.3	80.0%	19.9%	0.1%	\$216.3	84.9%	14.9%	0.2%	\$247.0	75.7%	24.3%	0.0%
New Hampshire	96.9	77.6	22.2	0.2	15.3	95.3	4.7	0.0	81.6	74.3	25.5	0.3
New Jersey	1,426.8	82.2	17.8	0.0	27.6	82.7	17.3	0.0	1,399.1	82.2	17.8	0.0
New Mexico	377.3	74.4	25.6	0.0	7.7	76.9	23.0	0.1	369.7	74.3	25.7	0.0
New York ⁶	3,620.6	82.2	17.8	0.1	611.5	78.3	21.7	0.0	3,009.1	83.0	17.0	0.1
North Carolina	1,791.3	84.9	15.1	0.0	1,791.3	84.9	15.1	0.0	-	-	-	-
North Dakota	55.6	76.8	23.1	0.1	32.5	74.1	25.7	0.2	23.1	80.5	19.4	0.1
Ohio	3,205.2	80.6	19.4	0.0	275.9	79.6	20.4	0.0	2,929.3	80.7	19.3	0.0
Oklahoma	523.5	78.3	21.6	0.1	523.5	78.3	21.6	0.1	-	-	-	-
Oregon	650.3	79.6	20.4	0.0	105.1	65.1	34.9	0.0	545.2	82.4	17.6	0.0
Pennsylvania	3,149.6	82.2	17.8	0.0	73.7	79.8	20.1	0.0	3,076.0	82.3	17.7	0.0
Rhode Island	219.3	79.1	20.9	0.0	3.5	78.4	21.6	-	215.9	79.2	20.8	0.0
South Carolina	528.2	80.5	19.4	0.1	119.0	88.0	12.0	0.1	409.2	78.3	21.6	0.1
South Dakota	100.3	76.4	23.3	0.3	100.3	76.4	23.3	0.3	-	-	-	-
Tennessee	1,013.3	83.2	16.7	0.2	945.2	82.3	17.6	0.1	68.2	95.4	3.5	1.1
Texas	3,342.9	83.4	16.6	0.0	74.4	82.6	17.3	0.1	3,268.5	83.4	16.5	0.0
Utah	197.9	81.3	18.7	0.0	103.4	79.8	20.2	0.0	94.5	82.9	17.1	0.0
Vermont	164.2	87.2	12.8	0.0	164.2	87.2	12.8	0.0	-	-	-	-
Virginia	1,013.4	68.7	30.7	0.6	74.7	80.7	19.0	0.2	938.6	67.8	31.6	0.6
Washington	1,096.6	84.3	15.7	0.0	139.8	92.2	7.8	0.0	956.8	83.1	16.9	0.0
West Virginia	657.9	80.7	19.2	0.0	643.8	80.4	19.6	0.0	14.2	95.4	3.9	0.8
Wisconsin	1,230.9	84.0	15.9	0.0	1,230.9	84.0	15.9	0.0	-	-	-	-
Wyoming	34.4	81.8	18.2	-	34.4	81.8	18.2	-	-	-	-	-



EXHIBIT 26. (continued)

Notes: FY is fiscal year. Amounts include federal and state funds. Gross spending reflects expenditures prior to the application of manufacturer rebates. Drug expenditures in this exhibit use information from the state drug utilization data that states submit to CMS for rebate purposes and are different from the CMS-64 financial management report (FMR) and Medicaid Statistical Information System (MSIS) data that serve as our usual sources of expenditure data. Spending shown in the drug utilization data may differ from these other sources due to differences in timing and run-out of data used. In addition, the drug utilization data may include physician-administered drugs for which rebates are available; these drugs are typically reported under the physician services category instead of the outpatient prescription drug category in other data. The state drug utilization data provide both fee-for-service (FFS) and managed care drug utilization and spending information at the national drug code (NDC) level. To assign brand and generic status, we linked the quarterly state drug utilization data to the quarterly Medicaid drug product data from CMS using the NDC code. Brand and generic status was assigned using the drug category indicator from the drug product file.

The state drug utilization data are available at <https://www.medicaid.gov/medicaid/prescription-drugs/state-drug-utilization-data/index.html> and the drug product data are available at <https://www.medicaid.gov/medicaid/prescription-drugs/medicaid-drug-rebate-program/data/index.html>.

Since October 2016, CMS has suppressed all records in the state drug utilization data that are less than 11 counts, as obligated by the Privacy Act of 1974 (5 USC § 552a) and the HIPAA Privacy Rule (45 CFR Parts 160 and 164). The different brand and generic proportions under FFS and managed care may reflect differences in the populations and specific drugs covered under each delivery system (e.g., behavioral health drugs carved out of managed care) as well as differences in how the state and participating health plans managed the drug benefit.

– Dash indicates zero; 0.0% indicates an amount less than 0.05% that rounds to zero.

- ¹ For this exhibit, brand drugs were defined as single source drugs and innovator, multiple source drugs as indicated in that quarter's Medicaid drug product data.
- ² For this exhibit, generic drugs were defined as non-innovator, multiple source drugs as indicated in that quarter's Medicaid drug product file.
- ³ For this exhibit, unknown drugs were those drugs whose NDC did not have a match in that quarter's Medicaid drug product file.
- ⁴ The national total does not equal the sum of the states due to the suppression of records. Records for drugs that were suppressed at the state level were not necessarily suppressed once the individual state data were rolled up into the national file. Although the amount of suppressed spending in the FY 2018 national file is not known, a comparison of totals from previous years may be instructive. A comparison of the updated FY 2014 files with data suppression to prior versions without data suppression indicates that about \$370 million dollars, or 0.9 percent of gross spending, was suppressed in the FY 2014 data.
- ⁵ Delaware reported all of its spending under managed care as non-Medicaid spending. For this exhibit, we have reclassified this spending as Medicaid spending. Delaware's managed care and total spending are substantially lower than prior years due to the apparent underreporting of managed care spending in three quarters of 2018.
- ⁶ New York managed care and total spending are substantially lower than prior years due to the apparent underreporting of managed care spending in two quarters of 2018.

Source: MACPAC, 2019, analysis of Medicaid drug product data and state drug rebate utilization data as of September 2019.

EXHIBIT 27. Medicaid Drug Prescriptions by Delivery System and Brand or Generic Status, FY 2018 (thousands)

State	Total				Fee for service				Managed care			
	Total	Brand ¹	Generic ²	Unknown ³	Total	Brand ¹	Generic ²	Unknown ³	Total	Brand ¹	Generic ²	Unknown ³
Total⁴	734,154	16.1%	83.6%	0.4%	210,648	18.6%	80.9%	0.4%	523,506	15.0%	84.6%	0.3%
Alabama	7,411	19.9	79.9	0.2	7,411	19.9	79.9	0.2	-	-	-	-
Alaska	1,313	20.2	79.3	0.5	1,313	20.2	79.3	0.5	-	-	-	-
Arizona	16,309	14.1	85.2	0.6	93	21.9	77.8	0.3	16,216	14.1	85.3	0.6
Arkansas	4,850	18.0	81.8	0.2	4,850	18.0	81.8	0.2	-	-	-	-
California	100,893	15.4	84.4	0.1	26,325	20.5	79.4	0.1	74,568	13.7	86.2	0.1
Colorado	7,080	19.9	79.4	0.7	6,720	20.2	79.1	0.7	360	15.5	84.4	0.1
Connecticut	9,405	23.1	76.7	0.1	9,405	23.1	76.7	0.1	-	-	-	-
Delaware	2,425	19.1	80.8	0.1	38	20.2	79.1	0.6	2,387	19.1	80.8	0.1
District of Columbia	2,138	18.0	81.9	0.1	910	22.2	77.6	0.1	1,228	14.8	85.2	0.0
Florida	28,339	18.4	81.5	0.1	1,048	25.2	74.8	0.1	27,292	18.1	81.8	0.1
Georgia	16,473	15.2	84.6	0.2	7,340	18.0	82.0	0.0	9,133	13.0	86.6	0.4
Hawaii	2,737	13.7	86.2	0.1	3	-	100.0	-	2,735	13.7	86.2	0.1
Idaho	2,287	19.0	80.8	0.3	2,287	19.0	80.8	0.3	-	-	-	-
Illinois	24,743	14.9	85.1	0.0	5,413	17.0	83.0	0.0	19,329	14.3	85.7	0.0
Indiana	16,427	17.0	82.9	0.1	2,494	16.5	83.4	0.0	13,933	17.1	82.9	0.1
Iowa	4,007	17.6	82.3	0.0	226	16.2	83.8	0.0	3,781	17.7	82.3	0.0
Kansas	3,388	18.2	81.7	0.1	13	11.8	87.8	0.3	3,374	18.2	81.7	0.1
Kentucky	19,492	13.2	86.2	0.7	1,058	11.0	86.0	3.0	18,434	13.3	86.2	0.5
Louisiana	19,314	12.5	87.2	0.3	792	13.6	86.3	0.2	18,522	12.4	87.3	0.3
Maine	2,060	24.9	75.0	0.1	2,060	24.9	75.0	0.1	-	-	-	-
Maryland	14,481	17.4	82.6	0.0	4,516	23.7	76.3	0.0	9,965	14.5	85.4	0.1
Massachusetts	16,319	16.3	81.5	2.2	7,828	16.1	80.7	3.2	8,491	16.5	82.1	1.4
Michigan	30,743	13.6	85.7	0.8	9,673	16.3	83.3	0.4	21,071	12.3	86.7	1.0
Minnesota	11,969	13.8	86.1	0.1	2,016	15.2	84.7	0.1	9,953	13.5	86.4	0.1
Mississippi	5,661	15.5	84.5	0.0	956	15.7	84.3	0.0	4,705	15.4	84.5	0.0
Missouri	12,122	17.5	82.3	0.2	12,122	17.5	82.3	0.2	-	-	-	-
Montana	2,787	18.7	81.3	0.1	2,787	18.7	81.3	0.1	-	-	-	-
Nebraska	3,001	15.4	84.3	0.3	4	14.3	85.7	-	2,998	15.4	84.3	0.3
Nevada	6,294	13.8	86.1	0.1	2,062	16.9	83.0	0.1	4,231	12.3	87.6	0.1
New Hampshire	1,138	17.3	82.0	0.6	75	24.5	75.2	0.4	1,062	16.8	82.5	0.6
New Jersey	20,320	13.8	86.2	0.1	330	15.1	84.8	0.1	19,990	13.7	86.2	0.1
New Mexico	5,547	13.8	86.2	0.0	114	16.7	83.2	0.1	5,433	13.7	86.3	0.0
New York	75,687	14.6	84.5	0.9	10,206	12.9	86.2	0.9	65,481	14.9	84.2	0.9
North Carolina	16,009	23.6	76.3	0.1	16,009	23.6	76.3	0.1	-	-	-	-
North Dakota	810	15.9	83.5	0.6	498	15.9	83.2	0.9	311	15.8	84.1	0.1
Ohio	46,117	16.0	84.0	0.0	3,918	17.5	82.5	0.0	42,200	15.9	84.1	0.0
Oklahoma	5,735	17.0	82.9	0.2	5,735	17.0	82.9	0.2	-	-	-	-



EXHIBIT 27. (continued)

State	Total				Fee for service				Managed care			
	Total	Brand ¹	Generic ²	Unknown ³	Total	Brand ¹	Generic ²	Unknown ³	Total	Brand ¹	Generic ²	Unknown ³
Oregon	9,514	13.8%	86.2%	0.0%	2,176	6.8%	93.2%	0.0%	7,338	15.9%	84.1%	0.0%
Pennsylvania	35,845	15.2	84.8	0.0	1,613	11.1	88.9	0.0	34,233	15.4	84.6	0.0
Rhode Island	3,485	12.7	87.3	0.0	102	14.6	85.4	–	3,383	12.7	87.3	0.0
South Carolina	6,270	17.1	82.5	0.5	1,082	18.4	80.9	0.7	5,188	16.8	82.8	0.4
South Dakota	796	19.2	80.5	0.4	796	19.2	80.5	0.4	–	–	–	–
Tennessee	13,105	16.5	82.8	0.7	12,610	16.0	83.4	0.6	495	29.3	68.4	2.3
Texas	34,720	19.0	81.0	0.0	963	23.5	76.5	0.1	33,757	18.8	81.2	0.0
Utah	2,388	16.9	83.0	0.0	1,082	16.5	83.5	0.0	1,306	17.3	82.6	0.0
Vermont	1,505	26.8	73.2	0.0	1,505	26.8	73.2	0.0	0	67.8	32.2	–
Virginia	11,246	15.3	83.7	0.9	1,140	20.6	78.8	0.6	10,106	14.8	84.3	0.9
Washington	15,286	14.3	85.7	0.1	1,337	14.1	85.8	0.1	13,949	14.3	85.7	0.1
West Virginia	9,931	16.7	83.1	0.1	9,611	16.2	83.7	0.1	321	32.0	66.3	1.7
Wisconsin	11,649	19.9	79.9	0.1	11,574	20.0	79.9	0.1	75	7.9	91.2	0.9
Wyoming	421	19.9	80.1	–	421	19.9	80.1	–	–	–	–	–

Notes: FY is fiscal year. Drug utilization in this exhibit reflects the number of prescriptions reported in the state drug utilization data that states submit to CMS for rebate purposes and are different from Medicaid Statistical Information System (MSIS) data that serve as our usual source of utilization data. Utilization shown in the drug utilization data may differ from these other sources due to differences in timing and run-out of data used. In addition, the drug utilization data may include physician-administered drugs for which rebates are available; these drugs are typically reported under the physician services category instead of the outpatient prescription drug category in other data. The state drug utilization data provide both fee-for-service and managed care drug utilization and spending information at the national drug code (NDC) level. To assign brand and generic status, we linked the quarterly state drug utilization data to the quarterly Medicaid drug product data from CMS using the NDC code. Brand and generic status was assigned using the drug category indicator from the drug product file.

The state drug utilization data are available at <https://www.medicaid.gov/medicaid/prescription-drugs/state-drug-utilization-data/index.html> and the drug product data are available at <https://www.medicaid.gov/medicaid/prescription-drugs/medicaid-drug-rebate-program/data/index.html>.

Since October 2016, CMS has suppressed all records in the state drug utilization data that are less than 11 counts, as obligated by the Privacy Act of 1974 (5 U.S.C. § 552a) and the HIPAA Privacy Rule (45 C.F.R. Parts 160 and 164). The different brand and generic proportions under fee for service and managed care may reflect differences in the populations and specific drugs covered under each delivery system (e.g., behavioral health drugs carved out of managed care) as well as differences in how the state and participating health plans managed the drug benefit.

– Dash indicates zero; 0.0% indicates an amount less than 0.05% that rounds to zero.

¹ For this exhibit, brand drugs were defined as single source drugs and innovator, multiple source drugs as indicated in that quarter's Medicaid drug product data.

² For this exhibit, generic drugs were defined as non-innovator, multiple source drugs as indicated in that quarter's Medicaid drug product file.

³ For this exhibit, unknown drugs were those drugs whose NDC did not have a match in that quarter's Medicaid drug product file.

⁴ The national total does not equal the sum of the states due to the suppression of records. Records for drugs that were suppressed at the state level were not necessarily suppressed once the individual state data were rolled up into the national file. Although the number of suppressed prescriptions in the national file is not known, a comparison of totals from previous years may be instructive. A comparison of the updated FY 2014 files with data suppression to prior versions without suppression indicate that about 4 million prescriptions, or 0.7 percent of prescriptions, were suppressed in the FY 2014 data.

Source: MACPAC, 2019, analysis of Medicaid drug product data and state drug rebate utilization data as of September 2019.

EXHIBIT 28. Medicaid Gross Spending and Rebates for Drugs by Delivery System, FY 2018 (millions)

State	Gross spending			Rebates		
	Total	Fee for service	Managed care	Total	Fee for service	Managed care
Total¹	\$60,829.9	\$23,825.3	\$37,004.6	-\$36,170.7	-\$12,601.2	-\$23,569.4
Alabama	712.7	712.7	–	-458.2	-458.2	–
Alaska	126.4	126.4	–	-83.8	-83.8	–
Arizona	1,228.4	18.9	1,209.5	-821.8	-20.7	-801.2
Arkansas	357.7	357.7	–	-237.0	-237.0	–
California	8,203.9	4,389.4	3,814.4	-4,282.1	-2,246.2	-2,035.9
Colorado	866.3	840.6	25.7	-561.5	-541.5	-20.0
Connecticut	1,243.6	1,243.6	–	-958.1	-957.9	-0.2
Delaware ²	45.8	2.8	43.1	-153.8	-2.8	-151.0
District of Columbia	252.4	188.3	64.1	-180.6	-129.9	-50.7
Florida	2,482.4	192.5	2,289.9	-1,937.5	-329.8	-1,607.7
Georgia	1,120.8	690.3	430.5	-673.6	-468.5	-205.1
Hawaii	197.9	0.1	197.9	-93.6	-1.5	-92.1
Idaho	199.7	199.7	–	-154.7	-154.7	–
Illinois	1,713.9	405.8	1,308.1	-951.2	-398.8	-552.3
Indiana	1,623.3	311.7	1,311.6	-983.0	-216.3	-766.7
Iowa ³	269.1	10.6	258.5	-368.0	-18.4	-349.6
Kansas	294.2	0.5	293.7	-187.9	-2.1	-185.7
Kentucky	1,122.0	61.5	1,060.5	-738.6	-49.3	-689.3
Louisiana	1,110.5	55.8	1,054.7	-618.8	-52.0	-566.8
Maine	220.0	220.0	–	-172.4	-172.4	–
Maryland	1,158.7	591.6	567.2	-639.5	-298.6	-340.9
Massachusetts	1,385.5	618.2	767.4	-966.6	-420.9	-545.7
Michigan	2,089.8	1,137.7	952.1	-1,495.5	-770.5	-725.0
Minnesota	869.0	163.9	705.0	-544.1	-289.3	-254.8
Mississippi	446.4	80.0	366.4	-300.4	-87.4	-213.0
Missouri	1,255.7	1,255.7	–	-690.3	-690.3	–
Montana	230.4	230.4	–	-161.8	-161.8	–

EXHIBIT 28. (continued)

State	Gross spending			Rebates		
	Total	Fee for service	Managed care	Total	Fee for service	Managed care
Nebraska ^{3,4}	\$176.2	\$0.2	\$176.0	-\$136.7	\$37.9	-\$174.6
Nevada	463.3	216.3	247.0	-316.5	-157.5	-159.0
New Hampshire	96.9	15.3	81.6	-67.9	-25.5	-42.4
New Jersey	1,426.8	27.6	1,399.1	-915.5	-25.7	-889.8
New Mexico	377.3	7.7	369.7	-205.6	-8.0	-197.6
New York ^{4,5}	3,620.6	611.5	3,009.1	-3,111.5	1,434.4	-4,545.9
North Carolina	1,791.3	1,791.3	–	-1,203.9	-1,203.9	–
North Dakota	55.6	32.5	23.1	-40.8	-24.3	-16.5
Ohio	3,205.2	275.9	2,929.3	-1,805.2	-229.7	-1,575.5
Oklahoma	523.5	523.5	–	-332.4	-332.4	–
Oregon	650.3	105.1	545.2	-424.2	-72.1	-352.0
Pennsylvania	3,149.6	73.7	3,076.0	-1,663.4	-73.8	-1,589.6
Rhode Island	219.3	3.5	215.9	-131.4	-10.2	-121.2
South Carolina	528.2	119.0	409.2	-424.4	-134.4	-290.0
South Dakota	100.3	100.3	–	-46.7	-46.7	–
Tennessee ⁶	1,013.3	945.2	68.2	-747.0	-747.0	–
Texas	3,342.9	74.4	3,268.5	-2,237.5	-101.8	-2,135.8
Utah	197.9	103.4	94.5	-128.8	-65.1	-63.7
Vermont	164.2	164.2	–	-135.9	-135.9	–
Virginia	1,013.4	74.7	938.6	-625.0	-86.1	-538.9
Washington	1,096.6	139.8	956.8	-769.2	-152.4	-616.8
West Virginia ⁷	657.9	643.8	14.2	-437.6	-336.7	-100.9
Wisconsin	1,230.9	1,230.9	–	-812.6	-807.0	-5.6
Wyoming	34.4	34.4	–	-36.8	-36.8	-0.0

EXHIBIT 28. (continued)

Notes: FY is fiscal year. Amounts include federal and state funds. Gross spending reflects expenditures prior to the application of manufacturer rebates. The gross drug expenditures in this exhibit use information from the state drug utilization data that states submit to CMS for rebate purposes and are different from the CMS-64 financial management report (FMR) and Medicaid Statistical Information System (MSIS) data that serve as our usual sources of expenditure data. Spending shown in the drug utilization data may differ from these other sources due to differences in timing and run-out of data used. In addition, the drug rebate data may include physician-administered drugs for which rebates are available; the spending for these drugs is typically reported under the physician services category instead of the outpatient prescription drug category in other data. The state drug utilization data provide both fee-for-service (FFS) and managed care drug utilization and spending information at the national drug code (NDC) level, which is not available in CMS-64 data. The state drug utilization data are available at <https://www.medicaid.gov/medicaid/prescription-drugs/state-drug-utilization-data/index.html>.

Since October 2016, CMS has suppressed all records in the state drug utilization data that are less than 11 counts, as obligated by the Privacy Act of 1974 (5 USC § 552a) and the HIPAA Privacy Rule (45 CFR Parts 160 and 164). The drug rebate information comes from the CMS-64 and does allow states to separately identify FFS and managed care drug rebates. The rebate totals shown here include federal rebates, state supplemental rebates, and the rebate increases attributable to the Patient Protection and Affordable Care Act (P.L. 111-148, as amended).

Due to the time it takes to collect the drug utilization information and invoice drug manufacturers for the rebate, the rebates collected in any particular quarter are generally attributable to drugs purchased in prior quarters; thus, the gross spending and rebate dollars for a given time period are not necessarily aligned. Changes in covered populations or benefit design (e.g., managed care expansion or pharmacy carve-in) can create distortions in the data, because changes will be reflected in gross spending before they are reflected in rebates collected.

– Dash indicates zero; \$0.0 indicates an amount between zero and \$0.05 million that rounds to zero.

¹ The national total does not equal the sum of the states due to the suppression of records. Records for drugs that were suppressed at the state level were not necessarily suppressed once the individual state data were rolled up into the national file. Although the amount of suppressed spending in the FY 2018 national file is not known, a comparison of totals from previous years may be instructive. A comparison of the updated FY 2014 files with data suppression to prior versions without data suppression indicate that about \$370 million dollars, or 0.9 percent of gross spending, was suppressed in the FY 2014 data.

² Delaware reported all of its spending under managed care as non-Medicaid spending. For this exhibit, we have reclassified this spending as Medicaid spending. Delaware's managed care and total spending are substantially lower than prior years due to the apparent underreporting of managed care spending in three quarters of 2018.

³ State recently carved the pharmacy benefit into managed care, implemented a new managed care program, or expanded their managed care program. This change creates a large difference between gross spending and rebate collections for FFS and managed care, resulting in anomalous rebate percentages at the delivery system level.

⁴ State made large prior period adjustments to FFS that ultimately result in a positive FFS rebate amount.

⁵ New York managed care and total spending are substantially lower than prior years due to the apparent underreporting of managed care spending in two quarters of 2018.

⁶ State generally carves out prescription drugs from the managed care program. State managed care spending may reflect physician-administered drugs; however, rebates for these managed care expenditures are not reported separately in the CMS-64 data and appear to be reported with the FFS rebates.

⁷ State recently carved the pharmacy benefit out of managed care. This change creates a large difference between gross spending and rebate collections for FFS and managed care, resulting in anomalous rebate percentages at the delivery system level.

Source: MACPAC, 2019, analysis of Medicaid state drug rebate utilization data as of September 2019 and CMS-64 FMR net expenditure data as of June 17, 2019.

EXHIBIT 29. Percentage of Medicaid Enrollees in Managed Care by State, July 1, 2017

State	Total Medicaid enrollees	Percentage of enrollees in managed care						PCCM
		Comprehensive managed care ¹	Limited-benefit plans					
			MLTSS	BHO (PIHP and/or PAHP)	Dental	Transportation	Other	
Total	78,840,664	68.7%	0.5%	13.6%	9.9%	16.3%	1.6%	6.9%
Alabama	1,037,814	0.0	–	–	–	–	1.4	38.2
Alaska ²	155,865	–	–	–	–	–	–	–
Arizona	1,917,183	84.4	–	–	–	–	–	–
Arkansas	993,792	0.0	–	–	–	52.6	–	47.3
California	13,515,168	79.9	–	0.0	6.7	–	0.0	–
Colorado ³	1,381,208	10.2	–	95.8	–	–	–	75.1
Connecticut ⁴	860,758	–	–	–	–	–	–	–
Delaware	222,859	93.4	–	–	–	–	–	–
District of Columbia	265,547	74.1	–	–	–	28.0	–	–
Florida	3,916,490	81.3	2.5	–	–	–	–	–
Georgia	1,813,016	68.8	–	–	–	–	0.5	–
Hawaii ⁵	365,087	98.9	–	1.3	–	–	–	–
Idaho	299,253	0.8	–	97.1	97.1	97.8	–	92.4
Illinois	3,192,569	59.0	0.9	–	–	–	–	10.0
Indiana	1,475,463	77.1	–	–	–	–	–	–
Iowa	623,501	89.3	–	–	24.7	1.9	–	–
Kansas	416,645	95.7	–	–	–	–	–	–
Kentucky	1,403,257	89.2	–	–	–	89.2	–	–
Louisiana	1,626,037	84.8	–	7.1	91.6	–	–	–
Maine	273,451	–	–	–	–	87.1	–	53.9
Maryland	1,326,080	87.6	–	–	–	–	–	–
Massachusetts	1,874,779	45.4	–	24.2	–	–	–	21.0
Michigan ⁶	4,668,815	51.7	0.2	49.0	20.7	–	–	–
Minnesota	1,107,499	76.4	–	–	–	–	–	–
Mississippi	708,992	68.7	–	–	–	–	–	–

EXHIBIT 29. (continued)

State	Total Medicaid enrollees	Percentage of enrollees in managed care						PCCM
		Comprehensive managed care ¹	Limited-benefit plans					
			MLTSS	BHO (PIHP and/or PAHP)	Dental	Transportation	Other	
Missouri	983,835	74.5%	–	–	–	24.6%	–	–
Montana	230,296	–	–	–	–	–	–	76.0%
Nebraska ⁷	247,894	99.5	–	–	–	–	–	–
Nevada	653,968	68.6	–	–	–	88.5	–	5.9
New Hampshire	204,458	65.4	–	–	–	–	–	–
New Jersey	1,678,888	92.9	–	–	–	92.7	–	–
New Mexico	898,965	77.4	–	–	–	–	–	–
New York	6,105,120	74.1	3.0%	–	–	–	–	–
North Carolina	2,110,914	0.1	–	75.8%	–	–	–	71.6
North Dakota	92,595	22.3	–	–	–	–	0.2%	53.3
Ohio	3,083,411	82.7	–	–	–	–	–	–
Oklahoma	808,267	0.1	–	–	–	80.8	–	66.7
Oregon ⁸	1,067,322	80.5	–	0.4	4.5%	–	–	–
Pennsylvania	2,835,800	79.9	–	90.0	–	21.9	0.0	–
Rhode Island	337,809	80.1	–	–	31.0	91.5	–	–
South Carolina	1,217,302	63.5	–	–	–	100.0	–	0.0
South Dakota	124,676	–	–	–	–	–	–	74.9
Tennessee ⁹	1,522,658	92.6	–	–	53.9	–	82.9	–
Texas	4,038,159	92.4	–	–	72.6	79.6	–	0.2
Utah	284,316	82.8	–	98.4	46.8	84.3	–	–
Vermont ¹⁰	183,918	52.6	–	–	–	–	–	–
Virginia	1,083,750	66.8	–	–	–	–	–	–
Washington	1,824,730	88.4	–	100.0	–	100.0	–	0.4
West Virginia	521,186	81.5	–	–	–	–	–	–
Wisconsin	1,197,770	62.5	3.8	0.1	–	–	0.3	–
Wyoming	61,529	0.2	–	–	–	–	0.4	–



EXHIBIT 29. (continued)

Notes: MLTSS is managed long-term services and supports. BHO is behavioral health organization. PIHP is prepaid inpatient health plan. PAHP is prepaid ambulatory health plan. PCCM is primary care case management. Excludes the territories. This exhibit includes Medicaid-expansion CHIP enrollees. Medicaid beneficiaries may be enrolled concurrently in more than one type of managed care program (e.g., a comprehensive plan and a BHO), so the sum of enrollment in each program type as a percentage of total Medicaid enrollment may be greater than 100 percent.

– Dash indicates zero; 0.0% indicates an amount less than 0.05% that rounds to zero.

¹ Includes comprehensive managed care and Programs of All-Inclusive Care for the Elderly. Comprehensive managed care organizations (MCOs) cover acute, primary, and specialty medical care services; they may also cover behavioral health, long-term services and supports, and other benefits in some states.

² Alaska did not provide total Medicaid enrollment as of July 1, 2017. This figure is from the September–December 2016 enrollment data collected through the Medicaid Budget and Expenditure System (MBES), updated December 2017, and accessed August 31, 2018. See <https://data.medicaid.gov/Enrollment/2016-4Q-Medicaid-MBES-Enrollment/capi-ym43>.

³ Colorado reported plan level enrollment as 30 for plans that had less than 30 beneficiaries. As a result, Medicaid enrollment in comprehensive managed care may be slightly inflated.

⁴ Connecticut did not provide total Medicaid enrollment as of July 1, 2017. This figure is from the September–December 2016 enrollment data collected through the MBES, updated December 2017, and accessed August 31, 2018. See <https://data.medicaid.gov/Enrollment/2016-4Q-Medicaid-MBES-Enrollment/capi-ym43>.

⁵ Some plans that appear to be limited-benefit plans (dental, BHO, or other managed care) were classified as comprehensive managed care in the CMS report. The values shown here use plan-level information in the CMS report to recategorize enrollment in Ohana Community Care Service as BHO.

⁶ Michigan has two programs that provide home- and community-based service waiver services under capitation: MI Choice and the Specialty Prepaid Inpatient Health Plan (SPIHP). MI Choice is reported as an MLTSS program and SPIHP is reported as a BHO.

⁷ Nebraska operated a dental program in 2017, but it began after July 1, 2017.

⁸ Some plans that appear to be limited-benefit plans (dental, BHO, or other managed care) were classified as comprehensive managed care in the CMS report. The values shown here use plan-level information in the CMS report to recategorize enrollment in Access Dental Plan, Advantage Dental Services, Capitol Dental Care, CareOregon Dental, Family Dental Care, Managed Dental Care of Oregon, and ODS Community Health as dental and enrollment in Greater Oregon Behavioral Health as BHO.

⁹ Some plans that appear to be limited-benefit plans (dental, BHO, or other managed care) were classified as comprehensive managed care in the CMS report. The values shown here use plan-level information in the CMS report to recategorize enrollment in DentaQuest as dental and enrollment in Magellan Health Services as other.

¹⁰ The Department of Vermont Health Access, a state agency, acts as Vermont's single managed care entity.

Source: MACPAC, 2019, analysis of data from CMS, 2019, *Medicaid managed care enrollment and program characteristics, 2017*, Baltimore, MD: CMS, <https://www.medicaid.gov/medicaid/managed-care/downloads/enrollment/2017-medicaid-managed-care-enrollment-report.pdf>.

EXHIBIT 30a. Percentage of Medicaid Enrollees in Managed Care by State and Eligibility Group, FY 2013

State	Total Medicaid enrollees (thousands)	Percentage of enrollees in managed care														
		Comprehensive managed care ¹					Limited-benefit plans					Primary care case management				
		Total	Children	Adults	Disabled	Aged	Total	Children	Adults	Disabled	Aged	Total	Children	Adults	Disabled	Aged
Total	70,161	53.9%	67.9%	50.9%	40.2%	18.1%	49.5%	58.8%	35.9%	53.1%	40.7%	12.7%	17.4%	9.3%	11.3%	2.5%
Alabama	1,212	2.4	–	0.0	5.6	12.4	–	–	–	–	–	46.0	69.7	13.4	44.4	1.4
Alaska	136	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Arizona	1,681	81.1	91.4	77.9	66.9	48.1	90.6	97.6	84.6	91.3	71.3	–	–	–	–	–
Arkansas	696	0.0	–	0.0	–	0.2	78.7	98.4	46.3	74.3	40.4	64.1	91.3	27.7	56.0	3.5
California	11,742	49.6	76.5	29.4	67.2	34.7	68.2	94.1	37.1	99.6	96.5	–	–	–	–	–
Colorado	896	11.6	12.7	11.2	9.1	9.8	95.4	99.5	96.2	89.7	73.2	2.9	2.7	2.3	4.1	4.4
Connecticut	858	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Delaware	260	85.9	95.0	87.8	67.6	47.8	89.4	98.9	90.2	74.2	49.5	2.1	1.7	2.5	2.6	0.5
District of Columbia	246	73.9	92.1	93.3	22.1	3.0	37.3	20.1	28.3	80.5	69.9	–	–	–	–	–
Florida	4,313	39.6	53.2	37.2	26.8	6.3	46.6	78.3	13.0	29.5	2.5	24.2	33.9	14.2	24.9	3.4
Georgia ³	2,013	68.3	93.9	87.3	2.8	0.0	85.2	96.9	78.6	74.4	48.2	–	–	–	–	–
Hawaii	300	98.2	99.8	99.6	96.4	88.9	2.2	2.0	0.0	8.9	1.5	–	–	–	–	–
Idaho	288	–	–	–	–	–	94.5	99.9	97.3	85.1	65.8	87.1	95.2	85.8	76.9	46.1
Illinois	3,039	11.0	9.8	14.5	11.8	4.8	4.3	5.9	4.3	0.1	0.0	61.9	76.1	64.4	29.0	5.0
Indiana	1,250	69.1	92.4	85.1	11.3	0.2	–	–	–	–	–	3.9	2.1	0.1	15.2	1.7
Iowa	634	6.7	10.5	5.7	0.3	0.3	78.9	99.2	46.8	92.6	74.1	59.7	73.8	72.0	14.4	3.5
Kansas	442	46.6	66.0	52.1	1.7	0.7	75.0	82.4	66.4	74.5	39.4	5.7	2.9	1.0	19.6	2.1
Kentucky	927	85.1	99.7	97.3	71.5	34.9	89.6	99.1	97.6	80.2	57.4	–	–	–	–	–
Louisiana	1,284	0.0	–	–	0.0	0.3	83.6	66.1	100.0	100.0	100.0	36.7	52.6	23.8	24.3	11.5
Maine	371	–	–	–	–	–	–	–	–	–	–	54.4	78.1	74.1	29.0	0.7
Maryland	1,139	81.7	97.5	86.7	59.6	2.1	–	–	–	–	–	–	–	–	–	–
Massachusetts	1,547	42.6	55.0	49.9	29.9	20.4	34.3	42.3	36.7	38.1	1.3	29.1	33.1	35.8	29.1	1.3
Michigan	2,291	73.1	87.5	70.7	58.9	11.5	93.8	98.9	85.0	95.2	85.7	–	–	–	–	–
Minnesota	1,154	76.5	87.0	80.8	40.8	59.4	–	–	–	–	–	–	–	–	–	–
Mississippi	786	25.6	10.9	69.9	42.3	1.0	87.3	99.9	82.9	78.6	54.8	–	–	–	–	–



EXHIBIT 30a. (continued)

State	Total Medicaid enrollees (thousands)	Percentage of enrollees in managed care														
		Comprehensive managed care ¹					Limited-benefit plans					Primary care case management				
		Total	Children	Adults	Disabled	Aged	Total	Children	Adults	Disabled	Aged	Total	Children	Adults	Disabled	Aged
Missouri	1,122	45.5%	67.7%	50.0%	2.0%	0.2%	-	-	-	-	-	-	-	-	-	-
Montana	142	-	-	-	-	-	0.6%	-	0.0%	3.6%	0.1%	73.3%	92.0%	75.8%	49.8%	1.4%
Nebraska	262	73.9	91.9	83.9	40.6	5.8	93.3	98.2%	89.6	91.2	74.7	-	-	-	-	-
Nevada	422	59.9	77.4	71.3	1.7	0.0	87.6	95.7	90.0	72.1	49.1	-	-	-	-	-
New Hampshire	166	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey	1,190	84.2	95.0	62.9	85.5	65.5	96.8	98.7	99.4	95.1	87.8	-	-	-	-	-
New Mexico	660	66.8	84.4	58.6	43.2	2.6	67.3	84.3	38.0	68.6	53.3	-	-	-	-	-
New York	6,002	76.9	90.5	90.0	50.6	15.0	2.0	0.0	0.1	2.5	15.0	0.0	0.0	0.0	0.0	-
North Carolina	2,000	0.0	-	-	0.0	0.4	91.3	99.1	81.3	89.1	72.3	80.0	96.0	60.2	72.4	46.6
North Dakota	87	2.5	4.5	0.1	0.1	0.8	2.1	3.4	0.3	1.4	0.2	53.9	71.9	72.4	1.3	0.0
Ohio	2,645	73.0	94.1	74.2	46.4	5.6	-	-	-	-	-	-	-	-	-	-
Oklahoma	951	0.0	-	-	0.0	0.2	88.2	96.7	75.6	85.2	79.2	70.2	90.2	64.3	41.3	1.2
Oregon	760	79.9	91.4	82.6	63.9	36.3	87.6	96.0	85.7	79.0	62.3	0.4	0.4	0.1	0.6	0.7
Pennsylvania	2,567	75.3	95.5	74.3	69.6	8.1	87.7	97.8	77.7	92.8	49.6	8.1	10.5	7.6	7.5	0.4
Rhode Island	170	58.8	88.0	81.0	15.8	1.0	31.6	70.0	0.0	9.5	-	-	-	-	-	-
South Carolina	1,091	48.7	63.4	45.0	30.8	1.3	89.1	99.8	65.5	93.9	83.0	19.5	23.4	14.0	20.9	8.4
South Dakota	134	-	-	-	-	-	-	-	-	-	-	72.3	91.8	87.5	28.6	0.9
Tennessee	1,557	91.6	100.0	100.0	78.6	54.2	91.6	100.0	100.0	78.6	54.0	-	-	-	-	-
Texas	5,240	81.5	96.2	62.3	67.0	34.8	11.8	14.3	7.8	10.0	4.2	0.0	0.0	-	0.0	-
Utah	389	35.4	40.7	25.7	33.2	27.5	90.1	98.7	70.6	92.2	81.8	28.1	31.5	21.6	28.9	19.1
Vermont	206	0.1	-	-	0.1	0.5	-	-	-	-	-	67.1	86.7	77.1	37.7	3.1
Virginia	1,136	63.5	84.4	59.1	40.0	5.5	-	-	-	-	-	-	-	-	-	-
Washington	1,421	69.7	87.6	59.8	52.2	2.3	90.9	99.9	73.1	88.3	77.4	0.8	0.9	0.9	1.1	0.0
West Virginia	437	54.1	89.1	80.2	1.4	0.0	-	-	-	-	-	1.2	1.8	1.5	0.5	0.0
Wisconsin	1,254	59.1	85.4	70.7	3.8	2.4	89.0	98.0	93.7	93.3	38.6	-	-	-	-	-
Wyoming	89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



EXHIBIT 30a. (continued)

Notes: FY is fiscal year. Enrollment numbers generally include individuals ever enrolled in Medicaid-financed coverage during the year, even if for a single month; however, in the event individuals were also enrolled in CHIP-financed Medicaid coverage (i.e., Medicaid-expansion CHIP) during the year, they are excluded if their most recent enrollment month was in Medicaid-expansion CHIP. Numbers exclude individuals enrolled only in Medicaid-expansion CHIP during the year and enrollees in the territories. Children and adults under age 65 who qualify for Medicaid on the basis of disability are included in the disabled category. About 746,000 enrollees age 65 and older are identified in the data as disabled; because disability is not an eligibility pathway for individuals age 65 and older, MACPAC recodes these enrollees as aged.

Due to changes in both methods and data over time, figures shown here may not be directly comparable to earlier years. With regard to methods, individuals are counted as participating in managed care if they had at least one month indicating plan enrollment; prior to the 2015 data book, individuals were counted as participating if at least one managed care payment was made on their behalf during the fiscal year. For MACPAC's analysis, Medicaid enrollees were assigned a unique national identification number using an algorithm that incorporates state-specific ID numbers and beneficiary characteristics such as date of birth and gender. The state and national enrollment counts shown here are unduplicated using this national ID. The sum of the state totals exceeds the national total because individuals may be enrolled in more than one state during the year. See <https://www.macpac.gov/macstats/data-sources-and-methods/> for additional information on methods and data. Medicaid enrollees may be enrolled concurrently in more than one type of managed care program (e.g., a comprehensive plan and a limited-benefit plan), so the sum of enrollment in each program type as a percentage of total Medicaid enrollment may be greater than 100 percent.

Figures shown here, which are based on Medicaid Statistical Information System (MSIS) data, may differ from those that use Medicaid managed care enrollment report data. Reasons for differences include differing time periods, state reporting anomalies, and the treatment of Medicaid-expansion CHIP enrollees (excluded here but included in enrollment report data). Although the enrollment report is a commonly cited source, it does not provide information on the characteristics of enrollees in managed care (e.g., eligibility group). Values have not been updated from those published in the December 2017 data book due to the unavailability of more recent MSIS or Transformed MSIS data.

– Dash indicates zero; 0.0% indicates an amount less than 0.05% that rounds to zero.

¹ Includes comprehensive managed care and Programs of All-Inclusive Care for the Elderly.

Source: MACPAC, 2017, analysis of MSIS data as of December 2016.

EXHIBIT 30b. Percentage of Medicaid Enrollees in Managed Care by State and Eligibility Group, FY 2014

State ¹	Total Medicaid enrollees (thousands)	Percentage of enrollees in managed care														
		Comprehensive managed care ²					Limited-benefit plans					Primary care case management				
		Total	Children	Adults ³	Disabled	Aged	Total	Children	Adults ³	Disabled	Aged	Total	Children	Adults ³	Disabled	Aged
Arizona	1,671	81.3%	91.9%	77.5%	66.5%	50.4%	89.7%	96.6%	83.5%	89.0%	73.4%	-	-	-	-	-
Arkansas	866	0.0	-	0.0	0.0	0.3	87.0	99.2	91.0	73.6	39.8	55.0%	91.4%	16.0%	55.6%	3.5%
California	14,309	56.4	79.6	44.0	71.1	41.9	74.7	95.0	56.7	99.6	96.4	-	-	-	-	-
Connecticut	921	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Georgia	2,109	68.3	93.2	86.1	2.8	0.1	85.2	96.1	82.0	73.1	46.7	-	-	-	-	-
Idaho	303	-	-	-	-	-	94.3	99.9	97.7	84.3	63.7	84.0	92.5	83.8	71.5	43.7
Iowa	685	15.7	16.3	22.7	0.8	0.6	90.6	99.3	83.4	92.5	73.8	56.3	70.9	58.7	28.1	6.4
Louisiana	1,281	34.4	44.6	24.1	32.3	10.1	79.6	59.6	97.7	99.6	99.9	38.0	54.4	23.9	25.5	11.9
Massachusetts	1,924	47.4	51.2	54.1	39.1	24.1	24.7	37.4	17.5	36.9	1.2	20.5	29.2	16.9	27.4	1.2
Michigan	2,542	73.7	87.6	72.2	61.2	14.7	95.2	99.0	92.1	95.4	86.1	-	-	-	-	-
Minnesota	1,305	77.0	85.9	82.8	43.7	50.9	-	-	-	-	-	-	-	-	-	-
Mississippi	782	28.0	13.9	75.5	41.3	1.1	86.9	99.9	82.9	78.1	53.9	-	-	-	-	-
New Jersey	1,702	86.0	93.5	82.5	88.1	66.4	97.7	98.7	100.0	95.1	87.7	-	-	-	-	-
New York	6,502	76.6	90.4	87.6	50.2	15.3	2.3	0.0	0.1	3.1	17.4	0.0	-	-	0.0	-
Ohio	2,949	75.6	93.5	79.5	47.2	6.0	-	-	-	-	-	-	-	-	-	-
Oklahoma	930	0.0	-	-	0.0	0.2	89.4	97.1	78.8	85.9	79.0	70.1	90.5	63.7	41.8	1.3
Oregon	1,102	83.5	90.9	83.9	73.1	56.2	51.2	65.0	39.4	60.5	46.6	0.0	0.0	0.0	0.0	-
Pennsylvania	2,625	76.0	95.8	77.5	69.3	8.7	87.9	97.7	80.0	92.5	49.9	-	-	-	-	-
South Carolina	1,181	63.3	85.2	50.9	43.0	1.5	86.7	99.9	59.9	93.6	82.4	14.6	20.7	8.6	12.4	0.4
South Dakota	137	-	-	-	-	-	-	-	-	-	-	75.9	92.2	88.1	40.8	11.8
Tennessee	1,522	91.3	100.0	100.0	77.6	53.1	91.3	100.0	100.0	77.5	52.9	-	-	-	-	-
Utah	423	37.9	43.4	27.3	35.3	29.6	89.9	98.9	68.4	92.3	82.2	27.5	31.4	19.9	27.6	18.4
Vermont	209	-	-	-	-	-	-	-	-	-	-	65.2	84.7	67.0	35.4	54.7
Washington	1,839	77.0	87.3	84.4	49.6	3.2	94.6	99.0	95.0	85.6	76.3	1.5	0.9	1.1	3.3	4.4
West Virginia	605	42.6	88.1	27.4	1.1	0.0	-	-	-	-	-	0.8	1.5	0.4	0.4	0.0
Wyoming	86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

EXHIBIT 30b. (continued)

Notes: FY is fiscal year. Enrollment numbers generally include individuals ever enrolled in Medicaid-financed coverage during the year, even if for a single month; however, in the event individuals were also enrolled in CHIP-financed Medicaid coverage (i.e., Medicaid-expansion CHIP) during the year, they are excluded if their most recent enrollment month was in Medicaid-expansion CHIP. Numbers exclude individuals enrolled only in Medicaid-expansion CHIP during the year and enrollees in the territories. Children and adults under age 65 who qualify for Medicaid on the basis of disability are included in the disabled category. About 528,000 enrollees age 65 and older are identified in the data as disabled; because disability is not an eligibility pathway for individuals age 65 and older, MACPAC recodes these enrollees as aged.

Due to changes in both methods and data over time, figures shown here may not be directly comparable to earlier years. With regard to methods, individuals are counted as participating in managed care if they had at least one month indicating plan enrollment; prior to the 2015 data book, individuals were counted as participating if at least one managed care payment was made on their behalf during the fiscal year. For MACPAC's analysis, Medicaid enrollees were assigned a unique national identification number using an algorithm that incorporates state-specific ID numbers and beneficiary characteristics such as date of birth and gender. The state enrollment counts shown here are unduplicated using this national ID. See <https://www.macpac.gov/macstats/data-sources-and-methods/> for additional information on methods and data. Medicaid enrollees may be enrolled concurrently in more than one type of managed care program (e.g., a comprehensive plan and a limited-benefit plan), so the sum of enrollment in each program type as a percentage of total Medicaid enrollment may be greater than 100 percent.

Figures shown here, which are based on Medicaid Statistical Information System (MSIS) data, may differ from those that use Medicaid managed care enrollment report data. Reasons for differences include differing time periods, state reporting anomalies, and the treatment of Medicaid-expansion CHIP enrollees (excluded here but included in enrollment report data). Although the enrollment report is a commonly cited source, it does not provide information on the characteristics of enrollees in managed care (e.g., eligibility group). Values have not been updated from those published in the December 2017 data book due to the unavailability of more recent MSIS or Transformed MSIS data.

– Dash indicates zero; 0.0% indicates an amount less than 0.05% that rounds to zero.

¹ Several states did not submit complete MSIS data for FY 2014 due to the ongoing transition to the Transformed MSIS (T-MSIS) and were excluded from this exhibit. In addition, a few states were excluded due to data reliability concerns regarding the completeness and quality of the submitted MSIS data. This exhibit only includes states that had sufficient FY 2014 MSIS data. Due to the number of states excluded, a national total is not provided.

² Includes comprehensive managed care and Programs of All-Inclusive Care for the Elderly.

³ Includes the new adult group made eligible under Section 1902(a)(10)(A)(i)(VIII) of the Social Security Act by the Patient Protection and Affordable Care Act (P.L. 111-148, as amended).

Source: MACPAC, 2017, analysis of MSIS data as of December 2016.

EXHIBIT 31. Total Medicaid Administrative Spending by State and Category, FY 2018 (millions)

State ¹	Total spending on administration	Spending by category					Collections
		MMIS ²	Eligibility systems ²	EHR incentive program ³	Other functions, federal match above 50% ⁴	Other functions, federal match of 50% ⁵	
Alabama	\$222	\$36	\$31	\$16	\$10	\$129	-\$0
Alaska	163	43	3	8	6	102	-
Arizona	275	30	137	11	13	83	-
Arkansas	401	126	91	13	48	124	-
California	5,738	363	2,203	145	312	2,716	-
Colorado	410	60	115	36	8	191	-0
Connecticut	395	34	144	12	37	168	-
Delaware	89	24	9	3	2	51	-
District of Columbia	172	23	22	7	7	112	-
Florida	854	72	102	27	29	624	-
Georgia	559	89	165	27	4	274	-0
Hawaii	98	14	49	6	4	26	-1
Idaho	123	30	19	11	6	56	-
Illinois	916	65	237	35	68	512	-
Indiana	555	96	190	11	15	243	-
Iowa	164	39	74	5	16	30	-
Kansas	165	48	57	6	3	64	-14
Kentucky	313	41	146	24	21	81	-
Louisiana	387	67	138	18	7	157	-
Maine	154	44	36	9	11	55	-0
Maryland	450	16	159	24	19	232	-
Massachusetts	1,044	163	89	36	56	700	-
Michigan	799	225	187	22	21	344	-
Minnesota	806	83	211	15	14	483	-
Mississippi	165	51	22	14	9	69	-
Missouri	413	64	84	27	16	222	-
Montana	91	29	19	2	4	37	-0
Nebraska	107	21	37	3	10	36	-
Nevada	205	58	60	8	11	68	-

EXHIBIT 31. (continued)

State ¹	Total spending on administration	Spending by category					Collections
		MMIS ²	Eligibility systems ²	EHR incentive program ³	Other functions, federal match above 50% ⁴	Other functions, federal match of 50% ⁵	
New Hampshire	\$123	\$33	\$48	\$2	\$5	\$35	–
New Jersey	863	63	238	9	27	528	-\$2
New Mexico	221	37	57	9	12	105	–
New York	2,233	210	180	159	67	1,617	–
North Carolina	722	56	389	20	51	206	–
North Dakota	120	29	63	0	2	25	-0
Ohio	951	109	279	22	31	511	–
Oklahoma	226	51	23	11	16	124	–
Oregon	504	35	120	35	14	300	-0
Pennsylvania	895	86	260	42	22	485	-0
Rhode Island	164	26	52	7	4	75	-0
South Carolina	351	68	93	15	14	160	–
South Dakota	48	9	1	1	2	36	–
Tennessee	620	138	185	20	14	263	-1
Texas	1,377	251	416	22	30	661	-3
Utah	154	27	42	9	10	65	–
Vermont	174	33	44	8	9	80	–
Virginia	378	68	126	7	24	153	-0
Washington	734	81	87	8	18	540	-0
West Virginia	143	37	34	5	24	43	-0
Wisconsin	412	58	74	20	9	251	–
Wyoming	74	30	15	11	4	14	-0
Subtotal (states)	\$27,714	\$3,588	\$7,658	\$1,026	\$1,196	\$14,269	-\$22
American Samoa	2	–	–	\$1	–	\$1	–
Guam	4	–	–	1	0	2	–
Northern Mariana Islands	1	0	–	0	–	0	–
Puerto Rico	100	34	6	15	–	45	–
Virgin Islands	18	4	10	0	–	4	–
Subtotal (states and territories)	\$27,839	\$3,626	\$7,673	\$1,044	\$1,196	\$14,322	-\$22



EXHIBIT 31. (continued)

State ¹	Total spending on administration	Spending by category					Collections
		MMIS ²	Eligibility systems ²	EHR incentive program ³	Other functions, federal match above 50% ⁴	Other functions, federal match of 50% ⁵	
MFCU ⁶	\$352	–	–	–	\$352	–	–
Medicaid survey and certification of nursing and intermediate care facilities ⁶	346	–	–	–	346	–	–
Total	\$28,536	\$3,626	\$7,673	\$1,044	\$1,894	\$14,322	-\$22
Percent of total, exclusive of collections	–	12.7%	26.9%	3.7%	6.6%	50.1%	–

Notes: FY is fiscal year. MMIS is Medicaid Management Information Systems. EHR is electronic health record. MFCU is Medicaid Fraud Control Unit. Includes federal and state funds. Excludes administrative activities performed by Medicaid managed care plans (which are included in the capitation payments that states make to these plans) and activities that are exclusively federal, such as program oversight by CMS staff. Collections may include, for example, donations made by hospitals to compensate for the cost of on-site stationing of state or local Medicaid agency personnel to determine eligibility or provide outreach. For more information on specific items from the Medicaid and CHIP Budget Expenditure System (MBES CBES) noted in this exhibit, see CMS, 2014, MBES CBES category of service line definitions for the 64.10 base form, <https://www.medicaid.gov/medicaid/financing-and-reimbursement/downloads/cms-6410-admin-category-of-services-definition-2-14.pdf>.

– Dash indicates zero; \$0 or -\$0 indicates an amount between \$0.5 and -\$0.5 million that rounds to zero.

¹ Not all states had certified their CMS-64 financial management report (FMR) submissions as of June 17, 2019. California's fourth quarter submissions were not certified. Figures presented in this exhibit may change if states revise their expenditure data after this date.

² Includes design and development of systems (90 percent federal match), operation of approved systems (75 percent), and other costs (50 percent).

³ Includes EHR incentive payments to providers (100 percent federal match) and administration of payments (90 percent).

⁴ Includes skilled medical professionals, preadmission screening and resident review, medical and utilization review, external independent review, survey and certification, and MFCU operations (all at 75 percent federal match); translation and interpretation services for children and planning activities for the Health Home benefit (both at match equal to a state's federal medical assistance percentage); eligibility changes associated with the Temporary Assistance for Needy Families program (75 or 90 percent); administration of family planning services (90 percent); and immigration status verification systems (100 percent). Excludes MMIS and eligibility systems, which are included in their own categories.

⁵ Excludes MMIS and eligibility systems, which are included in their own categories.

⁶ State-level estimates for MFCUs and survey and certification are available but are not included in the CMS-64 data that MACPAC typically uses to analyze Medicaid spending.

Sources: For state and territory spending: MACPAC, 2019, analysis of CMS-64 FMR net expenditure data as of June 17, 2019. For MFCUs and survey and certification: CMS, 2019, *Fiscal year 2020 justification of estimates for appropriations committees*, Baltimore, MD: CMS, <http://www.cms.gov/About-CMS/Agency-Information/PerformanceBudget/Downloads/FY2020-CJ-Final.pdf>.

EXHIBIT 32. Child Enrollment in CHIP and Medicaid by State, FY 2018 (thousands)

State	CHIP and Medicaid	CHIP-funded coverage			Medicaid-funded coverage
	Total	Medicaid expansion	Separate CHIP	Total	Total
Total	45,920	5,523	4,110	9,633	36,287
Alabama	761	107	115	222	539
Alaska	122	20	–	20	103
Arizona ¹	1,016	84	45	129	887
Arkansas	511	35	63	98	413
California ²	6,647	1,896	80	1,976	4,671
Colorado	677	81	102	182	495
Connecticut	381	–	29	29	352
Delaware	122	2	12	14	109
District of Columbia	101	16	0	16	85
Florida	2,870	182	314	496	2,374
Georgia	1,578	79	183	262	1,316
Hawaii	175	29	–	29	145
Idaho	249	6	33	40	210
Illinois	1,719	99	197	296	1,423
Indiana	809	90	45	135	674
Iowa	435	22	77	99	335
Kansas	330	15	49	64	266
Kentucky	649	62	41	103	545
Louisiana	875	160	13	173	702
Maine	172	15	10	25	147
Maryland	657	151	–	151	506
Massachusetts	777	92	136	228	549
Michigan	1,247	76	5	81	1,165
Minnesota	659	1	3	4	655
Mississippi	511	34	54	88	423
Missouri	736	56	54	109	627
Montana	171	6	25	31	140
Nebraska	228	58	2	60	168
Nevada	548	24	48	72	476
New Hampshire	110	18	–	18	92
New Jersey	983	108	147	254	729
New Mexico	423	13	0	13	410
New York	2,936	302	466	768	2,167
North Carolina	1,442	171	126	297	1,145
North Dakota ¹	61	4	3	7	54

EXHIBIT 32. (continued)

State	CHIP and Medicaid	CHIP-funded coverage			Medicaid-funded coverage
	Total	Medicaid expansion	Separate CHIP	Total	Total
Ohio	1,519	261	–	261	1,258
Oklahoma	723	196	11	206	517
Oregon	592	64	126	190	403
Pennsylvania	1,598	108	261	369	1,229
Rhode Island	148	35	1	36	112
South Carolina	767	111	–	111	656
South Dakota	94	15	5	20	74
Tennessee	1,011	8	99	107	904
Texas	4,593	354	782	1,137	3,456
Utah	296	29	32	60	235
Vermont	77	5	–	5	72
Virginia	866	101	107	208	658
Washington	910	–	88	88	822
West Virginia	276	13	27	39	236
Wisconsin	714	108	88	196	518
Wyoming	48	2	6	7	41

Notes: FY is fiscal year. The CHIP and Medicaid total column reflects children ever enrolled in CHIP or Medicaid during the year, even if for a single month. Most states counted children who were enrolled in multiple categories during the year (for example, in Medicaid-funded coverage for the first half of the year but in CHIP-funded coverage for the second half) in the most recent category (state-specific exceptions to this rule are noted below). Medicaid-funded child enrollment shown here includes all children, regardless of disability status; in other MACStats exhibits that break enrollment out by eligibility group, children qualifying on the basis of disability may be counted in the disabled category rather than the child category. Data were reported by individual states as of June 4, 2019, and may be revised at a later date.

– Dash indicates zero; 0 indicates an amount less than 500 that rounds to zero.

¹ CHIP enrollment reflects updated data from the CHIP Statistical Enrollment Data System and does not match the table published by CMS as of May 1.

² CMS notes that due to reporting system updates, California's CHIP enrollment totals are estimates (CMS 2019, note iii).

Sources: CMS, 2019, *Table: Unduplicated number of children ever enrolled (as of May 1)*, <http://www.medicaid.gov/chip/downloads/fy-2018-childrens-enrollment-report.pdf>. MACPAC, 2019, analysis of CHIP Statistical Enrollment Data System data as of June 4, 2019.

EXHIBIT 33. CHIP Spending by State, FY 2018 (millions)

State	Total CHIP			Benefits						State program administration			Section 2105(g) spending ²
				Medicaid-expansion CHIP			Separate CHIP programs and coverage of pregnant women ¹						
	Total	Federal	State	Total	Federal	State	Total	Federal	State	Total	Federal	State	Federal
Alabama	\$376.3	\$376.3	-	\$141.0	\$141.0	-	\$220.1	\$220.1	-	\$15.3	\$15.3	-	-
Alaska	32.1	28.9	\$3.2	28.9	26.1	\$2.8	-	-	-	3.2	2.8	\$0.4	-
Arizona ³	238.6	238.7	-0.0	174.3	174.3	-0.0	54.1	54.1	-\$0.0	10.3	10.3	-0.0	-
Arkansas ³	159.3	159.3	-0.0	56.8	56.8	-0.0	99.3	99.3	-0.0	3.2	3.2	-0.0	-
California	3,263.3	2,885.4	377.9	2,926.7	2,581.1	345.6	283.3	256.1	27.2	53.3	48.2	5.1	-
Colorado	322.0	283.4	38.6	105.7	93.0	12.7	207.6	182.7	24.9	8.7	7.7	1.0	-
Connecticut	49.3	96.3	-47.0	-	-	-	44.3	39.1	5.3	4.9	4.3	0.6	\$52.9
Delaware	38.7	36.0	2.7	5.3	5.0	0.4	32.1	29.8	2.2	1.3	1.2	0.1	-
District of Columbia	45.6	45.6	-	43.8	43.8	-	-	-	-	1.8	1.8	-	-
Florida	776.5	748.0	28.4	299.0	287.8	11.2	433.7	418.0	15.7	43.8	42.2	1.6	-
Georgia ³	421.9	421.9	-0.1	130.5	130.5	-0.0	266.5	266.6	-0.1	24.8	24.8	-0.0	-
Hawaii	65.9	60.0	5.9	63.0	57.3	5.6	-	-	-	2.9	2.6	0.3	-
Idaho	73.6	73.6	-	7.7	7.7	-	62.1	62.1	-	3.8	3.8	-	-
Illinois	421.8	372.9	48.8	218.5	193.2	25.2	163.8	144.8	19.0	39.5	34.9	4.6	-
Indiana	251.1	248.4	2.7	177.1	175.2	1.9	63.4	62.7	0.7	10.6	10.5	0.1	-
Iowa	131.3	123.4	7.9	35.8	33.7	2.2	83.0	78.0	5.0	12.5	11.8	0.7	-
Kansas	123.9	113.1	10.7	28.0	25.5	2.4	86.1	78.6	7.4	9.8	9.0	0.8	-
Kentucky	207.0	207.0	0.0	122.1	122.1	0.0	81.3	81.3	-0.0	3.7	3.7	-0.0	-
Louisiana	363.2	354.5	8.8	277.3	270.6	6.7	71.6	69.9	1.7	14.3	14.0	0.3	-
Maine	35.9	35.2	0.7	18.6	18.3	0.4	15.9	15.6	0.3	1.4	1.3	0.0	-
Maryland	341.7	300.7	41.0	348.4	306.6	41.8	-26.1	-22.9	-3.1	19.3	17.0	2.3	-
Massachusetts	782.4	688.1	94.4	292.0	256.5	35.5	412.1	362.7	49.5	78.3	68.9	9.4	-
Michigan	264.3	260.0	4.4	232.8	229.0	3.8	17.3	17.0	0.3	14.2	14.0	0.2	-
Minnesota	19.0	122.3	-103.4	1.7	1.5	0.2	15.3	13.5	1.8	1.9	1.7	0.2	105.7
Mississippi	244.2	244.2	-	103.6	103.6	-	137.5	137.5	-	3.1	3.1	-	-
Missouri	269.4	264.9	4.5	138.6	136.2	2.5	115.0	113.2	1.8	15.8	15.5	0.2	-
Montana	87.4	86.3	1.1	9.7	9.6	0.1	73.4	72.5	0.9	4.3	4.3	0.1	-
Nebraska	91.9	82.5	9.4	75.7	68.0	7.7	13.9	12.4	1.4	2.3	2.1	0.2	-
Nevada	74.3	73.5	0.7	21.6	21.4	0.2	50.2	49.7	0.5	2.5	2.5	0.0	-
New Hampshire	33.1	42.6	-9.5	33.1	29.1	4.0	0.0	0.0	0.0	0.0	0.0	0.0	13.5
New Jersey	560.9	493.5	67.4	246.4	216.9	29.6	258.3	227.3	31.1	56.1	49.4	6.8	-



EXHIBIT 33. (continued)

State	Total CHIP			Benefits						State program administration			Section 2105(g) spending ²
				Medicaid-expansion CHIP			Separate CHIP programs and coverage of pregnant women ¹						
	Total	Federal	State	Total	Federal	State	Total	Federal	State	Total	Federal	State	Federal
New Mexico	\$96.4	\$96.2	\$0.1	\$94.6	\$94.5	\$0.1	\$0.0	\$0.0	-	\$1.7	\$1.7	-	-
New York	1,589.7	1,398.9	190.8	764.4	672.7	91.7	759.8	668.6	\$91.2	65.4	57.6	\$7.9	-
North Carolina ³	474.8	475.0	-0.2	261.6	261.7	-0.1	200.7	200.8	-0.1	12.6	12.6	-0.0	-
North Dakota	28.5	25.2	3.3	19.0	16.8	2.3	7.1	6.4	0.8	2.4	2.1	0.3	-
Ohio	512.7	494.6	18.1	480.1	463.0	17.2	-	-	-	32.6	31.6	1.0	-
Oklahoma	236.0	221.9	14.2	238.4	224.1	14.3	-11.3	-10.6	-0.7	8.9	8.3	0.6	-
Oregon	358.9	350.1	8.8	102.1	99.6	2.5	246.4	240.4	6.0	10.4	10.1	0.3	-
Pennsylvania	710.8	634.5	76.3	262.6	234.5	28.2	434.9	388.2	46.7	13.3	11.9	1.4	-
Rhode Island	99.2	88.3	10.9	85.1	75.8	9.4	11.4	10.2	1.3	2.7	2.4	0.3	-
South Carolina	174.7	174.7	-	163.0	163.0	-	-0.2	-0.2	-	11.9	11.9	-	-
South Dakota	32.1	29.5	2.7	23.4	21.5	1.9	8.2	7.5	0.7	0.5	0.5	0.0	-
Tennessee	224.8	222.4	2.4	37.7	37.3	0.4	177.3	175.4	1.9	9.8	9.7	0.1	-
Texas	1,535.9	1,425.4	110.6	546.8	507.3	39.5	915.3	849.6	65.7	73.8	68.5	5.3	-
Utah	127.7	127.6	0.1	83.7	83.5	0.1	37.9	37.9	-	6.2	6.2	-	-
Vermont	12.7	26.8	-14.2	12.4	11.2	1.2	-1.0	-0.9	-0.1	1.3	1.1	0.1	\$15.4
Virginia	408.3	359.3	49.0	174.9	153.9	21.0	203.8	179.4	24.5	29.6	26.0	3.5	-
Washington	174.5	222.4	-47.9	15.1	13.3	1.8	156.0	137.4	18.6	3.4	3.0	0.4	68.7
West Virginia ³	73.5	73.5	-0.0	24.1	24.1	-	45.3	45.3	-0.0	4.1	4.1	-0.0	-
Wisconsin	245.9	259.1	-13.1	106.7	100.4	6.3	123.9	116.6	7.3	15.4	14.4	0.9	27.6
Wyoming	14.4	12.7	1.7	2.7	2.4	0.3	11.1	9.8	1.3	0.7	0.6	0.1	-
Subtotal (states)	\$17,297.4	\$16,284.8	\$1,012.7	\$9,862.3	\$9,081.6	\$780.7	\$6,661.8	\$6,203.4	\$458.4	\$773.3	\$716.0	\$57.3	\$283.8
American Samoa	4.8	4.6	0.2	4.8	4.6	0.2	-	-	-	-	-	-	-
Guam	33.2	30.6	2.6	33.2	30.6	2.6	-	-	-	-	-	-	-
Northern Mariana Islands	11.4	10.6	0.8	11.4	10.6	0.8	-	-	-	-	-	-	-
Puerto Rico	189.5	173.4	16.1	189.5	173.4	16.1	-	-	-	-	-	-	-
Virgin Islands	11.4	10.4	1.0	11.4	10.4	1.0	-	-	-	-	-	-	-
Total (states and territories)	\$17,547.7	\$16,514.4	\$1,033.3	\$10,112.6	\$9,311.2	\$801.4	\$6,661.8	\$6,203.4	\$458.4	\$773.3	\$716.0	\$57.3	\$283.8

EXHIBIT 33. (continued)

Notes: FY is fiscal year. Components may not add to total due to rounding. Federal CHIP spending on administration is generally limited to 10 percent of a state's total federal CHIP spending for the year. States with Medicaid-expansion CHIP may elect to receive reimbursement for administrative spending from Medicaid rather than CHIP funds; Medicaid funds are not shown in this exhibit.

– Dash indicates zero; \$0.0 or -\$0.0 indicates an amount between \$0.05 million and -\$0.05 million that rounds to zero.

¹ Five states (Colorado, Missouri, New Jersey, Rhode Island, and Virginia) use CHIP funds to provide coverage for pregnant women.

² Section 2105(g) of the Social Security Act permits 11 qualifying states to use CHIP funds to pay the difference between the regular Medicaid matching rate and the enhanced CHIP matching rate for Medicaid-enrolled, Medicaid-financed children whose family income exceeds 133 percent of the federal poverty level. Although these are CHIP funds, they effectively reduce state spending on children in Medicaid and do not require a state match within the CHIP program. In cases where the sum of 2105(g) federal CHIP spending (for Medicaid enrollees) and regular federal CHIP spending (for CHIP enrollees) exceeds total spending for CHIP enrollees, states are shown in this table as having negative state CHIP spending (Connecticut, Minnesota, New Hampshire, Vermont, Washington, and Wisconsin).

³ State reports negative state CHIP spending for benefits or state program administration due to federal CHIP spending exceeding total CHIP spending. Federal CHIP spending exceeds total CHIP spending due to negative prior period adjustments and the 23 percentage point increase in the enhanced federal medical assistance percentage (E-FMAP) that went into effect in FY 2016. Because these prior period adjustments apply to periods before the 23 percentage point increase to the E-FMAP, these negative adjustments decrease total spending to a greater extent than federal spending.

Source: MACPAC, 2019, analysis of Medicaid and CHIP Budget Expenditure System (MBES/CBES) data from CMS as of June 24, 2019.

EXHIBIT 34. Federal CHIP Allotments, FYs 2017–2019 (millions)

State	FY 2017 federal CHIP allotments	FY 2018 federal CHIP allotments	FY 2019 federal CHIP allotments
Alabama	\$319.7	\$338.5	\$396.3
Alaska	32.6	34.6	30.4
Arizona ¹	206.4	388.6	251.7
Arkansas	194.4	205.8	167.8
California	2,668.6	2,825.9	3,038.4
Colorado	254.4	270.4	298.4
Connecticut	77.4	82.0	101.4
Delaware	35.3	37.3	37.9
District of Columbia	42.5	45.8	49.2
Florida	686.6	734.1	793.2
Georgia	404.8	429.7	444.3
Hawaii	52.3	55.4	63.1
Idaho	82.9	88.4	78.4
Illinois	547.4	579.7	392.7
Indiana	191.1	202.3	261.5
Iowa ¹	145.7	163.4	130.0
Kansas	124.7	132.0	119.1
Kentucky	268.2	284.0	218.0
Louisiana	358.8	380.0	373.3
Maine	35.7	37.8	37.0
Maryland	295.9	313.4	316.6
Massachusetts	671.3	710.9	724.6
Michigan	264.8	280.4	273.7
Minnesota	115.2	122.3	129.4
Mississippi	316.8	335.5	257.2
Missouri ¹	175.2	233.7	279.0
Montana	103.5	110.3	91.4
Nebraska	72.5	77.1	87.1
Nevada	70.0	74.9	78.2
New Hampshire	38.2	40.5	44.9
New Jersey	462.9	490.2	519.7
New Mexico	136.0	144.1	101.4
New York	1,233.5	1,306.3	1,473.1
North Carolina	479.5	508.7	500.7
North Dakota	21.9	23.4	26.7
Ohio ¹	409.3	458.7	520.8

EXHIBIT 34. (continued)

State	FY 2017 federal CHIP allotments	FY 2018 federal CHIP allotments	FY 2019 federal CHIP allotments
Oklahoma	249.0	264.0	233.6
Oregon ¹	249.8	395.9	370.1
Pennsylvania	527.3	558.4	668.2
Rhode Island	72.8	77.1	93.0
South Carolina	154.2	164.0	184.6
South Dakota	26.9	28.8	31.2
Tennessee	465.0	493.2	234.6
Texas	1,382.1	1,476.3	1,510.2
Utah	131.6	140.5	135.1
Vermont	30.2	32.0	28.3
Virginia	291.1	308.3	378.4
Washington	242.5	259.3	236.3
West Virginia	61.0	64.6	77.4
Wisconsin	224.5	237.7	272.8
Wyoming	12.6	13.4	13.4
Subtotal (states)	\$15,716.6	\$17,059.8	\$17,173.8
American Samoa	2.9	3.1	4.8
Guam	26.6	28.1	32.2
Northern Mariana Islands	6.7	7.1	11.2
Puerto Rico	192.5	203.8	182.6
Virgin Islands	6.9	7.3	10.9
Total (states and territories)	\$15,952.1	\$17,309.2	\$17,415.6

Notes: FY is fiscal year.

¹ Section 2104(m)(7) of the Social Security Act gives states with approved CHIP state plans to expand eligibility for children or benefits the option to request an increased CHIP allotment for even-numbered years beginning in FY 2010 and ending in FY 2026. The FY 2018 allotment for this state differs from previously published allotments for the fiscal year because the state received such an allotment increase.

Sources: MACPAC, 2019, analysis of Medicaid and CHIP Budget Expenditure System data as of June 10, 2019.

SECTION 4

Medicaid and CHIP Eligibility

Section 4: Medicaid and CHIP Eligibility

Key Points

- Thirty-three states and the District of Columbia now cover low-income adults not otherwise eligible on the basis of disability, a new Medicaid eligibility group created under the Patient Protection and Affordable Care Act (ACA, P.L. 111-148, as amended). Three additional states have approved a Medicaid expansion but have not implemented it as of April 2019. Most of these new adults are eligible at incomes up to 138 percent of the federal poverty level (FPL) (Exhibit 36).
- Since 2014, eligibility levels under Medicaid and the State Children's Health Insurance Program (CHIP) for most children and adults eligible on a basis other than disability are determined using uniform modified adjusted gross income (MAGI) rules (Exhibits 35 and 36).
- Eligibility criteria for individuals eligible for Medicaid on the basis of disability and for individuals age 65 and older, who are not subject to MAGI rules, were largely unchanged between 2018 and 2019 (Exhibit 37).
- In 2019, in the lower 48 states and the District of Columbia, 100 percent FPL is \$12,490 for an individual plus \$4,420 for each additional family member (Exhibit 38).

EXHIBIT 35. Medicaid and CHIP Income Eligibility Levels as a Percentage of the FPL for Children and Pregnant Women by State, April 2019

State	CHIP program type ¹ (as of April 2019)	Medicaid coverage ²						Separate CHIP coverage		Medicaid or CHIP coverage
		Infants under age 1		Age 1–5		Age 6–18		Birth through age 18 ³	Unborn children ⁴	Pregnant women and deemed newborns ⁵
		Medicaid funded	CHIP funded	Medicaid funded	CHIP funded	Medicaid funded	CHIP funded			
Alabama	Combination	141%	–	141%	–	141%	107–141%	312%	–	141%
Alaska	Medicaid expansion	177	159–203%	177	159–203%	177	124–203	–	–	200
Arizona	Combination	147	–	141	–	133	104–133	200	–	156
Arkansas	Combination	142	–	142	–	142	107–142	211	209%	209
California	Combination	208	208–261	142	142–261	133	108–261	317 ⁶	317	208
Colorado	Combination	142	–	142	–	142	108–142	260	–	195; 260
Connecticut	Separate	196	–	196	–	196	–	318	–	258
Delaware	Combination	212	194–212	142	–	133	110–133	212 ⁷	–	212
District of Columbia	Medicaid expansion	319	206–319	319	146–319	319	112–319	–	–	319
Florida	Combination	206	192–206	140	–	133	112–133	210 ⁷	–	191
Georgia	Combination	205	–	149	–	133	113–133	247	–	220
Hawaii	Medicaid expansion	191	191–308	139	139–308	133	105–308	–	–	191
Idaho	Combination	142	–	142	–	133	107–133	185	–	133
Illinois	Combination	142	–	142	–	142	108–142	313	208	208
Indiana	Combination	208	157–208	158	141–158	158	106–158	250	–	208
Iowa	Combination	375	240–375	167	–	167	122–167	302 ⁷	–	375
Kansas	Combination	166	–	149	–	133	113–133	230	–	166
Kentucky	Combination	195	–	142	142–159	133	109–159	213	–	195
Louisiana	Combination	142	142–212	142	142–212	142	108–212	250	209	133
Maine	Combination	191	–	157	140–157	157	132–157	208	–	209
Maryland	Medicaid expansion	194	194–317	138	138–317	133	109–317	–	–	259
Massachusetts	Combination	200	185–200	150	133–150	150	114–150	300	200	200
Michigan	Combination	195	195–212	160	143–212	160	109–212	–	195	195
Minnesota	Combination	275	275–283 ⁸	275	–	275	–	–	278	278
Mississippi	Combination	194	–	143	–	133	107–133	209	–	194
Missouri	Combination	196	–	148	148–150	148	110–150	300	300	196; 300

EXHIBIT 35. (continued)

State	CHIP program type ¹ (as of April 2019)	Medicaid coverage ²						Separate CHIP coverage		Medicaid or CHIP coverage
		Infants under age 1		Age 1–5		Age 6–18		Birth through age 18 ³	Unborn children ⁴	Pregnant women and deemed newborns ⁵
		Medicaid funded	CHIP funded	Medicaid funded	CHIP funded	Medicaid funded	CHIP funded			
Montana	Combination	143%	–	143%	–	133%	109–143%	261%	–	157%
Nebraska	Combination	162	162–213%	145	145–213%	133	109–213	–	197%	194
Nevada	Combination	160	–	160	–	133	122–133	200	–	160
New Hampshire	Medicaid expansion	196	196–318	196	196–318	196	196–318	–	–	196
New Jersey	Combination	218	–	142	–	142	107–142	350	–	194; 200
New Mexico	Medicaid expansion	240	200–300	240	200–300	190	138–240	–	–	250
New York	Combination	218	–	149	–	149	110–149	400	–	218
North Carolina	Combination	210	194–210	210	141–210	133	107–133	211 ⁹	–	196
North Dakota	Combination	147	–	147	–	133	111–133	170	–	147
Ohio	Medicaid expansion	156	141–206	156	141–206	156	107–206	–	–	200
Oklahoma	Combination	205	169–205	205	151–205	205	115–205	–	205	133
Oregon	Combination	185	133–185	133	–	133	100–133	300	185	185
Pennsylvania	Combination	215	–	157	–	133	119–133	314	–	215
Rhode Island	Combination	190	190–261	142	142–261	133	109–261	–	253	190; 253
South Carolina	Medicaid expansion	194	194–208	143	143–208	133	107–208	–	–	194
South Dakota	Combination	182	147–182	182	147–182	182	111–182	204	133	133
Tennessee ¹⁰	Combination	195	–	142	–	133	109–133	250	250	195
Texas	Combination	198	–	144	–	133	109–133	201	202	198
Utah	Combination	139	–	139	–	133	105–133	200	–	139
Vermont	Medicaid expansion	312	237–312	312	237–312	312	237–312	–	–	208
Virginia	Combination	143	–	143	–	143	109–143	200	–	143; 200
Washington	Separate	210	–	210	–	210	–	312	193	193
West Virginia	Combination	158	–	141	–	133	108–133	300	–	158
Wisconsin	Combination	301	–	186	–	133	101–151	301 ⁷	301	301
Wyoming	Combination	154	–	154	–	133	119–133	200	–	154

Notes: As of January 2019, 100 percent of the federal poverty level (FPL) in the lower 48 states and the District of Columbia was \$12,490 for an individual plus \$4,420 for each additional family member. Prior to 2014, states had the flexibility to disregard income sources and amounts of their choosing when determining Medicaid and CHIP eligibility. In 2014, uniform modified adjusted gross income (MAGI) rules became mandatory for determining Medicaid and CHIP eligibility for most children and adults under age 65 eligible for Medicaid on a basis other than disability, including the groups shown in this table. As a result, states are now required to use MAGI-converted eligibility levels that account for the change in income-counting rules. The eligibility levels shown in this table reflect these MAGI-converted levels or another MAGI-based income limit in effect in each state for these groups as of April 2019. Under federal regulations, the effective income limits may be 5 percentage points higher than the percentage of FPL shown in this table to account for a general income disregard that applies to an individual's eligibility under the group with the highest income standard, rather than for particular eligibility groups within Medicaid or CHIP.

EXHIBIT 35. (continued)

Medicaid (Title XIX of the Social Security Act (the Act)) funding continues to finance Medicaid coverage of children under age 19 in families with incomes below state eligibility levels in effect as of March 31, 1997. Any expansion of eligibility to uninsured children above those levels—through expansions of Medicaid or through separate CHIP programs—is generally financed by CHIP (Title XXI of the Act) funding. CHIP funding is not permitted for children with other coverage. Thus, where Medicaid coverage in this table shows overlapping eligibility levels for Medicaid funding and CHIP funding, children with no other coverage are funded by CHIP, while children with other coverage are funded by Medicaid. Pregnant women can receive Medicaid- or CHIP-funded services through regular state plan eligibility pathways or through waivers under Section 1115 of the Act; in addition, the unborn children of pregnant women may receive CHIP-funded coverage under a state plan option.

– Dash indicates that state does not use this eligibility pathway.

¹ Under CHIP, states can implement Medicaid expansion, separate CHIP, or a combination program. Eight states (Alaska, Hawaii, Maryland, New Hampshire, New Mexico, Ohio, South Carolina, Vermont) and the District of Columbia use Medicaid expansion and two states (Connecticut and Washington) use separate CHIP. Forty states use combination programs, although some of these are combination programs solely as a result of the transition of children in families with income less than or equal to 133 percent FPL from separate CHIP to Medicaid.

² Under Medicaid-funded coverage, there is no lower threshold for income eligibility. The eligibility levels listed are the highest income levels under which each age group of children is covered under the Medicaid state plan. The eligibility levels listed under CHIP-funded Medicaid coverage are the income levels to which Medicaid has expanded using CHIP funds (which became available when CHIP was created in 1997). For states that set different CHIP-funded eligibility levels for children age 6–13 and age 14–18, this table shows only the levels for children age 6–13. In addition, Section 2105(g) of the Act permits 11 qualifying states to use CHIP funds to pay the difference between the regular Medicaid matching rate and the enhanced CHIP matching rate for Medicaid-enrolled, Medicaid-financed uninsured children whose family income exceeds 133 percent FPL (not separately noted on this table).

³ Separate CHIP eligibility for children from birth through age 18 generally begins where Medicaid coverage ends (as shown in the previous columns).

⁴ For unborn children, there is no lower threshold for income eligibility if the mother is not eligible for Medicaid.

⁵ Deemed newborns are infants up to age one who are deemed eligible for Medicaid or CHIP—with no separate application or eligibility determination required—if their mother was enrolled at the time of their birth. Pregnant women can be covered with Medicaid or CHIP funding. Under CHIP, coverage can be through a state plan option for targeted low-income pregnant women or through continuation of an existing Section 1115 waiver. When two values are shown in this column, the first is for Medicaid and the second is for CHIP.

⁶ In California, certain children up to age two with incomes up to 317 percent FPL are covered statewide, and children in three counties are covered up to 317 percent FPL through a separate CHIP program.

⁷ In Delaware, Florida, Iowa, and Wisconsin, separate CHIP covers children age 1–18.

⁸ In Minnesota, only infants (defined by the state as being under age two) are eligible for Medicaid-expansion CHIP up to 283 percent FPL.

⁹ North Carolina's separate CHIP covers children age 6–18.

¹⁰ Although Tennessee covers children with CHIP-funded Medicaid, coverage is available only for children under age 19 who are enrolled in Medicaid, but no longer qualify and lack access to health insurance through a parent's employer.

Sources: MACPAC, 2019, analysis of CMS, 2019, Table: State Medicaid and CHIP income eligibility standards (for selected MAGI groups, based on state decisions as of April 1, 2019), <https://www.medicaid.gov/medicaid/program-information/medicaid-and-chip-eligibility-levels/index.html>; CMS, 2019, Medicaid state plan amendments, <https://www.medicaid.gov/state-resource-center/medicaid-state-plan-amendments/index.html>; CMS, 2019, CHIP state plan amendments, <https://www.medicaid.gov/chip/state-program-information/index.html>; Kaiser Family Foundation (KFF), 2019, *Medicaid and CHIP eligibility, enrollment, renewal, and cost sharing policies as of January 2019: Findings from a 50-state survey*, Menlo Park, CA: KFF, <http://files.kff.org/attachment/Report-Medicaid-and-CHIP-Eligibility-Enrollment-Renewal-and-Cost-Sharing-Policies-as-of-January-2019>; and eligibility information from state websites. CMS, 2019, communication with MACPAC.

EXHIBIT 36. Medicaid Income Eligibility Levels as a Percentage of the Federal Poverty Level for Non-Aged, Non-Disabled, Non-Pregnant Adults by State, April 2019

State	Parents and caretaker relatives of dependent children ¹	Additional individuals age 19–64 ²
Alabama	13%	–
Alaska	135	133% (age 19–20 only: 135%)
Arizona	106	133
Arkansas	17	133
California	109	133
Colorado	68	133
Connecticut	150	133
Delaware	87	133
District of Columbia	216	210 (age 19–20 only: 216)
Florida	28	Age 19–20 only: 28
Georgia	32	–
Hawaii	105	133
Idaho ³	23	–
Illinois	133	133
Indiana	19	133
Iowa	51	133
Kansas	33	–
Kentucky	24	133
Louisiana	19	133
Maine	100	133 (age 19–20 only: 156)
Maryland	123	133
Massachusetts	133	133 (age 19–20 only: 150)
Michigan	54	133
Minnesota	133 ⁴	133 ⁴
Mississippi	23	–
Missouri	17 ⁵	– ⁶
Montana	24	133
Nebraska ³	58	–
Nevada	31	133

EXHIBIT 36. (continued)

State	Parents and caretaker relatives of dependent children ¹	Additional individuals age 19–64 ²
New Hampshire	64%	133%
New Jersey	30	133
New Mexico	43	133
New York	133 ⁴	133 ⁴
North Carolina	42	Age 19–20 only: 42
North Dakota	50	133
Ohio	90	133
Oklahoma	39 ⁵	– ⁶
Oregon	38	133
Pennsylvania	33	133
Rhode Island	116	133
South Carolina	62	–
South Dakota	54	–
Tennessee	98	–
Texas	15	–
Utah ³	42 ⁵	– ⁶
Vermont	52	133
Virginia	47	133
Washington	40	133
West Virginia	18	133
Wisconsin	95	95
Wyoming	52	–

Notes: As of January 2019, 100 percent of the federal poverty level (FPL) in the lower 48 states and the District of Columbia was \$12,490 for an individual plus \$4,420 for each additional family member. Prior to 2014, states had the flexibility to disregard income sources and amounts of their choosing when determining Medicaid and CHIP eligibility. In 2014, uniform modified adjusted gross income (MAGI) rules became mandatory for determining Medicaid and CHIP eligibility for most children and adults under age 65 eligible for Medicaid on a basis other than disability, including the groups shown in this table. As a result, states are now required to use MAGI-converted eligibility levels that account for the change in income-counting rules. The eligibility levels shown in this table reflect these MAGI-converted levels or another MAGI-based income limit in effect in

EXHIBIT 36. (continued)

each state for these groups as of April 2019. Under federal regulations, the effective income limits may be 5 percentage points higher than the percentage of FPL shown in this table to account for a general income disregard that applies to an individual's determination of eligibility under the group with the highest income standard, rather than for particular eligibility groups within Medicaid or CHIP.

States are required to provide Medicaid coverage for parents and other caretaker relatives (and their dependent children), at or above the state's 1988 Aid to Families with Dependent Children eligibility levels. Under regular Medicaid state plan rules, states may opt to cover additional parents and caretaker relatives, children age 19–20, and other individuals age 19–64 who have incomes less than or equal to 133 percent FPL and are not pregnant or eligible for Medicare. Certain states provide coverage under Section 1115 waivers, which allow them to operate their Medicaid programs with fewer statutory requirements. As noted in this table, the covered benefits under these waivers may be more limited than those provided under regular state plan rules and might not be available to all individuals at the income levels shown.

– Dash indicates that state does not use this eligibility pathway.

¹ In states that use dollar amounts rather than percentage of FPL to determine eligibility for parents, dollar amounts were converted to percentage of FPL, and the highest percentage was selected to reflect eligibility level for the group. Parents and caretaker relatives with income above the reported threshold for this group may be eligible for coverage under the new adult group (under Section 1902(a)(10)(A)(i)(VIII) of the Social Security Act (the Act)) in states that have adopted the expansion.

² Reflects state plan coverage under Section 1902(a)(10)(A)(i)(VIII) of the Act for individuals who are age 19–64, have incomes less than or equal to 133 percent FPL, and are not pregnant or eligible for Medicare; state plan coverage for children age 19–20 where indicated; and Section 1115 waiver coverage that is not subject to the limitations indicated in note 6.

³ Additional states have opted to expand Medicaid, but had not yet implemented as of April 2019. These include Idaho, Nebraska, and Utah, which opted to expand coverage to the new adult group by voter referendum.

⁴ In Minnesota and New York, individuals with incomes greater than 133 percent FPL but that do not exceed 200 percent FPL are covered under the Basic Health Program (BHP).

⁵ Reflects parent coverage under the Medicaid state plan. The state has some additional coverage above state plan eligibility standards through a Section 1115 demonstration or a pending demonstration proposal. The demonstration includes limitations on eligibility or benefits, is not offered to all residents of the state, or includes an enrollment cap.

⁶ The state has a Section 1115 demonstration that provides Medicaid coverage to some low-income adults. The demonstration includes limitations on eligibility or benefits, is not offered to all residents of the state, or includes an enrollment cap.

Sources: MACPAC, 2019, analysis of CMS, 2019, State Medicaid and CHIP income eligibility standards (for selected MAGI groups, based on state decisions as of April 1, 2019), <https://www.medicaid.gov/medicaid/program-information/medicaid-and-chip-eligibility-levels/index.html>; analysis of Kaiser Family Foundation (KFF), 2019, *Medicaid and CHIP eligibility, enrollment, renewal, and cost sharing policies as of January 2019: Findings from a 50-state survey*, Menlo Park, CA: KFF, <http://files.kff.org/attachment/Report-Medicaid-and-CHIP-Eligibility-Enrollment-Renewal-and-Cost-Sharing-Policies-as-of-January-2019>; MACPAC, 2019, analysis of CMS, 2019, Medicaid state plan amendments, <https://www.medicaid.gov/state-resource-center/medicaid-state-plan-amendments/index.html>; MACPAC, 2019, analysis of eligibility information from state websites, and CMS communication with MACPAC.

EXHIBIT 37. Medicaid Income Eligibility Levels as a Percentage of the Federal Poverty Level for Individuals Age 65 and Older and Persons with Disabilities by State, 2019

State	State eligibility type ¹	SSI recipients ²	§ 209(b) eligibility	Poverty level ³	Medically needy ⁴	Special income level ⁵
Alabama	§ 1634	74%	–	–	–	222%
Alaska	SSI criteria	59 ⁶	–	–	–	178
Arizona	§ 1634	74	–	100%	–	222
Arkansas	§ 1634	74	–	80 (aged only)	10%	222
California	§ 1634	74	–	100	58	–
Colorado	§ 1634	74	–	–	–	222
Connecticut	§ 209(b)	–	61% ⁷	–	61	222
Delaware	§ 1634	74	–	–	–	185
District of Columbia	§ 1634	74	–	100	64	222
Florida	§ 1634	74	–	88	17	222
Georgia	§ 1634	74	–	–	30	222
Hawaii	§ 209(b)	–	64	100	39	–
Idaho	SSI criteria	74	–	77	–	222
Illinois	§ 209(b)	–	100	100	100	–
Indiana	§ 1634	74	–	100	–	222
Iowa	§ 1634	74	–	–	46	222
Kansas	SSI criteria	74	–	–	46	222
Kentucky	§ 1634	74	–	–	21	222
Louisiana	§ 1634	74	–	–	10	222
Maine	§ 1634	74	–	100	30	222
Maryland	§ 1634	74	–	–	34	222
Massachusetts ⁸	§ 1634	74	–	100 (aged); 133 (disabled)	50	222
Michigan	§ 1634	74	–	100	39	222
Minnesota	§ 209(b)	–	81	100	81	222
Mississippi	§ 1634	74	–	–	–	222
Missouri	§ 209(b)	–	83	85	85	130
Montana	§ 1634	74	–	–	50	–
Nebraska	SSI criteria	74	–	100	38	–
Nevada	SSI criteria	74	–	–	–	222

EXHIBIT 37. (continued)

State	State eligibility type ¹	SSI recipients ²	§ 209(b) eligibility	Poverty level ³	Medically needy ⁴	Special income level ⁵
New Hampshire	§ 209(b)	–	75%	–	57%	222%
New Jersey	§ 1634	74%	–	100%	35	222
New Mexico	§ 1634	74	–	–	–	222
New York	§ 1634	74	–	83	83	–
North Carolina	§ 1634	74	–	100	23	–
North Dakota	§ 209(b)	–	83	–	83	–
Ohio ⁹	§ 1634	74	–	–	–	222
Oklahoma ⁹	SSI criteria	74	–	100	–	222
Oregon	SSI criteria	74	–	–	–	222
Pennsylvania	§ 1634	74	–	100	41	222
Rhode Island	§ 1634	74	–	100	86	222
South Carolina	§ 1634	74	–	100	–	222
South Dakota	§ 1634	74	–	–	–	222
Tennessee	§ 1634	74	–	–	–	222
Texas	§ 1634	74	–	–	–	222
Utah	SSI criteria	74	–	100	100	222
Vermont	§ 1634	74	–	–	111	222
Virginia	§ 209(b)	–	74	80	47	222
Washington	§ 1634	74	–	–	74	222
West Virginia	§ 1634	74	–	–	19	222
Wisconsin	§ 1634	74	–	81	57	222
Wyoming	§ 1634	74	–	–	–	222

Notes: SSI is Supplemental Security Income. Section 209(b) refers to Section 209(b) of the Social Security Act Amendments of 1972. Section 1634 refers to Section 1634 of the Social Security Act. In 2019, 100 percent of the federal poverty level (FPL) in the lower 48 states and the District of Columbia is \$12,490 for an individual and \$4,420 for each additional family member. Eligibility levels shown here apply to countable income; as a result, states that use optional income disregards to reduce countable income effectively allow more people to qualify at a given eligibility level (e.g., 100 percent FPL) than states that do not use income disregards. The eligibility levels listed in this table are for individuals; the eligibility levels for couples differ for certain categories. In addition, income eligibility levels for individuals who qualify based on blindness may be higher than for individuals age 65 and older or individuals who qualify on the basis of other disabilities.

In most states, enrollment in the SSI program for individuals age 65 and older and persons eligible on the basis of disability automatically qualifies them for Medicaid. However, Section 209(b) states may use more restrictive criteria (related to income and assets, disability, or both) than SSI when determining Medicaid eligibility. All states have the option of covering additional people with low incomes or high medical expenses through other eligibility pathways, such as poverty level, medically needy, and special income level.

EXHIBIT 37. (continued)

– Dash indicates that state does not use this eligibility pathway.

¹ SSI criteria are used to determine Medicaid eligibility in both Section 1634 and SSI-criteria states. In Section 1634 states, the federal eligibility determination process for SSI automatically qualifies an individual for Medicaid; in SSI-criteria states, individuals must submit information to the state for a separate eligibility determination. Section 209(b) states may use eligibility criteria (related to income and assets, disability, or both) that are more restrictive than SSI program criteria, but they may not use more restrictive criteria than those in effect in the state on January 1, 1972. If a Section 209(b) state does not have a separate medically needy standard, it must allow individuals with higher incomes to spend down to the Section 209(b) income level shown here by deducting incurred medical expenses from the amount of income that is counted for Medicaid eligibility purposes.

² The SSI federal benefit rate as a percentage of the FPL remains the same from last year because during this period, the SSI federal benefit rate and the FPL both increased by 2.8 percent.

³ Under the poverty level option, states may choose to provide Medicaid coverage to individuals who are age 65 and older or have disabilities and whose income is above the SSI or Section 209(b) level but is less than or equal to the FPL.

⁴ Under the medically needy option, individuals with higher incomes can spend down to the medically needy income level shown here by deducting incurred medical expenses from the amount of income that is counted for Medicaid eligibility purposes. Five states (Connecticut, Louisiana, Michigan, Vermont, and Virginia) have a medically needy income standard that varies by location; the highest income standard is listed for each of these states.

⁵ Under the special income level option, states have the option to provide Medicaid benefits to people who require at least 30 days of nursing facility or other institutional care and have incomes up to 300 percent of the SSI benefit rate (which was about 222 percent FPL in 2019). The income thresholds listed in this column may be for institutional services, home- and community-based waiver services, or both.

⁶ The dollar amount that equals the upper income eligibility level for SSI does not vary by state; however, the dollar amount that equals the FPL is higher in Alaska, resulting in a lower percentage.

⁷ The income standards in Connecticut vary by geography; the highest income standard for region A is listed. The income standard in regions B and C is 50 percent FPL.

⁸ Massachusetts provides medically needy coverage for individuals who are age 65 and older and those who are eligible on the basis of disability, but the rules for counting income and spend-down expenses vary for these groups.

⁹ Oklahoma was a Section 209(b) state until October 1, 2015, when it became an SSI-criteria state. Ohio was a Section 209(b) state until August 1, 2016, when it became a Section 1634 state; Ohio also eliminated its medically needy program during the conversion to Section 1634 criteria.

Source: MACPAC, 2019, analysis of eligibility information from state websites and Medicaid state plans as of October 31, 2019.

EXHIBIT 38. Income as a Percentage of the Federal Poverty Level for Various Family Sizes, 2019

State	FPL	Annual amount					Monthly amount				
		Family size					Family size				
		1	2	3	4	Each additional person	1	2	3	4	Each additional person
Lower 48 states and District of Columbia	100%	\$12,490	\$16,910	\$21,330	\$25,750	\$4,420	\$1,041	\$1,409	\$1,778	\$2,146	\$368
	133	16,612	22,490	28,369	34,248	5,879	1,384	1,874	2,364	2,854	490
	138	17,236	23,336	29,435	35,535	6,100	1,436	1,945	2,453	2,961	508
	150	18,735	25,365	31,995	38,625	6,630	1,561	2,114	2,666	3,219	553
	185	23,107	31,284	39,461	47,638	8,177	1,926	2,607	3,288	3,970	681
	200	24,980	33,820	42,660	51,500	8,840	2,082	2,818	3,555	4,292	737
	250	31,225	42,275	53,325	64,375	11,050	2,602	3,523	4,444	5,365	921
	300	37,470	50,730	63,990	77,250	13,260	3,123	4,228	5,333	6,438	1,105
	400	49,960	67,640	85,320	103,000	17,680	4,163	5,637	7,110	8,583	1,473
Alaska	100	15,600	21,130	26,660	32,190	5,530	1,300	1,761	2,222	2,683	461
	133	20,748	28,103	35,458	42,813	7,355	1,729	2,342	2,955	3,568	613
	138	21,528	29,159	36,791	44,422	7,631	1,794	2,430	3,066	3,702	636
	150	23,400	31,695	39,990	48,285	8,295	1,950	2,641	3,333	4,024	691
	185	28,860	39,091	49,321	59,552	10,231	2,405	3,258	4,110	4,963	853
	200	31,200	42,260	53,320	64,380	11,060	2,600	3,522	4,443	5,365	922
	250	39,000	52,825	66,650	80,475	13,825	3,250	4,402	5,554	6,706	1,152
	300	46,800	63,390	79,980	96,570	16,590	3,900	5,283	6,665	8,048	1,383
	400	62,400	84,520	106,640	128,760	22,120	5,200	7,043	8,887	10,730	1,843

EXHIBIT 38. (continued)

State	FPL	Annual amount					Monthly amount				
		Family size					Family size				
		1	2	3	4	Each additional person	1	2	3	4	Each additional person
Hawaii	100%	\$14,380	\$19,460	\$24,540	\$29,620	\$5,080	\$1,198	\$1,622	\$2,045	\$2,468	\$423
	133	19,125	25,882	32,638	39,395	6,756	1,594	2,157	2,720	3,283	563
	138	19,844	26,855	33,865	40,876	7,010	1,654	2,238	2,822	3,406	584
	150	21,570	29,190	36,810	44,430	7,620	1,798	2,433	3,068	3,703	635
	185	26,603	36,001	45,399	54,797	9,398	2,217	3,000	3,783	4,566	783
	200	28,760	38,920	49,080	59,240	10,160	2,397	3,243	4,090	4,937	847
	250	35,950	48,650	61,350	74,050	12,700	2,996	4,054	5,113	6,171	1,058
	300	43,140	58,380	73,620	88,860	15,240	3,595	4,865	6,135	7,405	1,270
	400	57,520	77,840	98,160	118,480	20,320	4,793	6,487	8,180	9,873	1,693

Notes: FPL is federal poverty level. The FPLs shown here are based on the U.S. Department of Health and Human Services (HHS) 2019 federal poverty guidelines. These differ slightly from the U.S. Census Bureau's federal poverty thresholds, which are used mainly for statistical purposes. The separate poverty guidelines for Alaska and Hawaii reflect Office of Economic Opportunity administrative practice beginning in the 1966–1970 period.

Source: HHS, 2019, Annual update of the HHS poverty guidelines, *Federal Register* 84, no. 22 (February 1): 1167.

SECTION 5

Beneficiary Health, Service Use, and Access to Care

Section 5: Beneficiary Health, Service Use, and Access to Care

Key Points

- Children whose primary coverage source is Medicaid or the State Children's Health Insurance Program (CHIP) are less likely to be in excellent or very good health than those who have private coverage (Exhibit 39).
- Data from the National Health Interview Survey (NHIS) and the Medical Expenditure Panel Survey (MEPS) indicate that children with Medicaid or CHIP are less likely than those with private coverage and more likely than those who are uninsured to have seen a dentist or to have had a dental visit in the past 12 months. However, the rates of service use differ between the two data sources. Approximately 81.2 percent of children with Medicaid or CHIP are reported as seeing a dentist in 2018 in the NHIS compared to 43.0 percent of children reported as having a dental visit in 2017 in the MEPS. Similar variations between the data sources were observed for children who have private coverage or are uninsured (Exhibits 40 and 41).
- Adults age 19–64 whose primary coverage source is Medicaid or CHIP are less likely to be in excellent or very good health than those who have private coverage or are uninsured. Adults age 19–64 whose primary coverage source is Medicare, who must meet federal disability criteria to receive coverage, report the poorest health and highest service use in this age group (Exhibits 43–45).
- Children whose primary coverage source is Medicaid or CHIP are less likely to report seeing a general doctor or having a well-child checkup than those with private coverage, but more likely than those who are uninsured (Exhibit 40). Children whose primary coverage source is Medicaid or CHIP are more likely to experience delayed care than those with private coverage (Exhibit 42).
- Adults age 19–64 whose primary coverage is Medicaid are slightly less likely to report having a usual source of care than those with private coverage and are more likely to report having difficulties with access to care. Among adults age 19–64 with health coverage (i.e., excluding the uninsured), adults whose primary coverage source is Medicare report the highest rates of delayed care and unmet need due to cost (Exhibit 46).
- Measures of use of care for specific types of services should be interpreted with caution due to the limitations of survey data and the characteristics of the populations examined. For example, the results shown are unadjusted for differences in age, health, income, race and ethnicity, and family and household characteristics, which are known factors in explaining some of the differences in access and use observed between individuals with different coverage sources. In addition, this section presents data based on primary source of coverage, with multiple coverage sources narrowed down to a single source based on a hierarchy. (For selected characteristics of individuals without the application of this hierarchy, see Exhibit 2.)

EXHIBIT 39. Coverage, Demographic, and Health Characteristics of Non-Institutionalized Individuals Age 0–18 by Primary Source of Health Coverage, 2018

Characteristics	Primary coverage source at time of interview ¹			
	Total	Private ²	Medicaid or CHIP ³	Uninsured ⁴
Total (percent distribution across coverage sources)⁵	100.0%	55.6%	34.6%	5.1%
Coverage				
Length of time with any coverage during the year				
Full year	91.8*	97.4*	95.4	–
Part year	4.8	2.6*	4.5	43.0*
No coverage during year	2.3*	–	–	57.0*
Demographics				
Age				
0–5	30.6*	28.9*	34.5	21.8*
6–11	32.6	31.8	33.4	33.5
12–18	36.8*	39.3*	32.0	44.8*
Gender				
Male	51.1	50.8	51.6	50.9
Female	48.9	49.2	48.4	49.1
Race				
Hispanic	25.5*	16.1*	39.2	37.2
White, non-Hispanic	52.5*	65.6*	33.1	41.7*
Black, non-Hispanic	14.2*	9.5*	21.6	13.3*
Other non-white, non-Hispanic	7.7*	8.8*	6.1	7.8
Parents present in family				
Mother, no father	21.8*	11.4*	38.5	20.3*
Father, no mother	4.0	3.8	4.6	5.7
Both present	71.3*	84.0*	51.0	71.4*
No parents	2.9*	0.8*	5.9	†
Family income				
Has income less than 138 percent FPL	27.1*	6.4*	59.0	31.4*
Has income in ranges shown below				
Less than 100 percent FPL	18.0*	3.5*	40.5	21.1*
100–199 percent FPL	21.6*	10.3*	38.4	25.8*
200–399 percent FPL	29.0*	35.4*	17.3	36.3*
400 percent FPL or higher	31.3*	50.9*	3.5	16.6*

EXHIBIT 39. (continued)

Characteristics	Primary coverage source at time of interview ¹			
	Total	Private ²	Medicaid or CHIP ³	Uninsured ⁴
Other demographic characteristics				
Citizen of United States	97.8%	98.3%	98.0%	92.2%*
Receives SSI ⁶	1.2*	†	2.8	†
Family receives WIC	5.6*	1.5*	12.5	†
Health				
Current health status				
Excellent or very good	85.5*	91.0*	77.7	78.5
Good	12.7*	7.9*	19.3	18.8
Fair or poor	1.8*	1.1*	3.0	†
Body mass index (BMI)⁷				
Healthy weight (BMI less than 25)	76.9*	81.9*	67.1	74.6
Overweight (BMI 25–29)	14.6*	12.5*	18.6	17.5
Obese (BMI 30 or higher)	8.6*	5.6*	14.3	7.9*
Special needs, impairments, and health conditions				
Has special health care needs ⁸	23.4*	20.3*	25.9	21.4
Receives special education or early intervention services ⁹	8.4*	6.9*	10.9	6.9*
Has impairment requiring special equipment	1.3	1.2	1.8	†
Has impairment limiting ability to crawl, walk, run, or play ⁹	1.6*	1.3*	2.3	†
Has impairment limiting ability to crawl, walk, run, or play that is expected to last 12 or more months ⁹	1.3*	†	†	–
Ever been told he or she has selected conditions				
ADHD or ADD ¹⁰	9.3*	7.8*	12.4	6.8*
Asthma	12.0*	11.1*	14.0	11.4
Autism ¹⁰	2.4*	1.7*	3.4	†
Cerebral palsy ⁹	0.3	†	†	–
Congenital heart disease ⁹	0.3	†	†	–
Diabetes	0.2	†	†	–
Down syndrome ⁹	0.2	†	†	–
Intellectual disability ⁹	1.2*	0.6*	2.2	†
Other developmental delay ⁹	4.0*	1.2*	2.8	†

EXHIBIT 39. (continued)

Notes: FPL is federal poverty level. SSI is Supplemental Security Income. WIC is Supplemental Nutrition Program for Women, Infants, and Children. ADHD is attention deficit hyperactivity disorder. ADD is attention deficit disorder. Percentage calculations for each item in the exhibit exclude individuals with missing and unknown values. The individual components listed under the subcategories are not always mutually exclusive and may not sum to 100 percent. Standard errors are available online in the Excel version of this exhibit at <https://www.macpac.gov/publication/coverage-demographic-and-health-characteristics-of-non-institutionalized-individuals-age-0-18-by-primary-source-of-health-coverage/>. Due to differences in methodology (such as the wording of questions, length of recall periods, and prompts or probes used to elicit responses), estimates obtained from different survey data sources will vary. For example, the National Health Interview Survey (NHIS) is known to produce higher estimates of service use than the Medical Expenditures Panel Survey (MEPS). For purposes of comparing groups of individuals (as in this exhibit), the NHIS provides the most recent information available. For other purposes, such as measuring levels of use relative to a particular benchmark or goal, it may be appropriate to consult estimates from MEPS or another source.

* Difference from Medicaid or CHIP is statistically significant at the 0.05 level.

† Estimate is unreliable because it has a relative standard error greater than or equal to 30 percent.

– Dash indicates zero.

¹ Total includes all non-institutionalized children under age 19, regardless of coverage source. In this exhibit, the following hierarchy was used to assign individuals with multiple coverage sources to a primary source: Medicare, private, Medicaid and CHIP, other, uninsured. Not separately shown are the estimates for those covered by Medicare (generally children with end-stage renal disease), any type of military health plan, or other federal government-sponsored programs. Coverage source is defined as of the time of the survey interview. Because an individual may have multiple coverage sources or changes over time, responses to survey questions may reflect characteristics or experiences associated with a coverage source other than the one assigned in this exhibit.

² Private health insurance coverage excludes plans that paid for only one type of service, such as accidents or dental care.

³ Medicaid or CHIP also includes persons covered by other state-sponsored health plans.

⁴ Individuals were defined as uninsured if they did not have any private health insurance, Medicaid, CHIP, Medicare, state- or other government-sponsored health plan, or military plan. Individuals were also defined as uninsured if they had only Indian Health Service coverage or had only a private plan that paid for one type of service, such as accidents or dental care.

⁵ Due to the fact that a hierarchy was used in this exhibit to assign individuals with multiple coverage sources to a primary source (see note 1), the Medicaid or CHIP percentages shown in this row exclude individuals who also have Medicare (which is rare for children) or private coverage. Components do not sum to 100 percent because not all coverage sources are shown.

⁶ Characteristic is listed under demographics because low income is one of the criteria for SSI eligibility. However, SSI receipt is also an indicator of disability. For a child to be eligible for SSI, he or she must have a medically determinable physical or mental impairment that results in marked and severe functional limitations and that is generally expected to last at least 12 months or result in death.

⁷ Survey information is limited to children age 12 or older.

⁸ Due in part to changes in the 2011 NHIS questionnaire as well as other methodological changes, the definition of children with special health care needs differs slightly from the definition MACPAC used in versions prior to 2016. Under the children with special health care needs definition applied here, a child must have at least one diagnosed or parent-reported condition expected to be an ongoing health condition and also must meet at least one of the criteria related to elevated service use or elevated need, including reported unmet need for care. For more information on the methods used to identify children with special health care needs, see <https://www.macpac.gov/macstats/data-sources-and-methods/>.

⁹ Survey information is limited to children age 0–17.

¹⁰ Survey information is limited to children age 2–17.

Source: MACPAC, 2019, analysis of NHIS data.

EXHIBIT 40. Use of Care among Non-Institutionalized Individuals Age 0–18 by Primary Source of Health Coverage, 2018, NHIS Data

Characteristics	Primary coverage source at time of interview ¹			
	Total	Private ²	Medicaid or CHIP ³	Uninsured ⁴
Total (percent distribution across coverage sources)⁵	100.0%	55.6%	34.6%	5.1%
Contact with health care professionals (past 12 months)				
Number of times saw a doctor or other health professional, excluding dental visits and inpatient hospital stays				
None	8.5	7.1	8.0	26.2*
At least 1	91.5	92.9	92.0	73.8*
1	24.2	22.9	25.3	31.3
2–3	37.7	38.8	37.2	27.5*
4 or more	29.6	31.2	29.5	15.0*
Saw selected health professional				
General doctor	84.2	87.5*	82.1	64.5*
General doctor, nurse practitioner, physician assistant, midwife, or obstetrician-gynecologist	86.3	89.7*	84.1	67.5*
Medical specialist	16.0*	18.3*	13.5	6.2*
Eye doctor	27.7	30.0*	25.6	20.5*
Mental health professional ⁶	9.8	9.4	10.5	†
Doctor, for emotional or behavioral problem ⁷	5.6*	4.6*	7.2	5.0
Dentist ⁸	82.6	85.6*	81.2	60.1*
Any health professional, excluding dental ⁹	89.9	92.6*	88.3	74.4*
Any health professional, including dental ⁹	96.7	98.3*	95.9	85.1*
Had at least 1 overnight hospital stay ¹⁰	4.8	5.0	4.8	†
Received care at home	1.1	0.9	1.4	†
Receipt of appropriate care (past 12 months)				
Had well-child checkup ⁷	86.5	88.7*	86.6	61.1*
Had more than 15 office or clinic visits	2.2	2.5	1.9	†
Number of emergency room visits				
None	80.7*	84.8*	73.9	81.6*
At least 1	19.3*	15.2*	26.1	18.4*
1	11.9*	10.1*	14.7	10.3*
2–3	6.0*	4.2*	8.9	7.5
4 or more	1.5*	0.9*	2.5	†

EXHIBIT 40. (continued)

Notes: NHIS is National Health Interview Survey. Percentage calculations for each item in the exhibit exclude individuals with missing and unknown values. The individual components listed under the subcategories are not always mutually exclusive and may not sum to 100 percent. Standard errors are available in the Excel version of this exhibit at <https://www.macpac.gov/publication/use-of-care-among-non-institutionalized-individuals-age-0-18-by-primary-source-of-health-coverage-data-from-national-health-interview-survey/>. Due to differences in methodology (such as the wording of questions, length of recall periods, and prompts or probes used to elicit responses), estimates obtained from different survey data sources will vary. For example, the NHIS is known to produce higher estimates of service use than the Medical Expenditures Panel Survey (MEPS). For purposes of comparing groups of individuals (as in this exhibit), the NHIS provides the most recent information available. For other purposes, such as measuring levels of use relative to a particular benchmark or goal, it may be appropriate to consult estimates from MEPS or another source.

* Difference from Medicaid or CHIP is statistically significant at the 0.05 level.

† Estimate is unreliable because it has a relative standard error greater than or equal to 30 percent.

¹ Total includes all non-institutionalized children under age 19, regardless of coverage source. In this exhibit, the following hierarchy was used to assign individuals with multiple coverage sources to a primary source: Medicare, private, Medicaid or CHIP, other, uninsured. Not separately shown are the estimates for those covered by Medicare (generally children with end-stage renal disease), any type of military health plan, or other federal government-sponsored programs. Coverage source is defined as of the time of the survey interview. Because an individual may have multiple coverage sources or changes over time, responses to survey questions may reflect characteristics or experiences associated with a coverage source other than the one assigned in this exhibit.

² Private health insurance coverage excludes plans that paid for only one type of service, such as accidents or dental care.

³ Medicaid or CHIP also includes persons covered by other state-sponsored health plans.

⁴ Individuals were defined as uninsured if they did not have any private health insurance, Medicaid, CHIP, Medicare, state- or other government-sponsored health plan, or military plan. Individuals were also defined as uninsured if they had only Indian Health Service coverage or had only a private plan that paid for one type of service, such as accidents or dental care.

⁵ Due to the fact that a hierarchy was used in this exhibit to assign individuals with multiple coverage sources to a primary source (see note 1), the Medicaid and CHIP percentages shown in this row exclude individuals who also have Medicare (which is rare for children) or private coverage. Components do not sum to 100 percent because not all coverage sources are shown.

⁶ Survey information is limited to children age two or older.

⁷ Survey information is limited to children age 0–17.

⁸ Survey information is limited to children age one or older.

⁹ Any health professional includes general doctor, nurse practitioner, physician assistant, midwife, obstetrician-gynecologist, medical specialist, eye doctor, mental health professional, doctor for emotional or behavioral problem, therapist, chiropractor, or podiatrist.

¹⁰ Includes stays for newborns.

Source: MACPAC, 2019, analysis of NHIS data.

EXHIBIT 41. Use of Care among Non-Institutionalized Individuals Age 0–18 by Primary Source of Health Coverage, 2017, MEPS Data

Characteristics	Primary coverage source at time of most recent interview ¹			
	Total	Private ²	Medicaid or CHIP ³	Uninsured ⁴
Total (percent distribution across coverage sources)⁵	100.0%	57.0%	36.5%	5.0%
Contact with health care professionals (past 12 months)				
Number of office-based visits (to a doctor or other health professional), excluding dental visits and inpatient hospital stays				
None	25.6*	21.6*	29.0	45.4*
At least 1	74.4*	78.4*	71.0	54.6*
1	23.2	23.1	23.4	26.8
2–3	26.3*	28.1*	24.0	20.8
4 or more	24.9	27.3*	23.6	6.9*
Had at least 1 overnight hospital stay	2.2*	1.8*	2.9	†
Received care at home	1.4*	1.1*	2.1	†
Had at least 1 dental care visit ⁶	50.3*	56.4*	43.0	33.4*
Receipt of appropriate care (past 12 months)				
Had more than 15 office-based or hospital outpatient visits	4.2	4.3	4.3	†
Number of emergency room visits				
None	88.5*	90.5*	84.8	90.8*
At least 1	11.5*	9.5*	15.2	9.2*
1	9.1*	7.7*	11.7	7.0*
2–3	2.2*	1.6*	3.0	†
4 or more	0.2*	†	0.4	†

Notes: MEPS is the Medical Expenditure Panel Survey. Percentage calculations for each item in the exhibit exclude individuals with missing and unknown values. Standard errors are available on the second sheet of the Excel version of this exhibit at <https://www.macpac.gov/publication/use-of-care-among-non-institutionalized-individuals-age-0-18-by-primary-source-of-health-coverage-data-from-medical-expenditures-panel-survey/>. Due to differences in methodology (such as the wording of questions, length of recall periods, and prompts or probes used to elicit responses), estimates obtained from different survey data sources will vary. For example, the National Health Interview Survey (NHIS) is known to produce higher estimates of service use than the MEPS. For purposes of comparing groups of individuals, the NHIS provides the most recent information available. For other purposes, such as measuring levels of use relative to a particular benchmark or goal, it may be appropriate to consult estimates from MEPS or another source.

* Difference from Medicaid or CHIP is statistically significant at the 0.05 level.

† Estimate is unreliable because it has a relative standard error greater than or equal to 30 percent.

¹ Total includes all non-institutionalized children under age 19, regardless of coverage source. In this exhibit, the following hierarchy was used to assign individuals with multiple coverage sources to a primary source: Medicare, private, Medicaid or CHIP, other, uninsured. Not separately shown are the estimates for those covered by Medicare (generally children with end-stage renal disease), any type of military health plan, or other federal government-sponsored programs. Coverage source is defined as of the

EXHIBIT 41. (continued)

time of the most recent survey interview. Because an individual may have multiple coverage sources or changes over time, responses to survey questions may reflect characteristics or experiences associated with a coverage source other than the one assigned in this exhibit.

² Private health insurance coverage excludes plans that paid for only one type of service, such as accidents or dental care.

³ Medicaid or CHIP also includes persons covered by other state-sponsored health plans.

⁴ Individuals were defined as uninsured if they did not have any private health insurance, Medicaid, CHIP, Medicare, state- or other government-sponsored health plan, or military plan. Individuals were also defined as uninsured if they had only Indian Health Service coverage or only a private plan that paid for one type of service, such as accidents or dental care.

⁵ Due to the fact that a hierarchy was used in this exhibit to assign individuals with multiple coverage sources to a primary source (see note 1), the Medicaid or CHIP percentages shown in this row exclude individuals who also have Medicare (which is rare for children) or private coverage. Components do not sum to 100 percent because not all coverage sources are shown.

⁶ This is a new measure that should not be compared to other dental measures included in databooks prior to this year. Dental visit is defined as a visit to any person for dental care including general dentists, dental hygienists, dental technicians, dental surgeons, orthodontists, endodontists, and periodontists. Additional dental variables included in previous years (general dentist, orthodontist, dental check-up) were not available this year.

Source: MACPAC, 2019, analysis of MEPS data.

EXHIBIT 42. Measures of Access to Care among Non-Institutionalized Individuals Age 0–18 by Primary Source of Health Coverage, 2018

Characteristics	Primary coverage source at time of interview ¹			
	Total	Private ²	Medicaid or CHIP ³	Uninsured ⁴
Total (percent distribution across coverage sources)⁵	100.0%	55.6%	34.6%	5.1%
Connection to the health care system (past 12 months)				
Has a usual source of care ⁶	95.0	97.1*	95.0	73.3*
Had the same usual source of medical care 12 months ago	88.4	90.8*	88.0	67.7*
Timeliness of care (past 12 months)				
Delayed medical care due to any access barrier indicated below	10.7*	7.6*	14.7	22.0*
Delayed because of costs	2.5	1.8	1.9	16.0*
Delayed for provider-related reasons ⁷	7.8*	5.9*	11.1	8.7
Delayed due to lack of transportation	1.6*	0.5*	3.6	†
Unmet need for selected types of care due to cost				
Medical care	1.3	0.9	1.2	8.0*
Mental health care or counseling ⁸	1.1	0.7	1.3	†
Dental care ⁸	4.7	3.3*	5.1	18.6*
Prescription drugs	1.8*	0.8*	2.8	7.3*
Eyeglasses ⁸	1.7	1.1*	2.2	5.1

Notes: Percentage calculations for each item in the table exclude individuals with missing and unknown values. The individual components listed under the subcategories are not mutually exclusive and may not sum to 100 percent. Standard errors are available in the Excel version of this exhibit at <https://www.macpac.gov/publication/measures-of-access-to-care-for-non-institutionalized-children-by-source-of-health-coverage/>. Due to differences in methodology (such as the wording of questions, length of recall periods, and prompts or probes used to elicit responses), estimates obtained from different survey data sources will vary. For example, the National Health Interview Survey (NHIS) is known to produce higher estimates of service use than the Medical Expenditure Panel Survey (MEPS). For purposes of comparing groups of individuals (as in this exhibit), the NHIS provides the most recent information available. For other purposes, such as measuring levels of use relative to a particular benchmark or goal, it may be appropriate to consult estimates from MEPS or another source.

* Difference from Medicaid or CHIP is statistically significant at the 0.05 level.

† Estimate is unreliable because it has a relative standard error greater than or equal to 30 percent.

¹ Total includes all non-institutionalized children under age 19, regardless of coverage source. In this exhibit, the following hierarchy was used to assign individuals with multiple coverage sources to a primary source: Medicare, private, Medicaid or CHIP, other, uninsured. Not separately shown are the estimates for those covered by Medicare (generally children with end-stage renal disease), any type of military health plan, or other federal government-sponsored programs. Coverage source is defined as of the time of the survey interview. Because an individual may have multiple coverage sources or changes over time, responses to survey questions may reflect characteristics or experiences associated with a coverage source other than the one assigned in this exhibit.

EXHIBIT 42. (continued)

- ² Private health insurance coverage excludes plans that paid for only one type of service, such as accidents or dental care.
- ³ Medicaid or CHIP also includes persons covered by other state-sponsored health plans.
- ⁴ Individuals were defined as uninsured if they did not have any private health insurance, Medicaid, CHIP, Medicare, state- or other government-sponsored health plan, or military plan. Individuals were also defined as uninsured if they had only Indian Health Service coverage or had only a private plan that paid for one type of service, such as accidents or dental care.
- ⁵ Due to the fact that a hierarchy was used in this exhibit to assign individuals with multiple coverage sources to a primary source (see note 1), the Medicaid or CHIP percentages shown in this row exclude individuals who also have Medicare (which is rare for children) or private coverage. Components do not sum to 100 percent because not all coverage sources are shown.
- ⁶ Excludes emergency room.
- ⁷ Includes any of the following: parent could not get an appointment, had to wait too long to see doctor, could not go when open, could not get through on phone.
- ⁸ Survey information is limited to children age two or older.

Source: MACPAC, 2019, analysis of NHIS data.

EXHIBIT 43. Coverage, Demographic, and Health Characteristics of Non-Institutionalized Individuals Age 19–64 by Primary Source of Health Coverage, 2018

Characteristic	Primary coverage source at time of interview ¹				
	Total	Medicare	Private ²	Medicaid or CHIP ³	Uninsured ⁴
Total (percent distribution across coverage sources)⁵	100.0%	4.0%	68.8%	10.5%	13.1%
Coverage					
Length of time with any coverage during year					
Full year	83.2*	97.1*	94.9*	89.7	–
Part year	8.2*	†	5.1*	10.3	27.7*
No coverage during year	8.6*	–	–	–	72.3*
Demographics					
Age					
19–25	15.0*	†	14.7*	19.7	18.0
26–44	42.1*	20.6*	41.3*	48.5	48.2
45–54	21.3*	21.1*	22.3*	15.9	20.2*
55–64	21.6*	56.3*	21.7*	15.9	13.6
Gender					
Male	49.1*	51.3*	49.1*	37.4	55.8*
Female	50.9*	48.7*	50.9*	62.6	44.2*
Race					
Hispanic	18.1*	15.3*	13.8*	25.8	36.9*
White, non-Hispanic	60.7*	61.5*	66.7*	43.3	42.1
Black, non-Hispanic	12.9*	18.1	11.0*	21.4	14.2*
Other non-white, non-Hispanic	8.3	5.1*	8.6	9.5	6.8
Marital status					
Married	52.3*	33.9	59.1*	29.2	38.3*
Widowed	1.6	4.5*	1.3*	2.0	1.5
Divorced or separated	10.4*	23.9*	8.4*	14.1	13.1
Living with partner	9.1*	8.8*	8.0*	13.5	11.8
Never married	26.7*	28.8*	23.2*	41.2	35.4*
Family income					
Less than 138 percent FPL	18.4*	42.3*	6.9*	59.7	20.9*
Has income in ranges below					
Less than 100 percent FPL	11.7*	26.6*	4.0*	41.3	12.6*
100–199 percent FPL	16.4*	34.3	9.3*	35.2	19.9*
200–399 percent FPL	28.1*	24.6*	29.5*	17.3	30.2*

EXHIBIT 43. (continued)

Characteristic	Primary coverage source at time of interview ¹				
	Total	Medicare	Private ²	Medicaid or CHIP ³	Uninsured ⁴
400 percent FPL or higher	43.8%*	14.2%*	57.2%*	5.9%	37.2%*
Education					
Less than high school	9.9*	20.5	4.4*	24.1	26.0
High school diploma or GED certificate	23.6*	35.6	19.3*	35.6	33.4
Some college	31.5	30.1	32.0	31.8	26.0*
College or graduate degree	35.1*	13.8*	44.4*	8.5	14.6*
Other demographic characteristics					
Citizen of United States	90.7	95.4*	93.4*	88.7	75.2*
Parent of a dependent child	34.2*	12.0*	36.3*	43.7	34.6*
Currently working	75.8*	15.4*	85.5*	48.3	69.6*
Veteran	5.7*	7.5*	4.5*	2.3	2.2
Receives SSI or SSDI ⁶	5.1*	68.9*	0.8*	14.2	1.0*
Receives SSI	2.3*	20.8*	0.3*	11.3	†
Receives SSDI	3.5*	57.0*	0.6*	5.5	†
Health					
Current health status					
Excellent or very good	64.2*	17.6*	71.6*	47.2	57.3*
Good	25.4*	30.3	22.7*	30.5	31.0
Fair or poor	10.4*	52.2*	5.7*	22.2	11.7*
Body mass index (BMI)					
Healthy weight (BMI less than 25)	32.8*	23.2*	34.3*	29.3	32.0
Overweight (BMI 25–29)	32.9	26.5*	33.5	31.5	32.0
Obese (BMI 30 or higher)	34.3*	50.3*	32.2*	39.2	36.0
Smoking status					
Current smoker	15.4*	28.8	11.2*	25.7	24.1
Former smoker	18.1*	23.0*	18.7*	13.8	14.7
Never smoked	66.5*	48.2*	70.0*	60.4	61.2
Limitations and health conditions					
Has basic action difficulty or complex activity limitation					
Any basic action difficulty ⁷	27.6*	82.3*	21.4*	44.9	26.7*
Any complex activity limitation ⁸	12.2*	77.7*	6.0*	27.5	11.0*



EXHIBIT 43. (continued)

Characteristic	Primary coverage source at time of interview ¹				
	Total	Medicare	Private ²	Medicaid or CHIP ³	Uninsured ⁴
Either one	29.2%*	87.7%*	22.6%*	47.3%	28.8%*
Has functional limitation ⁹	11.1*	61.5*	6.3*	22.6	9.5*
Has difficulty walking without equipment	3.4*	29.3*	1.4*	7.1	2.0*
Has health condition requiring special equipment	4.3*	30.5*	2.3*	8.1	2.6*
Needs help with any of the following ADLs					
Personal care	1.5*	15.2*	0.5*	4.3	0.6*
Bathing	0.9*	9.7*	0.2*	3.1	†
Eating	0.3*	†	†	0.9	†
Transferring	0.7*	5.8*	0.3*	2.2	†
Toileting	0.5*	4.3*	†	1.7	†
Getting around in home	0.6*	4.8*	0.2*	1.9	†
Number of ADLs needing assistance					
None	98.7*	87.2*	99.6*	96.0	99.7*
1–2	0.6*	6.1*	0.2*	1.6	†
3–4	0.4*	4.6*	†	1.3	†
5–6	0.3	2.1	†	†	†
Other limitations					
Unable to work now due to health problem	6.8*	61.9*	2.1*	17.7	4.3*
Limited in amount or kind of work due to health	10.0*	72.6*	4.2*	24.1	8.0*
Lost all natural teeth	4.5*	14.3*	3.3*	8.0	4.7*
Has depressed or anxious feelings ¹⁰	5.4*	19.6*	3.0*	12.5	7.2*
Currently pregnant ¹¹	3.0*	–	2.7*	5.7	†
Ever been told he or she has selected conditions					
Hypertension	23.7*	54.4*	22.2*	26.4	17.9*
Coronary heart disease	2.0*	10.2*	1.4*	3.0	0.9*
Heart attack	1.6*	8.8*	0.9*	3.0	1.1*
Stroke	1.7*	12.6*	0.8*	3.1	1.5*
Cancer	5.2	11.3*	5.4	5.0	2.1*
Diabetes	7.4*	27.1*	5.8*	11.4	5.8*
Arthritis	17.2*	49.1*	15.4*	21.4	10.8*
Asthma	13.8*	19.9	13.5*	17.3	10.3*

EXHIBIT 43. (continued)

Characteristic	Primary coverage source at time of interview ¹				
	Total	Medicare	Private ²	Medicaid or CHIP ³	Uninsured ⁴
Chronic bronchitis (past 12 months)	3.2%*	11.2%*	2.6%*	5.1%	2.7%*
Liver condition (past 12 months)	1.7*	7.4*	1.2*	2.8	1.2*
Weak or failing kidneys (past 12 months)	1.4	10.5*	0.8*	2.1	0.9*

Notes: ADL is activity of daily living. FPL is federal poverty level. GED is General Equivalence Diploma. SSI is Supplemental Security Income. SSDI is Social Security Disability Insurance. Percentage calculations for each item in the exhibit exclude individuals with missing and unknown values. The individual components listed under the subcategories are not always mutually exclusive and may not add to 100 percent. Standard errors are available online in the downloadable Excel version of this exhibit at <https://www.macpac.gov/publication/coverage-demographic-and-health-characteristics-of-non-institutionalized-individuals-age-19-64-by-primary-source-of-health-coverage/>. Due to differences in methodology (such as the wording of questions, length of recall periods, and prompts or probes used to elicit responses), estimates obtained from different survey data sources will vary. For example, the National Health Interview Survey (NHIS) is known to produce higher estimates of service use than the Medical Expenditures Panel Survey (MEPS). For purposes of comparing groups of individuals (as in this exhibit), the NHIS provides the most recent information available. For other purposes, such as measuring levels of use relative to a particular benchmark or goal, it may be appropriate to consult estimates from MEPS or another source.

* Difference from Medicaid or CHIP is statistically significant at the 0.05 level.

† Estimate is unreliable because it has a relative standard error greater than or equal to 30 percent.

– Dash indicates zero.

¹ Total includes all non-institutionalized individuals age 19–64, regardless of coverage source. In this exhibit, the following hierarchy was used to assign individuals with multiple coverage sources to a primary source: Medicare, private, Medicaid or CHIP, other, uninsured. Not separately shown are the estimates for those covered by any type of military health plan or other federal government-sponsored programs. Coverage source is defined as of the time of the survey interview. Because an individual may have multiple coverage sources or changes over time, responses to survey questions may reflect characteristics or experiences associated with a coverage source other than the one assigned in this exhibit.

² Private health insurance coverage excludes plans that paid for only one type of service, such as accidents or dental care.

³ Medicaid or CHIP also includes persons covered by other state-sponsored health plans.

⁴ Individuals were defined as uninsured if they did not have any private health insurance, Medicaid, CHIP, Medicare, state- or other government-sponsored health plan, or military plan. Individuals were also defined as uninsured if they had only Indian Health Service coverage or had only a private plan that paid for one type of service, such as accidents or dental care.

⁵ Due to the fact that a hierarchy was used in this exhibit to assign individuals with multiple coverage sources to a primary source (see note 1), the Medicaid or CHIP percentages shown in this row exclude individuals who also have Medicare or private coverage. Components do not sum to 100 percent because not all coverage sources are shown.

⁶ Characteristic is listed under demographics because low income is one of the criteria for SSI eligibility, and the inability to engage in a specified level of work activity and earnings (referred to as substantial gainful activity in federal statute) is one of the criteria for SSDI eligibility. However, SSI or SSDI receipt is also an indicator of disability. For an adult to be eligible for SSI or SSDI, he or she must have a medically determinable physical or mental impairment that is expected to last at least 12 months or to result in death.

EXHIBIT 43. (continued)

⁷ Captures limitations or difficulties in movement (walking, standing, bending or kneeling, reaching overhead, and using the hands and fingers) and limitations or difficulties in sensory, emotional (i.e., feelings that interfere with accomplishing daily activities), and mental (i.e., difficulties with remembering or experiencing confusion) functioning that are associated with some health problems.

⁸ Reflects a limitation in the tasks and organized activities that, when executed, make up numerous social roles, such as working, attending school, or maintaining a household. Adults are defined as having a complex activity limitation if they have one or more of the following types of limitations: self-care limitation, social limitation, or work limitation.

⁹ Functional limitation is defined as "very difficult" or "cannot do" for the following activities: grasp small objects; reach above one's head; sit more than 2 hours; lift or carry 10 pounds; climb a flight of stairs; push a heavy object; walk one-quarter of a mile; stand more than 2 hours; stoop, bend, or kneel. These estimates should not be compared to the 2014 estimates published in the December 2015 data book which also included responses of "only a little" and "somewhat difficult".

¹⁰ These estimates should not be compared to the 2014 estimates published in the December 2015 data book due to a change in the characteristic's definition.

¹¹ Information is limited to women age 19–44.

Source: MACPAC, 2019, analysis of NHIS data.

EXHIBIT 44. Use of Care among Non-Institutionalized Individuals Age 19–64 by Primary Source of Health Coverage, 2018, NHIS Data

Characteristics	Primary coverage source at time of interview ¹				
	Total	Medicare	Private ²	Medicaid or CHIP ³	Uninsured ⁴
Total (percent distribution across coverage sources)⁵	100.0%	4.0%	68.8%	10.5%	13.1%
Contact with health care professionals (past 12 months)					
Number of times saw a doctor or other health professional, excluding dental visits and inpatient hospital stays					
None	20.1	8.7*	16.3	18.3	46.8*
At least 1	79.9	91.3*	83.7	81.7	53.2*
1	20.0*	7.3*	21.8*	17.0	17.9
2–3	27.0*	20.2	29.3*	23.5	19.6*
4 or more	32.9*	63.8*	32.7*	41.2	15.7*
Saw selected health professional					
General doctor	65.6	83.0*	69.5	67.4	36.4*
General doctor, nurse practitioner, physician assistant, midwife, or obstetrician-gynecologist	74.5	87.2*	78.6	76.6	45.7*
Medical specialist	24.8	49.8*	26.1	24.7	9.7*
Eye doctor	39.0*	42.5*	43.9*	29.2	19.2*
Mental health professional	11.1*	26.7*	9.4*	18.9	6.1*
Dentist	65.7*	50.6	73.7*	54.5	37.2*
Any health professional, excluding dental ⁶	82.5	92.5*	86.5*	83.4	56.8*
Any health professional, including dental ⁶	90.5	94.8*	94.5*	89.7	68.6*
Had at least 1 overnight hospital stay	6.8*	18.9*	5.5*	12.9	4.9*
Received care at home	1.5*	10.8*	0.8*	3.5	†
Receipt of appropriate care (past 12 months)					
Had cholesterol checked ⁷					
All individuals	61.7	83.4*	65.7*	59.8	32.6*
Men age 35–64	68.3	84.4*	73.1*	63.2	34.2*
Individuals with elevated risk of cardiac disease ^{7,8}	71.6	87.7*	77.4*	69.2	38.6*

EXHIBIT 44. (continued)

Characteristics	Primary coverage source at time of interview ¹				
	Total	Medicare	Private ²	Medicaid or CHIP ³	Uninsured ⁴
Had flu shot					
All individuals	38.4%*	53.0%*	41.9%*	33.1%	16.4%*
Individuals age 50–64	47.0	56.4*	49.0	46.2	20.8*
Had any test for colorectal cancer (age 50–64) ⁹	20.2*	24.8	20.3*	25.5	8.5*
Had Pap smear or test for cervical cancer (women age 21–60) ⁹	48.5	30.5*	51.6	51.4	31.3*
Had more than 15 office or clinic visits	5.7*	19.9*	5.0*	8.7	2.0*
Number of emergency room visits					
None	79.9*	62.3	84.0*	62.6	79.3*
At least 1	20.1*	37.7	16.0*	37.4	20.7*
1	12.4*	13.7*	11.1*	19.0	13.0*
2–3	5.5*	15.0	3.7*	12.4	5.6*
4 or more	2.2*	9.0*	1.2*	6.0	2.1*

Notes: NHIS is the National Health Interview Survey. Percentage calculations for each item in the exhibit exclude individuals with missing and unknown values. The individual components listed under the subcategories are not always mutually exclusive and may not sum to 100 percent. Standard errors are available on the second sheet of the Excel version of this exhibit at <https://www.macpac.gov/publication/use-of-care-among-non-institutionalized-individuals-age-19-64-by-primary-source-of-health-coverage-data-from-national-health-interview-survey/>. Due to differences in methodology (such as the wording of questions, length of recall periods, and prompts or probes used to elicit responses), estimates obtained from different survey data sources will vary. For example, the NHIS is known to produce higher estimates of service use than the Medical Expenditures Panel Survey (MEPS). For purposes of comparing groups of individuals (as in this exhibit), the NHIS provides the most recent information available. For other purposes, such as measuring levels of use relative to a particular benchmark or goal, it may be appropriate to consult estimates from MEPS or another source.

* Difference from Medicaid or CHIP is statistically significant at the 0.05 level.

† Estimate is unreliable because it has a relative standard error greater than or equal to 30 percent.

¹ Total includes all non-institutionalized individuals age 19–64, regardless of coverage source. In this exhibit, the following hierarchy was used to assign individuals with multiple coverage sources to a primary source: Medicare, private, Medicaid or CHIP, other, uninsured. Not separately shown are the estimates for those covered by any type of military health plan or other federal government-sponsored programs. Coverage source is defined as of the time of the survey interview. Because an individual may have multiple coverage sources or changes over time, responses to survey questions may reflect characteristics or experiences associated with a coverage source other than the one assigned in this exhibit.

² Private health insurance coverage excludes plans that paid for only one type of service, such as accidents or dental care.

³ Medicaid or CHIP also includes persons covered by other state-sponsored health plans.

⁴ Individuals were defined as uninsured if they did not have any private health insurance, Medicaid, CHIP, Medicare, state- or other government-sponsored health plan, or military plan. Individuals were also defined as uninsured if they had only Indian Health Service coverage or had only a private plan that paid for one type of service, such as accidents or dental care.

EXHIBIT 44. (continued)

⁵ Due to the fact that a hierarchy was used in this exhibit to assign individuals with multiple coverage sources to a primary source (see note 1), the Medicaid or CHIP percentages shown in this row exclude individuals who also have Medicare or private coverage. Components do not sum to 100 percent because not all coverage sources are shown.

⁶ Any health professional includes general doctor, nurse practitioner, physician assistant, midwife, obstetrician-gynecologist, medical specialist, eye doctor, mental health professional, therapist, chiropractor, or podiatrist.

⁷ These estimates should not be compared to the 2014 estimates published in the December 2015 data book due to a change in the screening questions for cholesterol, blood pressure, and diabetes. In 2014, as part of the supplemental questions pertaining to the Million Hearts® Initiative, the NHIS included additional blood pressure and cholesterol screening questions. After 2014, the NHIS reverted back to the original screening questions, so estimates should be comparable with years earlier than 2014.

⁸ Individuals of any age or sex who report hypertension or diabetes, or who currently smoke.

⁹ These estimates should not be compared to the 2017 estimates published in the December 2018 data book due to a change in the characteristic's definition.

Source: MACPAC, 2019, analysis of NHIS data.

EXHIBIT 45. Use of Care among Non-Institutionalized Individuals Age 19–64 by Primary Source of Health Coverage, 2017, MEPS Data

Characteristics	Primary coverage source at time of most recent interview ¹				
	Total	Medicare	Private ²	Medicaid or CHIP ³	Uninsured ⁴
Total (percent distribution across coverage sources)⁵	100.0%	3.9%	68.6%	11.0%	14.6%
Contact with health care professionals (past 12 months)					
Number of office-based visits (to a doctor or other health professional), excluding dental visits and inpatient hospital stays					
None	30.5	7.4*	26.0*	32.6	56.5*
At least 1	69.5	92.6*	74.0*	67.4	43.5*
1	15.4*	6.1*	16.2*	12.8	16.1*
2–3	18.8	14.7	20.8*	16.7	12.7*
4 or more	35.3	71.8*	37.0	37.9	14.7*
Had at least 1 overnight hospital stay	5.5*	16.9*	4.2*	11.4	3.7*
Received care at home	1.6*	16.1*	0.6*	3.5	0.8*
Had at least 1 dental care visit ⁶	39.9*	30.8*	47.4*	24.2	19.2*
Receipt of appropriate care (past 12 months)					
Had more than 15 office-based or hospital outpatient visits	8.3*	27.6*	8.0*	10.0	3.2*
Number of emergency room visits					
None	87.8*	69.1*	90.4*	77.9	88.2*
At least 1	12.2*	30.9*	9.6*	22.1	11.8*
1	9.0*	17.5	7.6*	14.4	8.7*
2–3	2.8*	10.5*	1.8*	6.1	2.8*
4 or more	0.4*	2.8	†	1.6	†

Notes: MEPS is the Medical Expenditure Panel Survey. Percentage calculations for each item in the exhibit exclude individuals with missing and unknown values. Standard errors are available in the Excel version of this exhibit at <https://www.macpac.gov/publication/use-of-care-among-non-institutionalized-individuals-age-19-64-by-primary-source-of-health-coverage-data-from-medical-expenditures-panel-survey/>. Due to differences in methodology (such as the wording of questions, length of recall periods, and prompts or probes used to elicit responses), estimates obtained from different survey data sources will vary. For example, the National Health Interview Survey (NHIS) is known to produce higher estimates of service use than the MEPS. For purposes of comparing groups of individuals, the NHIS provides the most recent information available. For other purposes, such as measuring levels of use relative to a particular benchmark or goal, it may be appropriate to consult estimates from MEPS or another source.

* Difference from Medicaid or CHIP is statistically significant at the 0.05 level.

† Estimate is unreliable because it has a relative standard error greater than or equal to 30 percent.

EXHIBIT 45. (continued)

¹ Total includes all non-institutionalized individuals age 19–64, regardless of coverage source. In this exhibit, the following hierarchy was used to assign individuals with multiple coverage sources to a primary source: Medicare, private, Medicaid or CHIP, other, uninsured. Not separately shown are the estimates for those covered by any type of military health plan or other federal government-sponsored programs. Coverage source is defined as of the time of the most recent survey interview. Because an individual may have multiple coverage sources or changes over time, responses to survey questions may reflect characteristics or experiences associated with a coverage source other than the one assigned in this exhibit.

² Private health insurance coverage excludes plans that paid for only one type of service, such as accidents or dental care.

³ Medicaid or CHIP also includes persons covered by other state-sponsored health plans.

⁴ Individuals were defined as uninsured if they did not have any private health insurance, Medicaid, CHIP, Medicare, state- or other government-sponsored health plan, or military plan. Individuals were also defined as uninsured if they had only Indian Health Service coverage or had only a private plan that paid for one type of service, such as accidents or dental care.

⁵ Due to the fact that a hierarchy was used in this exhibit to assign individuals with multiple coverage sources to a primary source (see note 1), the Medicaid or CHIP percentages shown in this row exclude individuals who also have Medicare or private coverage. Components do not sum to 100 percent because not all coverage sources are shown.

⁶ This is a new measure that should not be compared to other dental measures included in databooks prior to this year. Dental visit is defined as a visit to any person for dental care including general dentists, dental hygienists, dental technicians, dental surgeons, orthodontists, endodontists, and periodontists. Additional dental variables included in previous years (general dentist, orthodontist, dental check-up) were not available this year.

Source: MACPAC, 2019, analysis of MEPS data.

EXHIBIT 46. Measures of Access to Care among Non-Institutionalized Individuals Age 19–64 by Primary Source of Health Coverage, 2018

Characteristics	Primary coverage source at time of interview ¹				
	Total	Medicare	Private ²	Medicaid or CHIP ³	Uninsured ⁴
Total (percent distribution across coverage sources)⁵	100.0%	4.0%	68.8%	10.5%	13.1%
Connection to the health care system (past 12 months)					
Has a usual source of care ⁶	82.4*	92.5*	87.8*	85.3	47.5*
Had the same usual source of medical care 12 months ago	74.1	85.1*	78.7	76.5	43.5*
Timeliness of care (past 12 months)					
Delayed medical care due to any access barrier indicated below	22.2*	33.9*	18.4*	25.7	35.8*
Delayed because of costs	11.1*	16.5*	8.1	7.9	29.5*
Delayed for provider-related reasons ⁷	13.1*	20.5	12.4*	17.1	10.5*
Delayed due to lack of transportation	2.3*	9.5	0.9*	7.4	3.0*
Unmet need for selected types of care due to cost					
Medical care	7.4	12.1*	4.4*	6.2	23.7*
Mental health care or counseling	3.2*	6.5	2.1*	4.8	6.9*
Dental care	12.4*	27.8*	7.8*	17.7	28.0*
Prescription drugs	6.8*	18.7*	4.0*	8.6	17.4*
Eyeglasses	6.9*	17.2*	4.0*	12.1	15.7*

Notes: Percentage calculations for each item in the table exclude individuals with missing and unknown values. The individual components listed under the subcategories are not mutually exclusive and may not sum to 100 percent. Standard errors are available in the Excel version of this exhibit at <https://www.macpac.gov/publication/measures-of-access-to-care-for-non-institutionalized-individuals-age-19-64-by-source-of-health-coverage/>. Due to differences in methodology (such as the wording of questions, length of recall periods, and prompts or probes used to elicit responses), estimates obtained from different survey data sources will vary. For example, the National Health Interview Survey (NHIS) is known to produce higher estimates of service use than the Medical Expenditure Panel Survey (MEPS). For purposes of comparing groups of individuals (as in this exhibit), the NHIS provides the most recent information available. For other purposes, such as measuring levels of use relative to a particular benchmark or goal, it may be appropriate to consult estimates from MEPS or another source.

* Difference from Medicaid or CHIP is statistically significant at the 0.05 level.

EXHIBIT 46. (continued)

- ¹ Total includes all non-institutionalized individuals age 19–64, regardless of coverage source. In this exhibit, the following hierarchy was used to assign individuals with multiple coverage sources to a primary source: Medicare, private, Medicaid or CHIP, other, uninsured. Not separately shown are the estimates for those covered by any type of military health plan or other federal government-sponsored programs. Coverage source is defined as of the time of the survey interview. Because an individual may have multiple coverage sources or changes over time, responses to survey questions may reflect characteristics or experiences associated with a coverage source other than the one assigned in this exhibit.
- ² Private health insurance coverage excludes plans that paid for only one type of service, such as accidents or dental care.
- ³ Medicaid or CHIP also includes persons covered by other state-sponsored health plans.
- ⁴ Individuals were defined as uninsured if they did not have any private health insurance, Medicaid, CHIP, Medicare, state- or other government-sponsored health plan, or military plan. Individuals were also defined as uninsured if they had only Indian Health Service coverage or had only a private plan that paid for one type of service, such as accidents or dental care.
- ⁵ Due to the fact that a hierarchy was used in this exhibit to assign individuals with multiple coverage sources to a primary source (see note 1), the Medicaid or CHIP percentages shown in this row exclude individuals who also have Medicare or private coverage. Components do not sum to 100 percent because not all coverage sources are shown..
- ⁶ Excludes emergency room.
- ⁷ Includes any of the following: individual could not get an appointment, had to wait too long to see doctor, could not go when open, could not get through on phone.

Source: MACPAC, 2019, analysis of NHIS data.

SECTION 6

Technical Guide to MACStats

Section 6: Technical Guide to MACStats

This technical guide provides supplementary information to help readers interpret the exhibits in this data book as well as understand the data sources and methods used. In addition, we explain why MACPAC's statistics, particularly those on enrollment and spending, may differ from each other or from those published elsewhere.¹

Interpreting Medicaid and CHIP Enrollment and Spending Numbers

Published numbers for enrollment in Medicaid and the State Children's Health Insurance Program (CHIP) can vary substantially depending on the source of data, the enrollment period examined, and the individuals included in the data.

Data sources

Medicaid and CHIP enrollment and spending numbers are available from data compiled by states and the federal government in the course of administering these programs. Program data are updated on different schedules, so the latest year of available data may differ depending on the source. MACPAC commonly uses the following types of administrative data, which are submitted by the states to the Centers for Medicare & Medicaid Services (CMS):

- Form CMS-64 data for state-level Medicaid spending;
- Medicaid Statistical Information System (MSIS) data for person-level detail;
- Medicaid managed care enrollment reports; and
- Statistical Enrollment Data System (SEDS) data for CHIP enrollment.

In addition, CMS recently began compiling two new administrative data sources, referred to here as performance indicator enrollment data and CMS-64

enrollment data.² These sources differ in the timing of the reports and the enrollees covered. Performance indicator enrollment data are published monthly by CMS and include only full-benefit Medicaid and CHIP enrollees. CMS-64 enrollment data are published quarterly and include Medicaid enrollees with limited benefits but exclude CHIP enrollees.

Both sources provide more up-to-date information than the MSIS. CMS-64 enrollment data include detailed information about the new adult group made eligible under Section 1902(a)(10)(A)(i)(VIII) of the Social Security Act (the Act) by the Patient Protection and Affordable Care Act (ACA, P.L. 111-148, as amended).

MACPAC uses the spending and enrollment data submitted on the CMS-64 to produce an exhibit on spending and enrollment from the most recent year for all Medicaid enrollees and those adults newly eligible for Medicaid under the ACA (Exhibit 23).

Over the past several years, CMS has been working with states to implement a new version of the MSIS, referred to as the Transformed MSIS (T-MSIS), which will provide more timely data. One consequence of the transition from the MSIS to the T-MSIS is that there is now a gap in available data from many states. Several states began the transition to the T-MSIS in 2014 and as a result, MSIS does not have complete information for fiscal year (FY) 2014. Although all states are now submitting T-MSIS data to CMS, CMS has been working with states to improve the quality and completeness of the data.³ In March 2019, CMS issued an informational bulletin pushing states to resolve data issues and submit improved T-MSIS data for inclusion in the first T-MSIS public file release.⁴ Although these data recently became available for analysis, MACPAC is still working to validate the T-MSIS data for completeness and accuracy.

Because of these data issues, we were not able to update several exhibits that provide enrollment and spending data by eligibility group, and we are reprinting 11 exhibits from last year's edition.⁵ For exhibits that provide national-level data derived from the MSIS, we show FY 2013 data. For exhibits

that provide state-level data, we have published two versions: the (a) version provides FY 2013 data and the (b) version provides FY 2014 data for the states that had sufficient data. For the (b) version FY 2014 tables, we have not published national totals due to the number of states excluded.

MACStats also uses nationally representative surveys based on interviews of individuals, including the National Health Interview Survey (NHIS) and the Medical Expenditure Panel Survey (MEPS). Estimates of Medicaid and CHIP enrollment from survey data tend to be lower than estimates generated from administrative data, in part because survey respondents tend to underreport Medicaid and CHIP coverage. However, survey data provide many more details on individual and family circumstances (for example, health status, ease in accessing services, and reasons for delaying care) and can therefore provide a richer picture of the individuals enrolled in Medicaid and CHIP.

Enrollment period examined

Characterizations of the size of the Medicaid and CHIP populations may vary based on the enrollment period examined. The number of individuals enrolled at a particular point during the year will be lower than the total number enrolled at any point during an entire year. Point-in-time numbers are sometimes referred to as average, full-year equivalent, or person-year enrollment. These statistics are often used for budget analyses (such as those by the CMS Office of the Actuary) and when comparing enrollment and expenditure numbers. Per enrollee spending levels based on full-year equivalents ensure that amounts are not biased by individuals' transitions in and out of Medicaid coverage during the year.

Enrollees versus beneficiaries

Depending on the source and the year in question, data may reflect different ways of characterizing individuals in Medicaid. Certain terms commonly used to refer to people with Medicaid have specific definitions in administrative data sources provided by CMS:⁶

- Enrollees (less commonly referred to as eligibles) are individuals who are eligible for

and enrolled in Medicaid or CHIP. Prior to FY 1990, CMS did not track the number of Medicaid enrollees, but tracked only beneficiaries (see below). In some cases, CMS has estimated the number of enrollees prior to 1990.

- Beneficiaries, or persons served (less commonly referred to as recipients), are enrollees who receive covered services or for whom Medicaid or CHIP payments are made. Prior to FY 1998, individuals were not counted as beneficiaries if managed care payments were the only Medicaid payments made on their behalf. Beginning in FY 1998, however, Medicaid managed care enrollees with no fee-for-service (FFS) spending were also counted as beneficiaries, which increased the number of individuals reported in enrollment statistics. Generally, the number of beneficiaries will approach the number of enrollees as more of these individuals use Medicaid-covered services or are enrolled in managed care.⁷ (In common usage outside of CMS statistical publications, the term beneficiaries is typically synonymous with enrollees.)

Institutionalized and limited-benefit enrollees

Administrative Medicaid data include enrollees who are in institutions, such as nursing facilities, as well as individuals who receive only limited benefits (for example, coverage for emergency services only). Survey data tend to exclude such individuals from counts of coverage. In percentage terms, the difference between estimates from administrative data and estimates from survey data tends to be largest among older beneficiaries, who are more likely to be living in institutions (in which case they are excluded from most surveys) and more likely to be receiving limited Medicaid benefits that pay only for their Medicare premiums and cost sharing (which may not be counted as Medicaid coverage in some surveys).

CHIP enrollees

Medicaid-expansion CHIP enrollees are children who are entitled to the covered services of a state's Medicaid program, but whose Medicaid coverage is

generally funded with CHIP dollars. Depending on the data source, Medicaid enrollment and spending figures may include not only Medicaid enrollees funded with Medicaid dollars, but also Medicaid-expansion CHIP enrollees funded with CHIP dollars. For MACStats, we generally exclude Medicaid-expansion CHIP enrollees from Medicaid analyses, but some data sources do not allow these children to be broken out separately.

Understanding Data on Health and Other Characteristics of Medicaid and CHIP Populations

MACStats uses data from the federal NHIS and the MEPS to describe Medicaid and CHIP enrollees in terms of their self-reported demographic, socioeconomic, and health characteristics as well as their use of care. Background information on these surveys is provided here, along with information on how children with special health care needs are identified using NHIS data.

NHIS and MEPS data

The NHIS is an annual face-to-face household survey of civilian non-institutionalized persons designed to monitor the health of the U.S. population through the collection of information on a broad range of health topics.⁸ A subsample of households that participated in the previous year's NHIS undergo further interviews for the household component of the MEPS, which collects more detailed information on use of health care services and expenditures.⁹

Although other surveys are available, the NHIS is the main survey data source used in MACStats because it provides relatively timely estimates and because its sample size is large enough to produce reliable subgroup estimates and to detect meaningful differences between them. In addition, it is generally considered to be one of the best surveys for health insurance coverage estimates, and it captures detailed information on individuals' health status.¹⁰ However, the NHIS is known to produce higher estimates of service use than the MEPS.¹¹ As a result, MACStats includes estimates of service

use from both sources. For purposes of comparing groups of individuals, the NHIS has the advantage of providing the most recent information available; for other purposes, such as measuring levels of service use relative to a particular benchmark or goal, consulting estimates from the MEPS or another source might be more appropriate.

The NHIS has some limitations. As in most surveys, respondents in the NHIS do not always accurately report information about participation in programs such as Medicaid, CHIP, Medicare, Supplemental Security Income (SSI), and Social Security Disability Insurance. As a result, survey data may not match estimates of program participation computed from the programs' own administrative data. In addition, although the NHIS asks about participation in Medicaid and CHIP in two different questions, program participation estimates from the survey are not reported separately. One reason for this is that many states' CHIP and Medicaid programs use the same name, so respondents may not necessarily know which program funds their children's coverage. Even when the programs have different names, it may be difficult for respondents and interviewers to correctly categorize the coverage. As a result, separate survey questions regarding participation in Medicaid and CHIP are generally used to minimize the undercounting of Medicaid and CHIP enrollees, not to produce valid estimates separately for each program. Thus, survey data analyses typically combine Medicaid and CHIP into a single category.

Children with special health care needs

The term children with special health care needs (CSHCN) is defined by the U.S. Department of Health and Human Services' Maternal and Child Health Bureau as a group of children who "have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally."¹² This definition encompasses children with disabilities and also children with chronic conditions (e.g., asthma, juvenile diabetes, or sickle cell anemia) that range from mild to severe. The category of CSHCN covers a broader range of children than the

category of children with conditions severe enough and family incomes low enough to qualify for SSI.¹³

To identify children in the CSHCN category in the NHIS, MACPAC uses responses to several questions, based on an approach developed by the Child and Adolescent Health Measurement Initiative.¹⁴ Children identified as meeting CSHCN criteria include those with at least one diagnosed or parent-reported ongoing health condition and elevated service use. The selected ongoing health conditions include, for example, attention deficit disorder, developmental delays, cerebral palsy, and heart disease. Examples of parent-reported conditions include suffering from seizures, frequent migraines, and allergies within the past 12 months.¹⁵ In addition to having one of the identified conditions, a child must also meet one of the following criteria related to elevated service use:

- The child is limited in his or her ability or unable to do things most children the same age can do.¹⁶
- The child needs or uses medications prescribed by a doctor (other than vitamins).¹⁷
- The child needs or uses specialized therapies such as physical, occupational, or speech therapy.¹⁸
- The child has above-routine need or use of medical, mental health, home care, or education services.¹⁹
- The child needs or receives treatment or counseling for an emotional, behavioral, or developmental problem.²⁰

The NHIS varies from year to year in the diagnoses and health conditions it asks parents to report, so estimates for number of children in the CSHCN category may not be comparable from year to year.

Methodology for Adjusting Benefit Spending Data

The FY 2013 and FY 2014 Medicaid benefit spending amounts presented in this data book were calculated based on MSIS data that have been adjusted to match total benefit spending reported

by states in CMS-64 data.²¹ Although the CMS-64 provides a more complete accounting of spending than the MSIS and is preferred when examining state or federal spending totals, it cannot be used for analysis of benefit spending by eligibility group and other enrollee characteristics.²² Thus, we adjust MSIS amounts for several reasons:

- CMS-64 data provide an official accounting of state spending on Medicaid for purposes of receiving federal matching dollars; in contrast, MSIS data are used primarily for statistical purposes.
- The MSIS generally understates total Medicaid benefit spending because it excludes disproportionate share hospital (DSH) payments and additional types of supplemental payments made to hospitals and other providers, Medicare premium payments, and certain other amounts.²³
- The MSIS generally overstates net spending on prescribed drugs because it excludes rebates from drug manufacturers.
- Even after accounting for differences in scope and design, the MSIS still tends to produce lower total benefit spending than the CMS-64.²⁴
- The extent to which the MSIS differs from the CMS-64 varies by state, meaning that a cross-state comparison of unadjusted MSIS amounts may not reflect true differences in benefit spending. (See Exhibits 47a and 47b for unadjusted benefit spending amounts in the MSIS as a percentage of benefit spending in the CMS-64.)

The methodology MACPAC uses for adjusting MSIS benefit spending data involves the following steps:

- We aggregate the service types into broad categories that are comparable between the two sources. This is necessary because there is not a one-to-one correspondence of service types in MSIS and CMS-64 data. Even service types that have identical names may still be reported differently in the two sources due to differences in the instructions given to states. (See Exhibit 48 for additional detail on the categories used.)

- We calculate state-specific adjustment factors for each of the service categories by dividing CMS-64 benefit spending by MSIS benefit spending.
- We then multiply MSIS dollar amounts in each service category by the state-specific factors to obtain adjusted MSIS spending. For example, in a state with an FFS hospital factor of 1.2, each Medicaid enrollee with hospital spending in the MSIS would have that spending multiplied by 1.2; doing so makes the sum of adjusted hospital spending amounts among individual Medicaid enrollees in the MSIS total the aggregate hospital spending reported by states in the CMS-64 (as noted later, MACPAC excludes some amounts from the CMS-64 hospital total).²⁵

These adjustments to MSIS data are meant to provide more complete estimates of Medicaid benefit spending across states that can be analyzed by eligibility group and other enrollee characteristics. Other organizations, including the CMS Office of the Actuary, the Kaiser Family Foundation, and the Urban Institute, use similar methodologies, although these may differ in some ways—for example, by using different service categories or producing estimates for future years based on actual data from earlier years.

Readers should note that due to changes in both methods and data, MSIS figures shown here are not directly comparable to earlier years. Key differences between the current and previous methodologies include the following:

- Beginning with the 2014 edition of the MACStats data book, we have excluded DSH payments from CMS-64 totals used to adjust MSIS spending. In earlier editions, DSH payments were included in CMS-64 totals. The rationale for doing so was that DSH payments are used to support hospitals that serve a large number of low-income and Medicaid-enrolled patients, and could therefore be partially attributed to Medicaid enrollees in the MSIS. However, an examination of annual DSH audit data submitted by states indicates that for some hospitals, Medicaid DSH payments far

exceed their uncompensated care costs for Medicaid-enrolled patients and may therefore be attributed largely to uninsured patients.²⁶ As a result, we now exclude DSH payments from CMS-64 totals when we adjust MSIS spending.

- Also starting with the 2014 edition, we obtained a more precise separation of home- and community-based services (HCBS) waiver spending in the MSIS due to the use of more detailed MSIS data files than in previous years.
- In the 2015 edition of the MACStats data book, we began excluding incentive and uncompensated care pool payments made with waiver expenditure authority under Section 1115 of the Act from CMS-64 totals used to adjust MSIS spending.²⁷ In earlier editions, these payments were included in CMS-64 totals. Because these payments may be made for purposes other than providing services to Medicaid-enrolled patients, we now exclude them when we adjust MSIS spending.
- Also starting with the 2015 edition, we shifted a portion of drug rebate amounts in the CMS-64 from FFS to managed care for a small number of states that, despite reporting drug utilization data for managed care, reported minimal or no drug rebate amounts for managed care.

With regard to changes in data, complete MSIS Annual Person Summary (APS) files have not been available in a timely manner for use in MACStats since 2013. Therefore, beginning with the 2014 edition, we have been calculating spending and enrollment from the full MSIS data files that are used to create APS files. In general, our calculations closely match those used to create the APS. However, our development of enrollment counts is a notable exception. In MACPAC's analysis of the full MSIS data files, Medicaid enrollees are assigned a unique national identification (ID) number using an algorithm that incorporates state-specific ID numbers and beneficiary characteristics such as date of birth and gender. The state and national enrollment counts are then unduplicated using this national ID, which results in slightly lower enrollment counts than would be the case had we used APS files.

EXHIBIT 47a. Medicaid Benefit Spending in MSIS and CMS-64 Data by State, FY 2013 (millions)

State	Benefit spending totals included in analysis			Amounts excluded from CMS-64 benefit spending totals	
	Unadjusted MSIS	CMS-64 ¹	MSIS as a percentage of CMS-64	DSH	Incentive and uncompensated care pool waivers
Total	\$382,676	\$409,267	93.5%	\$16,247	\$10,799
Alabama	4,179	4,568	91.5	471	–
Alaska	1,321	1,335	99.0	22	–
Arizona	8,229	7,586	108.5	173	679
Arkansas	3,497	4,141	84.4	61	5
California	41,027	57,297	71.6	2,120	2,487
Colorado	4,004	4,898	81.7	194	–
Connecticut	6,241	6,453	96.7	273	–
Delaware	1,662	1,552	107.1	11	–
District of Columbia	2,360	2,232	105.7	56	–
Florida	20,301	17,233	117.8	335	994
Georgia	9,310	8,530	109.1	430	–
Hawaii	1,464	1,524	96.1	25	82
Idaho	1,702	1,648	103.3	24	–
Illinois	13,782	15,211	90.6	447	–
Indiana	6,603	7,630	86.5	338	–
Iowa	3,547	3,649	97.2	55	6
Kansas	2,533	2,441	103.7	77	60
Kentucky	5,575	5,606	99.4	216	–
Louisiana	5,513	6,380	86.4	767	–
Maine	2,041	2,850	71.6	37	–
Maryland	7,195	7,647	94.1	134	–
Massachusetts	11,142	12,338	90.3	–	828
Michigan	11,529	11,998	96.1	388	–
Minnesota	8,561	8,873	96.5	46	–
Mississippi	3,842	4,518	85.0	218	–
Missouri	7,121	8,248	86.3	703	–
Montana	864	989	87.3	18	–
Nebraska	1,749	1,788	97.8	45	–
Nevada	1,477	1,742	84.8	81	–
New Hampshire	1,045	1,162	89.9	41	–
New Jersey	9,082	9,266	98.0	1,298	42
New Mexico	2,615	3,270	80.0	25	–

EXHIBIT 47a. (continued)

State	Benefit spending totals included in analysis			Amounts excluded from CMS-64 benefit spending totals	
	Unadjusted MSIS	CMS-64 ¹	MSIS as a percentage of CMS-64	DSH	Incentive and uncompensated care pool waivers
New York	\$50,560	\$50,354	100.4%	\$3,423	\$644
North Carolina	9,932	11,298	87.9	617	–
North Dakota	805	783	102.8	1	–
Ohio	16,001	16,154	99.1	649	–
Oklahoma	3,925	4,754	82.6	42	–
Oregon	3,996	4,782	83.6	77	253
Pennsylvania	18,749	20,245	92.6	847	–
Rhode Island	²	²	²	²	²
South Carolina	4,862	4,449	109.3	457	–
South Dakota	757	765	99.0	1	–
Tennessee	13,563	7,617	178.1	80	1,020
Texas	22,084	24,417	90.4	227	3,695
Utah	2,640	2,101	125.6	29	–
Vermont	1,136	1,431	79.4	37	5
Virginia	6,363	7,105	89.6	186	–
Washington	6,684	7,805	85.6	367	–
West Virginia	3,216	2,949	109.1	75	–
Wisconsin	5,689	7,105	80.1	1	–
Wyoming	603	554	108.9	0	–

Notes: MSIS is Medicaid Statistical Information System. FY is fiscal year. DSH is disproportionate share hospital. Includes federal and state funds. MSIS and CMS-64 data reflect unadjusted amounts as reported by states. Both sources exclude spending on administration, the territories, and Medicaid-expansion CHIP enrollees; in addition, CMS-64 amounts exclude \$7.1 billion in offsetting collections from third-party liability, estate, and other recoveries. For greater detail on the difference between MSIS and CMS-64, please see the Methodology for Adjusting Benefit Spending Data section. Beginning with the December 2014 data book, DSH payments have been excluded from CMS-64 totals used to adjust MSIS spending; beginning with the December 2015 data book, incentive and uncompensated care pool payments made under Section 1115 waiver authority have also been excluded. For informational purposes, the DSH and waiver expenditure amounts that were excluded are shown here. Values have not been updated from those published in the December 2017 data book due to the unavailability of more recent MSIS or Transformed MSIS data.

– Dash indicates zero; \$0 indicates an amount less than \$0.5 million that rounds to zero.

¹ The total amount reported on the CMS-64 may differ slightly from the state and national totals of our adjusted MSIS spending reported in other exhibits due to rounding when applying certain adjustments.

² Rhode Island was excluded due to data reliability concerns regarding completeness of monthly claims and enrollment data.

Source: MACPAC, 2017, analysis of MSIS data as of December 2016 and CMS-64 financial management report net expenditure data as of June 2016.

EXHIBIT 47b. Medicaid Benefit Spending in MSIS and CMS-64 Data by State, FY 2014 (millions)

State ¹	Benefit spending totals included in analysis			Amounts excluded from CMS-64 benefit spending totals	
	Unadjusted MSIS	CMS-64 ²	MSIS as a percentage of CMS-64	DSH	Incentive and uncompensated care pool waivers
Arizona	\$8,190	\$8,757	93.5%	\$143	\$339
Arkansas	4,231	4,858	87.1	38	1
California	47,584	58,116	81.9	2,483	3,342
Connecticut	6,729	7,082	95.0	149	–
Georgia	11,947	9,051	132.0	435	–
Idaho	1,643	1,584	103.7	24	–
Iowa	4,040	3,993	101.2	44	2
Louisiana	5,351	6,233	85.9	1,126	–
Massachusetts	12,889	13,338	96.6	–	1,265
Michigan	11,683	13,019	89.7	562	–
Minnesota	9,761	10,013	97.5	43	–
Mississippi	3,980	4,662	85.4	223	–
New Jersey	11,038	11,235	98.2	1,214	225
New York	48,722	48,190	101.1	3,366	2,648
Ohio	18,028	18,909	95.3	673	–
Oklahoma	3,908	4,922	79.4	44	–
Oregon	5,747	6,555	87.7	32	244
Pennsylvania	20,497	22,666	90.4	956	–
South Carolina	5,243	5,058	103.7	495	–
South Dakota	779	783	99.4	2	–
Tennessee	12,614	8,480	148.7	–	833
Utah	3,306	2,062	160.3	32	–
Vermont	1,230	1,465	84.0	37	–
Washington	8,508	10,022	84.9	365	–
West Virginia	3,567	3,275	108.9	74	–
Wyoming	622	547	113.7	0	–

EXHIBIT 47b. (continued)

Notes: MSIS is Medicaid Statistical Information System. FY is fiscal year. DSH is disproportionate share hospital. Includes federal and state funds. MSIS and CMS-64 data reflect unadjusted amounts as reported by states. Both sources exclude spending on administration, the territories, and Medicaid-expansion CHIP enrollees; in addition, CMS-64 amounts exclude \$7.9 billion in offsetting collections from third-party liability, estate, and other recoveries. For greater detail on the difference between MSIS and CMS-64, please see the Methodology for Adjusting Benefit Spending Data section. Beginning with the December 2014 data book, DSH payments have been excluded from CMS-64 totals used to adjust MSIS spending; beginning with the December 2015 data book, incentive and uncompensated care pool payments made under Section 1115 waiver authority have also been excluded. For informational purposes, the DSH and waiver expenditure amounts that were excluded are shown here. Values have not been updated from those published in the December 2017 data book due to the unavailability of more recent MSIS or Transformed MSIS (T-MSIS) data.

– Dash indicates zero; \$0 indicates an amount less than \$0.5 million that rounds to zero.

¹ Several states did not submit complete MSIS data for FY 2014 due to the ongoing transition to the T-MSIS and were excluded from this exhibit. In addition, a few states were excluded due to data reliability concerns regarding the completeness and quality of the submitted MSIS data. This exhibit includes only states that had sufficient FY 2014 MSIS data. Due to the number of states excluded, a national total is not provided.

² The total amount reported on the CMS-64 may differ slightly from the state totals of our adjusted MSIS spending reported in other exhibits due to rounding when applying certain adjustments.

Source: MACPAC, 2017, analysis of MSIS data as of December 2016 and CMS-64 financial management report net expenditure data as of June 2017.

EXHIBIT 48. Service Categories Used to Adjust FYs 2013 and 2014 Medicaid Benefit Spending in the MSIS to Match CMS-64 Totals

Service category	MSIS service types ¹	CMS-64 service types
Hospital	<ul style="list-style-type: none"> • Inpatient hospital • Outpatient hospital 	<ul style="list-style-type: none"> • Inpatient hospital non-DSH • Inpatient hospital non-DSH supplemental payments • Inpatient hospital GME payments • Outpatient hospital non-DSH • Outpatient hospital non-DSH supplemental payments • Emergency services for aliens² • Emergency hospital services • Critical access hospitals
Non-hospital acute care	<ul style="list-style-type: none"> • Physician • Dental • Nurse-midwife • Nurse practitioner • Other practitioner • Non-hospital outpatient clinic • Lab and X-ray • Sterilizations • Abortions • Hospice • Targeted case management • Physical, occupational, speech, and hearing therapy • Non-emergency transportation • Private duty nursing • Rehabilitative services • Other care, excluding HCBS waiver 	<ul style="list-style-type: none"> • Physician (including primary care physician payment increase) • Physician services supplemental payments • Preventive services with USPSTF Grade A or B and ACIP vaccines • Dental • Nurse-midwife • Nurse practitioner • Other practitioner • Other practitioner supplemental payments • Non-hospital clinic • Rural health clinic • Federally qualified health center • Lab and X-ray • Sterilizations • Abortions • Hospice • Targeted case management • Statewide case management • Physical therapy • Occupational therapy • Services for speech, hearing, and language • Non-emergency transportation • Private duty nursing • Rehabilitative services (non-school-based) • School-based services • EPSDT screenings • Diagnostic screening and preventive services • Prosthetic devices, dentures, eyeglasses • Freestanding birth center • Health home with chronic conditions • Tobacco cessation for pregnant women • Care not otherwise categorized
Drugs	<ul style="list-style-type: none"> • Drugs (gross spending) 	<ul style="list-style-type: none"> • Drugs (gross spending) • Drug rebates

EXHIBIT 48. (continued)

Service category	MSIS service types ¹	CMS-64 service types
Managed care and premium assistance	<ul style="list-style-type: none"> HMO (i.e., comprehensive risk-based managed care; includes PACE) PHP PCCM 	<ul style="list-style-type: none"> MCO (i.e., comprehensive risk-based managed care) MCO drug rebates PACE PAHP PIHP PCCM MCO, PAHP, and PIHP payments associated with the primary care physician payment increase, Community First Choice option, preventive services with USPSTF Grade A or B, and ACIP vaccines Premium assistance for private coverage
LTSS non-institutional	<ul style="list-style-type: none"> Home health Personal care HCBS waiver 	<ul style="list-style-type: none"> Home health Personal care Personal care—1915(j) HCBS waiver HCBS—1915(i) HCBS—1915(j) HCBS—1915(k)
LTSS institutional	<ul style="list-style-type: none"> Nursing facility ICF/ID Inpatient psychiatric for individuals under age 21 Mental health facility for individuals age 65 and older 	<ul style="list-style-type: none"> Nursing facility Nursing facility supplemental payments ICF/ID ICF/ID supplemental payments Mental health facility for individuals under age 21 or age 65 and older, non-DSH
Medicare ^{3,4}		<ul style="list-style-type: none"> Medicare Part A and Part B premiums Medicare coinsurance and deductibles for QMBs

Notes: FY is fiscal year. MSIS is Medicaid Statistical Information System. DSH is disproportionate share hospital. GME is graduate medical education. HCBS is home- and community-based services. USPSTF is U.S. Preventive Services Task Force. ACIP is Advisory Committee on Immunization Practices. EPSDT is early and periodic screening, diagnostic, and treatment. HMO is health maintenance organization. PACE is Program of All-Inclusive Care for the Elderly. PHP is prepaid health plan. PCCM is primary care case management. MCO is managed care organization. PAHP is prepaid ambulatory health plan (a type of PHP). PIHP is prepaid inpatient health plan (a type of PHP). LTSS is long-term services and supports. ICF/ID is intermediate care facility for persons with intellectual disabilities. QMB is qualified Medicare beneficiary. Service categories and types reflect fee-for-service spending unless noted otherwise. Service types with identical names in MSIS and CMS-64 data may still be reported differently in the two sources due to differences in the instructions given to states; amounts for those that appear only in the CMS-64 (e.g., drug rebates) are distributed across Medicaid enrollees with MSIS spending in the relevant service categories (e.g., drugs). Service categories have not been updated from those published in the December 2017 data book due to the unavailability of more recent MSIS or Transformed MSIS data.

¹ Claims in the MSIS include both a service type (such as inpatient hospital, physician, personal care) and a program type (including HCBS waiver). When adjusting MSIS data to match CMS-64 totals, we count all claims with an HCBS waiver program type as HCBS waiver, regardless of their specific service type. Among claims with an HCBS waiver program type, the most common service types are other, home health, rehabilitation, and personal care.

² Emergency services for non-qualified aliens are reported under individual service types throughout the MSIS, but primarily as inpatient and outpatient hospital. As a result, we include this CMS-64 amount in the hospital category.

³ Medicare premiums are not reported in the MSIS. We distribute CMS-64 amounts proportionately across dually eligible enrollees identified in the MSIS for each state.

⁴ Medicare coinsurance and deductibles are reported under individual service types throughout the MSIS. We distribute CMS-64 amounts for QMBs across CMS-64 spending in the hospital, non-hospital acute, and LTSS institutional categories prior to calculating state-level adjustment factors based on the distribution of Medicare cost sharing for hospital, Part B, and skilled nursing facility services among QMBs using 2011 Medicare data for the FY 2013 tables and 2012 Medicare data for the FY 2014 tables. See MedPAC and MACPAC, 2017, Table 5: Fee-for-service Medicare Part A and Part B cost sharing incurred by dual-eligible and non-dual Medicare beneficiaries, CY 2012, in *Data book: Beneficiaries dually eligible for Medicare and Medicaid*, Washington, DC: MedPAC and MACPAC, https://www.macpac.gov/wp-content/uploads/2017/01/Jan17_MedPAC_MACPAC_DualsDataBook.pdf; and MedPAC and MACPAC, 2016, Table 4: Fee-for-service Medicare Part A and Part B cost sharing incurred by dual-eligible and non-dual Medicare beneficiaries, CY 2011, in *Data book: Beneficiaries dually eligible for Medicare and Medicaid*, Washington, DC: MedPAC and MACPAC, <https://www.macpac.gov/wp-content/uploads/2015/01/Dually-Eligible-Beneficiaries-DataBook.pdf>.

Source: MACPAC, 2017, analysis of MSIS and CMS-64 financial management report net expenditure data.

Understanding Managed Care Enrollment and Spending Data

There are four main sources of data on Medicaid managed care available from CMS.

- **Medicaid Managed Care Data Collection System (MMCDCS).** The MMCDCS provides state-reported aggregate enrollment statistics and other basic information for each managed care plan within a state. CMS uses the MMCDCS to create an annual Medicaid managed care enrollment report, which is the source of information on Medicaid managed care most commonly cited by CMS as well as by outside analysts and researchers.
- **MSIS.** The MSIS provides person-level and claims-level information for all Medicaid enrollees. For managed care, MSIS claims include records of each capitated payment made on behalf of an enrollee to a managed care plan (generally referred to as capitated claims) as well as records of each service received by the enrollee from a provider under contract with a managed care plan (which generally do not include payment amounts and may be referred to as encounter or dummy claims). All states collect encounter data from their Medicaid managed care plans, but some do not report them in the MSIS. Managed care enrollees may also have FFS claims in the MSIS if they used services beyond those covered by a managed care plan's contract with the state.
- **CMS-64.** The CMS-64 financial management report provides aggregate spending information for Medicaid grouped into major benefit categories, including managed care. The spending amounts reported by states on the CMS-64 are used to calculate their federal matching dollars.

- **SEDS.** The SEDS provides aggregate statistics on CHIP enrollment and child Medicaid enrollment that include the number of individuals covered under FFS and managed care systems. The SEDS is the only comprehensive source of information on managed care participation among separate CHIP enrollees across states.

Although the annual Medicaid managed care enrollment report generally contains the most recent information available from CMS on Medicaid managed care for all states, it does not provide information on many characteristics of enrollees in managed care (e.g., basis of eligibility and demographics such as age, sex, race, and ethnicity). It does provide information on whether individuals are dually eligible for Medicare. As a result, MACStats also includes statistics based on MSIS and CMS-64 data, such as the percentage of individuals enrolled in managed care by eligibility group and the percentage of Medicaid benefit spending attributable to managed care.

When examining managed care statistics from various sources, the following issues should be noted:

- Figures in the annual Medicaid managed care enrollment report published by CMS include Medicaid-expansion CHIP enrollees. Although we generally exclude these children (between 2 million and 5 million, depending on the time period) from Medicaid analyses in MACStats, it is not possible to do so with the CMS annual Medicaid managed care enrollment report data.²⁸
- The types of managed care reported by states may differ somewhat between the Medicaid managed care enrollment report and the MSIS. For example, some states report a small number of enrollees in comprehensive risk-based managed care in one data source but not the other. Anomalies in MSIS data are documented by CMS as it reviews each state's

quarterly submission, but all issues may not be identified in this process.

- The Medicaid managed care enrollment report provides point-in-time figures. In contrast, MSIS data allow the calculation of number of enrollees ever enrolled in managed care during a fiscal year or other period of time.

Endnotes

- ¹ For technical guides to earlier editions of MACStats, see the MACStats archive page of the MACPAC website <https://www.macpac.gov/publication/macstats-archive/>.
- ² CMS has been collecting Medicaid and CHIP performance indicator data on key processes related to eligibility and enrollment since late 2013. In part because the new Medicaid and CHIP performance indicator enrollment data do not identify newly eligible individuals for whom there is a higher federal matching rate, CMS is using a separate process to collect monthly Medicaid enrollment by eligibility category when states submit their CMS-64 quarterly expenditures. Specifically, a new CMS-64 enrollment form has been created to accompany the current expenditure forms. Although enrollment is submitted at the same time as expenditures, there is not a direct link between the amount of federal expenditures claimed by states and the number of enrollees reported. Instead, CMS uses CMS-64 enrollment data for monitoring and oversight purposes.
- ³ Centers for Medicare & Medicaid Services, U.S. Department of Health and Human Services, 2018, Letter from Tim Hill to state health officials regarding “Transformed-Medicaid Statistical Information System (T-MSIS),” August 10, 2018, <https://www.medicaid.gov/federal-policy-guidance/downloads/sho18008.pdf>.
- ⁴ Centers for Medicare & Medicaid Services, U.S. Department of Health and Human Services, 2019, Center for Medicaid and CHIP Services informational bulletin regarding “T-MSIS state compliance,” March 18, 2019, <https://www.medicaid.gov/federal-policy-guidance/downloads/cib031819.pdf>.
- ⁵ These tables are: Exhibit 7, Medicaid beneficiaries (persons served) by eligibility group; Exhibit 14, Medicaid enrollment by state, eligibility group, and dually eligible status; Exhibit 15, Medicaid full-year equivalent enrollment by state and eligibility group; Exhibit 18, Distribution of Medicaid benefit spending by eligibility group and service category; Exhibit 19, Medicaid benefit spending per full-year equivalent enrollee by eligibility group and service category; Exhibit 20, Distribution of Medicaid enrollment and benefit spending by users and non-users of long-term services and supports; Exhibit 21, Medicaid spending by state, eligibility group, and dually eligible status; Exhibit 22, Medicaid benefit spending per full-year equivalent enrollee by state and eligibility group; Exhibit 30, Percentage of Medicaid enrollees in managed care by state and eligibility group; Exhibit 47, Medicaid benefit spending in MSIS and CMS-64 data by state; and Exhibit 48, Service Categories Used to Adjust FYs 2013 and 2014 Medicaid Benefit Spending in the MSIS to Match CMS-64 Totals.
- ⁶ See, for example, Centers for Medicare & Medicaid Services (CMS), 2010, Brief summaries and glossary (2010 edition), in *Medicare & Medicaid statistical supplement*, Baltimore, MD: CMS, <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MedicareMedicaidStatSupp/Downloads/2010SummariesGlossary.zip>.
- ⁷ States make capitated payments for all individuals enrolled

in managed care plans even if no health care services are used. Therefore, all managed care enrollees currently are counted as beneficiaries or persons served, regardless of whether they have used any health services.

⁸ Centers for Disease Control and Prevention, U.S. Department of Health and Human Services, 2019, About the National Health Interview Survey, http://www.cdc.gov/nchs/nhis/about_nhis.htm.

⁹ Agency for Health Care Research and Quality, U.S. Department of Health and Human Services, 2016, Medical Expenditures Panel Survey: Survey background, http://meps.ahrq.gov/mepsweb/about_meps/survey_back.jsp.

¹⁰ Kenney, G., and V. Lynch, 2010, Monitoring children's health insurance coverage under CHIPRA using federal surveys, in *Databases for estimating health insurance coverage for children: A workshop summary*, Plewes, T.J., ed., Washington, DC: National Academies Press, <http://www.nap.edu/catalog/13024.html>.

¹¹ Rhoades, J.A., J.W. Cohen, and S.R. Machlin, 2010, Methodological comparison of estimates of ambulatory health care use from the Medical Expenditure Panel Survey and other data sources (pp. 2828–2837, health policy statistics section), in *JSM Proceedings*, Alexandria, VA: American Statistical Association.

¹² McPherson, M., P. Arrango, H. Fox, et al., 1998, A new definition of children with special health care needs, *Pediatrics* 102: 137–140.

¹³ For children under age 18 to be determined disabled under SSI rules, the child must have at least one medically determinable physical or mental impairment that causes marked and severe functional limitations and that can be expected to cause death or last at least 12 months (§ 1614(a)(3)(C)(i) of the Act).

¹⁴ To operationalize the Maternal and Child Health Bureau definition of CSHCN, researchers developed a set of survey questions referred to as the CSHCN Screener. It incorporates four components of the definition of CSHCN considered by researchers as essential: functional limitations, need for health-related services, presence of a health condition, and minimum expected duration of health condition (e.g., 12 months). The CSHCN Screener is currently used in several national surveys, but not the NHIS. An alternative approach was developed by the Child and Adolescent Health Measurement Initiative (CAHMI) specifically for use in the NHIS and uses the term children with chronic conditions and elevated service use or need, or CCCESUN. CAHMI's work builds on earlier work conducted by Davidoff using the NHIS. (Child and Adolescent Health Measurement Initiative, 2012, *Identifying children with chronic conditions and elevated service use or need (CCCESUN) in the National Health Interview Survey (NHIS)*, Portland, OR: Oregon Health and Science University; and Davidoff, A., 2004, Children with special health care needs in the NHIS, *Health Services Research* 39, no. 1: 53–72).

¹⁵ The following conditions were identified in the most recent NHIS: attention deficit disorder; intellectual disability; other developmental delay or problems that cause difficulty with activity; other mental health condition; Down syndrome; cerebral palsy; muscular dystrophy; cystic fibrosis; sickle cell anemia; autism; diabetes; arthritis; heart disease or condition; cancer; any of the

following episodes/attacks in the past 12 months: seizure, asthma, respiratory allergy, eczema or skin allergy, food or digestive allergy, anemia, frequent severe headache or migraines, or frequent diarrhea or colitis; depressed or anxious feelings most or all of the time in the past 30 days, feelings interfered with life a lot in the past 30 days; depression/anxiety/emotional problem causes difficulty with activity, difficulties with emotions/concentration/behavior/getting along; very low birth weight (less than 1500 grams) and under 2 years old; chronic condition that limits activity; at least one condition that causes functional limitation and is chronic; or reported fair or poor health status.

¹⁶ Limitations in ability to do things other children do include the following: any activity limitation, needs help with activities of daily living, has mobility impairment that has lasted or is expected to last more than 12 months, has any functional limitation, is blind, or has a lot of trouble with hearing ability without a hearing aid.

¹⁷ Need or use of medications includes the following: took a prescription medicine for three or more months or reported unmet need for prescription medications due to cost in the past 12 months.

¹⁸ Need or use of specialized therapies includes the following: saw or talked to a therapist in the past 12 months.

¹⁹ Above-routine need or use of services includes the following: has impairment or health problem that requires use of special equipment, had 10 or more visits to a health professional in the past 12 months, had 2 or more emergency department visits in the past 12 months, had 1 or more hospital stays other than for birth in the past 12 months, any homecare visits in the past 12 months, received special education or early intervention services, or reported unmet need for medical care due to cost in the past 12 months.

²⁰ Needs or receives counseling includes the following: family member seen/talked to a mental health professional concerning health of the child in the past 12 months or reported unmet need for mental health counseling due to cost in the past 12 months.

²¹ Medicaid benefit spending reported here excludes amounts for Medicaid-expansion CHIP enrollees, the territories, administrative activities, the Vaccines for Children program (which is authorized by the Medicaid statute but operates as a separate program), and offsetting collections from third-party liability, estate, and other recoveries.

²² For a discussion of these data sources, see Medicaid and CHIP Payment and Access Commission (MACPAC), 2011, Improving Medicaid and CHIP data for policy analysis and program accountability, in *Report to the Congress on Medicaid and CHIP*, March 2011, Washington, DC: MACPAC, https://www.macpac.gov/wp-content/uploads/2015/01/MACPAC_March2011_web.pdf.

²³ Some of these amounts, including certain supplemental payments to hospitals and drug rebates, are lump sums that are not paid on a claim-by-claim basis for individual Medicaid enrollees. Nonetheless, we refer to these CMS-64 amounts as benefit spending, and the adjustment methodology described here distributes them across Medicaid enrollees with MSIS spending in the relevant service categories.

²⁴ U.S. Government Accountability Office (GAO), 2012, *Medicaid*:

Data sets provide inconsistent picture of expenditures, Washington, DC: GAO, <http://www.gao.gov/assets/650/649733.pdf>; National Research Council, 2010, Administrative databases, in *Databases for estimating health insurance coverage for children: A workshop summary*, Plewes, T.J., ed., Washington, DC: National Academies Press, <http://www.nap.edu/catalog/13024.html>.

²⁵ The sum of adjusted MSIS benefit spending for all service categories is equal to CMS-64 benefit spending, exclusive of offsetting collections from third-party liability, estate, and other recoveries. These collections are not reported by type of service in the CMS-64 and are not reported at all in the MSIS.

²⁶ See Medicaid and CHIP Payment and Access Commission (MACPAC), 2016, Improving data as the first step to a more targeted disproportionate share hospital policy, in *Report to Congress on Medicaid and CHIP*, March 2016, Washington, DC: MACPAC, <https://www.macpac.gov/wp-content/uploads/2016/03/Improving-Data-as-the-First-Step-to-a-More-Targeted-Disproportionate-Share-Hospital-Policy.pdf>; and Centers for Medicare & Medicaid Services, 2016, Medicaid disproportionate share hospital (DSH) payments, <https://www.medicaid.gov/medicaid/financing-and-reimbursement/dsh/index.html>.

²⁷ For more on these payments, see Medicaid and CHIP Payment and Access Commission (MACPAC), 2015, Using Medicaid supplemental payments to drive delivery system reform, in June 2015, Washington, DC: MACPAC, <https://www.macpac.gov/wp-content/uploads/2015/06/Using-Medicaid-Supplemental-Payments-to-Drive-Delivery-System-Reform.pdf>.

²⁸ We generally exclude children enrolled in Medicaid-expansion CHIP from Medicaid analyses because their funding stream (CHIP, under Title XXI of the Act) differs from that of other Medicaid enrollees (Medicaid, under Title XIX of the Act). In addition, spending (and often enrollment) for the Medicaid-expansion CHIP population is reported by CMS in CHIP statistics along with information on separate CHIP enrollees.




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