MACStats: Medicaid and CHIP Data Book

December 2018

MACPAC
Medicaid and CHIP Payment and Access Commission

MACPAC

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 2018 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 has slowed and even decreased slightly in the past few years; enrollment grew by about 1 percent in 2016 and 2017 but decreased 2.2 percent in 2018 (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 2018 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 to a lack of available data caused by the transition from the Medicaid Statistical Information System (MSIS) to the Transformed MSIS (T-MSIS). While all states have begun submitting T-MSIS data to CMS, these data are still being verified for completeness and accuracy and are not available for publication at this time. When these data become available, 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 in interpreting the exhibits and 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 the Centers for Medicare & Medicaid Services and our contractors—the State Health Access Data Assistance Center (SHADAC) and Acumen, LLC—who provided their insights and assistance. We would also like to thank Paula Gordon and Dave Rinaldo and his talented team at CHIEF 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 2017, 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: 85.3 million in Medicaid and 9.5 million in CHIP (Exhibit 1).
- About 36.5 percent of children had Medicaid or CHIP coverage in 2017. 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 2017 had family incomes below 100 percent of the federal poverty level (FPL). About 59.4 percent of all 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 17.5 percent of national health expenditures in calendar year 2016, less than either Medicare (20.1 percent) or private insurance (33.7 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 2017, Medicaid accounted for a smaller share (9.4 percent) than Medicare (14.9 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 financed by states through taxes and other means), Medicaid's share was 15.9 percent in state fiscal year (SFY) 2016. When federal funds are included, Medicaid's share was 28.7 percent in SFY 2016 (Exhibit 5).

EXHIBIT 1. Medicaid and CHIP Enrollment as a Percentage of the U.S. Population, 2017 (millions) E 1

Population	Ever during FY 2017	Point in time during FY 2017	Point in time during CY 2017
	Estimates based on administrative data (CMS)[1]		Survey data (NHIS)[2]
Medicaid enrollees	85.3[3]	72.4	Not available
CHIP enrollees	9.5	6.9	Not available
Totals for Medicaid and CHIP	**94.8[3]**	**79.3**	**56.4**
	Census Bureau data		Survey data (NHIS)[2]
U.S. population	326.2[4]	325.1[4]	318.7
	Administrative and Census Bureau data		Survey data (NHIS)[2]
Medicaid and CHIP enrollment as a percentage of U.S. population	29.1%[1]	24.4%	17.7%

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 2018 President's budget and ever-enrolled estimates are from the FY 2017 President's budget because the CMS Office of the Actuary did not produce ever-enrolled for the FY 2018 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, an individual moved and may 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; also, surveys such as the NHIS generally do not classify limited benefits (e.g., emergency Medicaid) 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 for this group instead. As a result, the total is an underestimate of the number of people ever enrolled.

[4] The Census Bureau number in the ever-enrolled column was the estimated U.S. resident population as of September 2017 (the month with the largest count in FY 2017); 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 2017.

Source: MACPAC, 2018, analysis of the following: CMS, Office of the Actuary, 2017a, e-mail to MACPAC, August 15; CMS, Office of the Actuary, 2017b, e-mail to MACPAC, July 24; NHIS data; and U.S. Bureau of the Census, 2018, Monthly population estimates for the United States: April 1, 2010 to December 1, 2018, National totals: vintage 2017 https://www.census.gov/data/tables/2017/demo/popest/nation-total.html.

EXHIBIT 2. Characteristics of Non-Institutionalized Individuals by Age and Source of Health Coverage, 2017 **E 2**

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%**	**17.3%**	**63.0%**	**17.7%**	**8.9%**	**100.0%**	**55.4%**	**36.5%**	**5.1%**
Coverage									
Length of time with any coverage during year									
Full year	**88.4***	99.4*	96.3*	94.2	–	**92.5***	97.1*	95.9	–
Part year	**5.7**	0.6*	3.7*	5.8	26.4*	**4.6**	2.9*	4.1	31.7*
No coverage during year	**5.9***	–	–	–	73.6*	**2.9***	–	–	68.3*
Multiple coverage sources at time of interview									
Yes, any Medicare and Medicaid or CHIP combination[6]	**1.8***	10.4	–	10.2	–	**†**	–	†	–
Yes, any private and Medicaid or CHIP combination	**0.5***	–	0.7*	2.6	–	**1.1***	2.0*	3.1	–
Yes, any other combination	**7.3***	42.3*	11.6*	0.6	–	**†**	†	–	–
No	**90.4***	47.3*	87.7	86.7	100.0*	**98.8***	97.8	96.9	100.0*
Demographics									
Age									
0–18	**24.5***	†	21.5*	50.5	14.0*	**100.0**	100.0	100.0	100.0
19–64	**60.0***	14.1*	66.7*	42.5	85.0*	**–**	–	–	–
65 or older	**15.5***	85.4*	11.8*	7.0	0.9*	**–**	–	–	–
Gender									
Male	**48.9***	44.8	49.6*	43.8	53.2*	**51.1**	51.2	50.0	55.1
Female	**51.1***	55.2	50.4*	56.2	46.8*	**48.9**	48.8	50.0	44.9
Race									
Hispanic	**18.0***	8.9*	12.4*	31.5	38.4*	**25.0***	15.6*	37.7	38.2
White, non-Hispanic	**62.0***	75.9*	69.9*	39.8	40.8	**53.0***	66.2*	34.4	42.9*
Black, non-Hispanic	**12.6***	10.3*	9.9*	21.4	14.1*	**14.7***	9.6*	22.5	11.5*
Other non-white, non-Hispanic	**7.3**	4.9*	7.8	7.3	6.6	**7.3***	8.6*	5.5	7.4

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%**	**4.1%**	**70.0%**	**12.5%**	**12.6%**	**100.0%**	**94.9%**	**47.8%**	**8.0%**
Coverage									
Length of time with any coverage during year									
Full year	**84.0***	98.7*	95.5*	91.3	–	**99.1**	99.6	99.7	99.4
Part year	**7.4**	1.3*	4.5*	8.7	25.7*	**0.5**	0.4	†	†
No coverage during year	**8.6***	–	–	–	74.3*	**0.4***	–	–	–
Multiple coverage sources at time of interview									
Yes, any Medicare and Medicaid or CHIP combination[6]	**1.2***	29.6*	–	9.6	–	**7.0***	7.3*	–	86.6
Yes, any private and Medicaid or CHIP combination	**0.3***	–	0.4*	2.4	–	**–**	–	–	–
Yes, any other combination	**0.7**	16.0	0.9	†	–	**44.3***	46.7*	92.7*	4.9
No	**97.8***	54.3*	98.6*	87.5	100.0*	**48.8***	46.0*	7.3	8.5
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	**49.0***	47.0*	50.0*	37.6	53.1*	**44.8***	44.4*	44.7*	37.5
Female	**51.0***	53.0*	50.0*	62.4	46.9*	**55.2***	55.6*	55.3*	62.5
Race									
Hispanic	**17.7***	13.8*	12.9*	25.2	38.4*	**8.3***	7.8*	4.1*	25.1
White, non-Hispanic	**61.7***	63.1*	68.2*	46.2	40.6*	**77.3***	78.3*	85.9*	40.2
Black, non-Hispanic	**12.7***	18.0	10.6*	20.6	14.5*	**9.1***	9.0*	6.2*	19.2
Other non-white, non-Hispanic	**7.9**	5.2*	8.3	8.0	6.4	**5.2***	4.8*	3.7*	15.5

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]
Education[7]									
Less than high school	**11.1%***	15.9%*	4.9%*	27.5%	27.3%	–	–	–	–
High school diploma or GED certificate	**24.0***	28.6*	20.7*	34.1	30.1*	–	–	–	–
Some college	**30.5***	28.3	30.8*	27.8	29.9	–	–	–	–
College or graduate degree	**34.4***	27.2*	43.6*	10.6	12.8	–	–	–	–
Marital status[7]									
Married	**53.7***	53.8*	60.2*	28.0	39.9*	–	–	–	–
Widowed	**6.0**	20.2*	4.3*	6.5	2.2*	–	–	–	–
Divorced or separated	**11.5***	15.8*	9.2*	18.1	11.8*	–	–	–	–
Living with partner	**7.9***	2.4*	6.8*	12.7	15.4*	–	–	–	–
Never married	**21.0***	7.8*	19.4*	34.7	30.7*	–	–	–	–
Family income									
Has income less than 138 percent FPL	**20.7***	20.8*	7.5*	59.4	36.7*	**27.8%***	6.9%*	58.5%	33.0%*
Has income in ranges shown below									
Less than 100 percent FPL	**13.4***	11.7*	4.5*	41.3	24.6*	**18.8***	4.1*	40.4	22.5*
100–199 percent FPL	**18.0***	21.5*	10.1*	36.0	30.2*	**22.1***	10.7*	37.8	33.2
200–399 percent FPL	**28.4***	31.6*	30.2*	18.1	30.3*	**28.4***	34.5*	18.2	31.1*
400 percent FPL or higher	**40.1***	34.9*	55.2*	4.3	14.7*	**30.5***	50.7*	3.3	13.0*
Other demographic characteristics									
Citizen of United States	**93.4**	98.1*	95.3*	93.4	75.7*	**97.4**	98.4*	96.9	89.0*
Parent of a dependent child[7]	**27.6***	1.9*	28.9*	34.4	37.3	–	–	–	–
Currently working[7]	**63.1***	15.5*	74.6*	38.6	68.0*	–	–	–	–
Veteran[7]	**8.6***	19.7*	7.1*	3.4	2.8	–	–	–	–
Receives SSI or SSDI	**4.2***	13.5	1.1*	13.2	0.8*	**1.4***	†	3.4	†
Health									
Current health status									
Excellent or very good	**66.2***	41.7*	72.7*	56.4	60.9*	**84.8***	89.9*	76.4	82.5*
Good	**23.6***	32.3*	21.2*	26.5	27.9	**13.5***	9.3*	20.2	15.4
Fair or poor	**10.2***	26.0*	6.1*	17.1	11.2*	**1.8***	0.8*	3.4	†

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]
Education[7]									
Less than high school	**10.0%***	22.6%	4.2%*	24.9%	26.9%	**15.2%***	14.8%*	9.1%*	43.5%
High school diploma or GED certificate	**23.2***	35.2	19.5*	35.5	30.2*	**27.0**	27.5	27.5	25.1
Some college	**31.3**	33.1	31.5	29.4	30.1	**27.4***	27.5*	27.0*	18.2
College or graduate degree	**35.4***	9.0	44.8*	10.2	12.8*	**30.4***	30.2*	36.3*	13.1
Marital status[7]									
Married	**52.9***	36.4*	59.9*	27.5	40.1*	**56.8***	56.7*	62.1*	30.5
Widowed	**1.8***	5.4*	1.5*	2.9	1.6*	**22.3***	22.6*	20.6*	28.4
Divorced or separated	**10.8***	26.2*	8.8*	16.7	11.7*	**14.2***	14.0*	11.6*	26.3
Living with partner	**9.4***	5.3*	7.7*	14.4	15.5	**1.9**	1.9	1.7	†
Never married	**25.1***	26.7*	22.1*	38.4	31.0*	**4.8***	4.7*	4.1*	12.4
Family income									
Has income less than 138 percent FPL	**18.8***	43.7*	7.7*	58.9	37.1*	**16.9***	16.7*	8.0*	68.1
Has income in ranges below									
Less than 100 percent FPL	**12.5***	28.9*	4.8*	41.5	24.9*	**8.9***	8.7*	3.5*	46.2
100–199 percent FPL	**16.1***	34.6	9.4*	34.1	29.6*	**19.1***	19.4*	13.2*	35.0
200–399 percent FPL	**27.4***	25.3*	28.2*	18.7	30.3*	**32.2***	32.7*	33.4*	13.9
400 percent FPL or higher	**44.0***	10.8*	57.6*	5.4	15.0*	**39.6***	39.1*	49.9*	4.7
Other demographic characteristics									
Citizen of United States	**90.8**	97.7*	93.6*	90.0	73.8*	**97.4***	98.1*	98.7*	89.3
Parent of a dependent child[7]	**34.6***	10.9*	33.9*	39.9	37.7	**0.5**	0.4	0.5	†
Currently working[7]	**74.7***	10.9*	83.8*	44.0	68.6*	**17.9***	16.3*	22.7*	6.0
Veteran[7]	**5.3***	7.5*	4.3*	2.7	2.8	**21.5***	21.8*	22.5*	7.8
Receives SSI or SSDI	**5.3***	72.3*	1.4*	21.8	0.8*	**3.9***	3.9*	0.7*	31.8
Health									
Current health status									
Excellent or very good	**63.8***	14.1*	71.0*	39.2	57.5*	**46.1***	46.1*	51.4*	17.4
Good	**25.4***	30.9	23.1*	33.8	29.9*	**32.4***	32.5*	32.2	27.6
Fair or poor	**10.8***	55.0*	6.0*	27.0	12.6*	**21.5***	21.4*	16.4*	55.0

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 downloadable 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 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, 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. 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-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, 2018, analysis of NHIS data.

EXHIBIT 3. National Health Expenditures by Type and Payer, 2016 **E 3**

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	**$3,337,248**	**$565,550**	**$16,883**	**$672,093**	**$1,123,372**	**$108,945**	**$497,868**	**$352,537**
Hospital care	**1,082,479**	189,824	4,466	267,504	426,671	62,651	98,693	32,671
Physician and clinical services	**664,882**	72,564	3,911	149,964	287,254	26,069	66,206	58,913
Dental services	**124,373**	12,122	1,829	511	57,729	1,783	470	49,929
Other professional services[3]	**91,980**	7,263	355	22,582	31,576	–	7,350	22,854
Home health care	**92,364**	33,981	62	37,376	9,641	652	2,600	8,052
Other non-durable medical products[4]	**62,201**	–	–	2,050	–	–	–	60,151
Prescription drugs	**328,588**	33,445	1,750	95,393	142,617	8,477	1,873	45,032
Durable medical equipment[5]	**50,952**	7,653	174	7,476	9,932	–	869	24,848
Nursing care facilities and continuing care retirement communities[6]	**162,685**	49,991	14	37,477	14,809	5,042	11,574	43,778
Other health, residential, and personal care services[7]	**173,486**	98,379	1,398	4,944	13,538	968	47,950	6,310
Administration[8]	**263,652**	60,327	2,923	46,814	129,605	3,305	20,679	–
Public health activity	**82,187**	–	–	–	–	–	82,187	–
Investment	**157,418**	–	–	–	–	–	157,418	–

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%**	**16.9%**	**0.5%**	**20.1%**	**33.7%**	**3.3%**	**14.9%**	**10.6%**
Hospital care	**100.0**	17.5	0.4	24.7	39.4	5.8	9.1	3.0
Physician and clinical services	**100.0**	10.9	0.6	22.6	43.2	3.9	10.0	8.9
Dental services	**100.0**	9.7	1.5	0.4	46.4	1.4	0.4	40.1
Other professional services[3]	**100.0**	7.9	0.4	24.6	34.3	–	8.0	24.8
Home health care	**100.0**	36.8	0.1	40.5	10.4	0.7	2.8	8.7
Other non-durable medical products[4]	**100.0**	–	–	3.3	–	–	–	96.7
Prescription drugs	**100.0**	10.2	0.5	29.0	43.4	2.6	0.6	13.7
Durable medical equipment[5]	**100.0**	15.0	0.3	14.7	19.5	–	1.7	48.8
Nursing care facilities and continuing care retirement communities[6]	**100.0**	30.7	0.0	23.0	9.1	3.1	7.1	26.9
Other health, residential, and personal care services[7]	**100.0**	56.7	0.8	2.8	7.8	0.6	27.6	3.6
Administration[8]	**100.0**	22.9	1.1	17.8	49.2	1.3	7.8	–
Public health activity	**100.0**	–	–	–	–	–	100.0	–
Investment	**100.0**	–	–	–	–	–	100.0	–

Notes: Every five years the 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 practioners 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, 2017, *National health expenditures by type of service and source of funds: Calendar years 1960–2016*, Baltimore, MD: OACT, https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/NHE2016.zip. OACT, 2017, *National health expenditure accounts: Methodology paper, 2016*, Baltimore, MD: OACT, https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/DSM-16.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 1965–2017

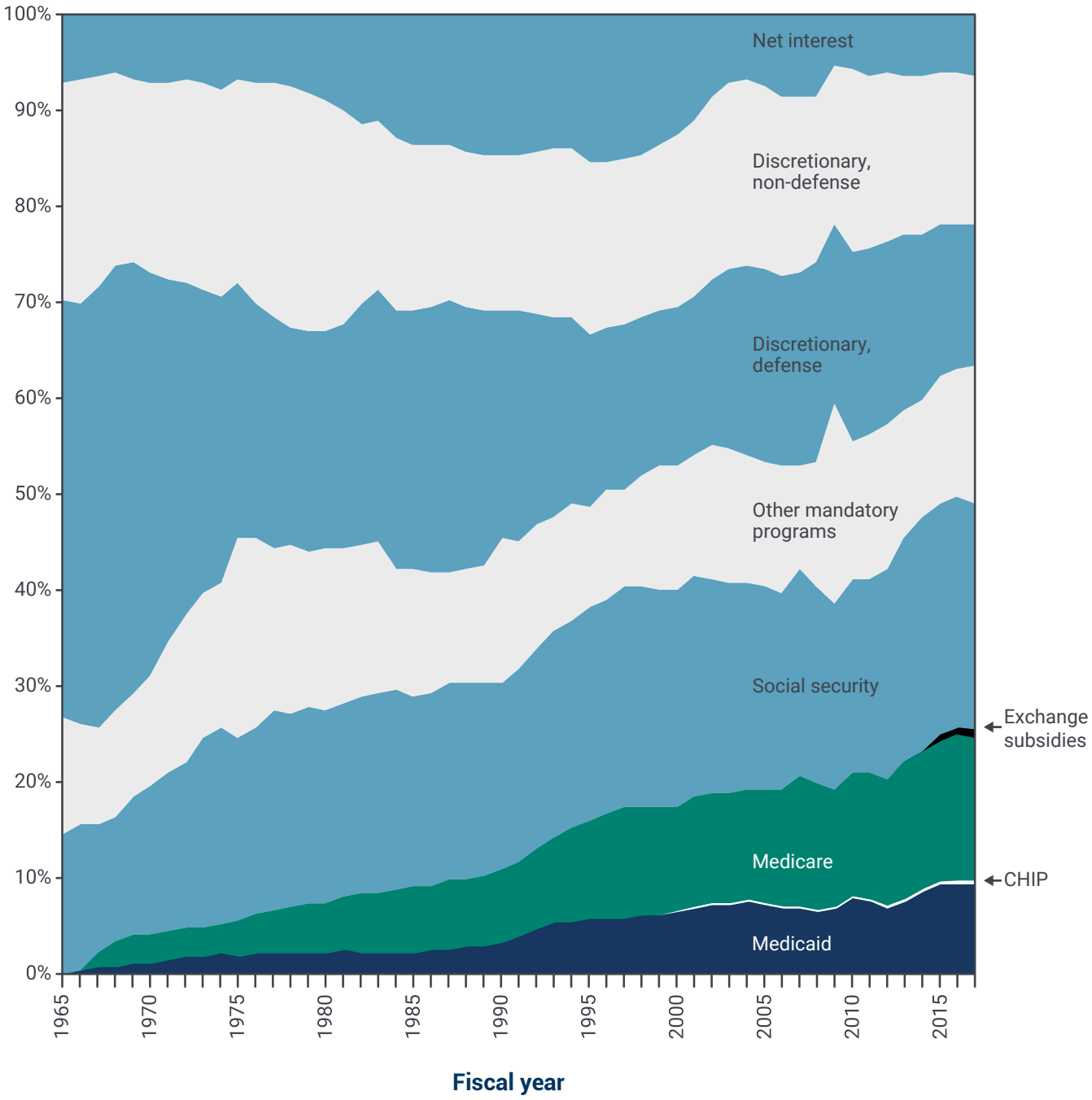


EXHIBIT 4. (continued) **E 4**

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

Notes: FY is fiscal year.

– Dash indicates zero; 0.0% indicates amounts less than 0.05% that round to zero.

Source: MACPAC, 2018, 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 2019*, Washington, DC: OMB, https://www.gpo.gov/fdsys/search/pagedetails.action?granuleId=&packageId=BUDGET-2019-TAB.

EXHIBIT 5. Medicaid as a Share of States' Total Budgets and State-Funded Budgets, SFY 2016 **E 5**

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	**$1,898,194**	**28.7%**	**19.6%**	**10.5%**	**$1,306,260**	**15.9%**	**24.5%**	**13.7%**
Alabama	25,838	24.6	20.7	20.5	16,203	12.1	26.8	25.5
Alaska	10,032	17.0	16.4	8.0	6,755	9.4	21.2	10.0
Arizona	39,682	29.0	15.0	15.8	25,515	11.1	18.9	22.2
Arkansas	23,961	27.4	14.7	14.5	16,563	8.9	18.0	20.9
California	250,899	32.5	20.7	7.2	160,209	17.7	28.4	8.2
Colorado	36,727	24.5	23.7	14.7	27,210	13.2	29.7	18.6
Connecticut	31,842	22.7	14.9	10.0	25,626	14.1	16.5	11.3
Delaware	10,236	19.8	23.5	4.1	8,085	9.2	27.2	4.6
District of Columbia[2]	12,552	22.7	16.5	1.3	9,348	8.4	19.4	1.5
Florida	72,319	32.2	18.7	9.7	47,013	20.7	25.1	14.8
Georgia	47,534	20.9	24.5	18.8	33,638	9.8	27.7	26.4
Hawaii	13,836	16.4	14.2	9.4	11,273	6.9	15.5	11.3
Idaho	7,335	26.4	25.3	8.4	4,649	15.8	33.9	13.1
Illinois	54,347	29.5	17.2	1.6	38,604	13.8	18.2	1.7
Indiana	31,406	35.9	28.9	6.2	18,958	14.3	42.4	10.3
Iowa	23,094	22.8	15.7	25.7	16,766	13.5	18.9	32.3
Kansas	15,123	21.3	29.4	18.2	11,488	12.2	34.6	18.8
Kentucky	32,699	30.3	16.3	24.1	20,517	10.2	21.9	34.1
Louisiana	27,735	29.0	19.2	10.2	18,479	15.2	23.1	14.9
Maine	8,040	33.0	17.2	3.9	5,504	19.1	21.5	5.7
Maryland	40,779	24.3	18.1	14.4	28,745	13.4	22.0	19.2
Massachusetts	61,285	24.7	11.3	9.9	50,238	13.0	11.8	12.1
Michigan	54,413	31.1	25.2	4.1	33,541	14.0	35.9	6.4
Minnesota	36,798	30.4	25.3	4.7	26,481	17.9	32.4	6.5
Mississippi	19,766	26.1	16.7	19.3	11,900	11.4	21.6	30.4

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	$24,628	37.2%	23.0%	4.8%	$16,951	26.1%	27.7%	6.9%
Montana	6,384	20.3	15.8	10.7	4,014	9.6	21.0	16.0
Nebraska	11,610	17.1	14.2	23.9	8,621	11.1	15.2	27.9
Nevada	12,918	25.0	18.8	6.6	8,267	9.1	26.1	10.3
New Hampshire	5,834	33.6	19.6	2.4	3,676	20.7	26.2	3.7
New Jersey	56,540	25.0	24.3	8.1	42,186	12.0	30.5	10.8
New Mexico	18,083	29.9	17.4	16.9	10,708	11.1	25.5	22.4
New York	150,707	31.9	19.6	7.1	101,231	16.7	25.3	10.2
North Carolina	44,439	31.0	23.6	13.5	31,432	15.9	28.6	18.9
North Dakota	7,459	15.4	15.4	17.2	5,852	7.1	17.2	19.9
Ohio	67,450	37.7	16.7	4.0	55,000	35.3	17.1	4.9
Oklahoma	22,719	23.5	15.4	25.0	15,063	14.5	19.3	32.8
Oregon	37,266	22.3	12.4	3.4	26,949	7.0	14.8	4.6
Pennsylvania	76,354	36.6	18.1	2.5	49,281	24.2	23.1	3.9
Rhode Island	8,627	29.8	14.9	12.9	5,750	18.7	19.1	19.0
South Carolina	22,948	27.3	19.1	19.7	15,334	12.1	22.3	28.8
South Dakota	4,172	20.6	14.4	20.0	2,801	13.4	15.6	27.4
Tennessee	31,933	34.4	17.7	14.4	19,366	21.3	23.7	22.7
Texas	122,754	33.8	24.5	13.8	76,841	23.1	32.7	17.0
Utah	13,643	18.7	25.6	13.6	10,061	8.9	30.4	18.4
Vermont	5,562	29.5	31.9	1.7	3,570	18.7	46.2	2.6
Virginia	49,089	18.1	14.8	15.1	39,251	11.6	16.0	15.9
Washington	41,779	18.1	23.4	14.5	29,972	7.6	30.1	20.2
West Virginia	16,172	21.8	15.2	12.2	11,666	7.9	17.5	16.7
Wisconsin	45,730	20.1	15.7	14.6	34,971	12.1	18.4	14.3
Wyoming	5,116	11.4	15.8	7.6	4,138	7.0	19.5	9.3

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.

[2] This is the first year that the NASBO state expenditure report includes the District of Columbia.

Source: NASBO, 2017, *State expenditure report: Examining fiscal 2015–2017 state spending*, Washington, DC: NASBO, https://higherlogicdownload.s3.amazonaws.com/NASBO/9d2d2db1-c943-4f1b-b750-0fca152d64c2/UploadedImages/SER%20Archive/State_Expenditure_Report__Fiscal_2015-2017_-S.pdf.

EXHIBIT 6. Federal Medical Assistance Percentages and Enhanced Federal Medical Assistance Percentages by State, FYs 2015–2019 **E 6**

State	FMAPs for Medicaid					E-FMAPs for CHIP				
	FY 2015[1]	FY 2016[1]	FY 2017[1]	FY 2018[1]	FY 2019[1]	FY 2015	FY 2016[2]	FY 2017[2]	FY 2018[2]	FY 2019[2]
Alabama	68.99%	69.87%	70.16%	71.44%	71.88%	78.29%	100.00%	100.00%	100.00%	100.00%
Alaska	50.00	50.00	50.00	50.00	50.00	65.00	88.00	88.00	88.00	88.00
Arizona	68.46	68.92	69.24	69.89	69.81	77.92	100.00	100.00	100.00	100.00
Arkansas	70.88	70.00	69.69	70.87	70.51	79.62	100.00	100.00	100.00	100.00
California	50.00	50.00	50.00	50.00	50.00	65.00	88.00	88.00	88.00	88.00
Colorado	51.01	50.72	50.02	50.00	50.00	65.71	88.50	88.01	88.00	88.00
Connecticut	50.00	50.00	50.00	50.00	50.00	65.00	88.00	88.00	88.00	88.00
Delaware	53.63	54.83	54.20	56.43	57.55	67.54	91.38	90.94	92.50	93.29
District of Columbia	70.00	70.00	70.00	70.00	70.00	79.00	100.00	100.00	100.00	100.00
Florida	59.72	60.67	61.10	61.79	60.87	71.80	95.47	95.77	96.25	95.61
Georgia	66.94	67.55	67.89	68.50	67.62	76.86	100.00	100.00	100.00	100.00
Hawaii	52.23	53.98	54.93	54.78	53.92	66.56	90.79	91.45	91.35	90.74
Idaho	71.75	71.24	71.51	71.17	71.13	80.23	100.00	100.00	100.00	100.00
Illinois	50.76	50.89	51.30	50.74	50.31	65.53	88.62	88.91	88.52	88.22
Indiana	66.52	66.60	66.74	65.59	65.96	76.56	99.62	99.72	98.91	99.17
Iowa	55.54	54.91	56.74	58.48	59.93	68.88	91.44	92.72	93.94	94.95
Kansas	56.63	55.96	56.21	54.74	57.10	69.64	92.17	92.35	91.32	92.97
Kentucky	69.94	70.32	70.46	71.17	71.67	78.96	100.00	100.00	100.00	100.00
Louisiana	62.05	62.21	62.28	63.69	65.00	73.44	96.55	96.60	97.58	98.50
Maine	61.88	62.67	64.38	64.34	64.52	73.32	96.87	98.07	98.04	98.16
Maryland	50.00	50.00	50.00	50.00	50.00	65.00	88.00	88.00	88.00	88.00
Massachusetts	50.00	50.00	50.00	50.00	50.00	65.00	88.00	88.00	88.00	88.00
Michigan	65.54	65.60	65.15	64.78	64.45	75.88	98.92	98.61	98.35	98.12
Minnesota	50.00	50.00	50.00	50.00	50.00	65.00	88.00	88.00	88.00	88.00
Mississippi	73.58	74.17	74.63	75.65	76.39	81.51	100.00	100.00	100.00	100.00
Missouri	63.45	63.28	63.21	64.61	65.40	74.42	97.30	97.25	98.23	98.78
Montana	65.90	65.24	65.56	65.38	65.54	76.13	98.67	98.89	98.77	98.88
Nebraska	53.27	51.16	51.85	52.55	52.58	67.29	88.81	89.30	89.79	89.81

EXHIBIT 6. (continued)

State	FMAPs for Medicaid					E-FMAPs for CHIP				
	FY 2015[1]	FY 2016[1]	FY 2017[1]	FY 2018[1]	FY 2019[1]	FY 2015	FY 2016[2]	FY 2017[2]	FY 2018[2]	FY 2019[2]
Nevada	64.36%	64.93%	64.67%	65.75%	64.87%	75.05%	98.45%	98.27%	99.03%	98.41%
New Hampshire	50.00	50.00	50.00	50.00	50.00	65.00	88.00	88.00	88.00	88.00
New Jersey	50.00	50.00	50.00	50.00	50.00	65.00	88.00	88.00	88.00	88.00
New Mexico	69.65	70.37	71.13	72.16	72.26	78.76	100.00	100.00	100.00	100.00
New York	50.00	50.00	50.00	50.00	50.00	65.00	88.00	88.00	88.00	88.00
North Carolina	65.88	66.24	66.88	67.61	67.16	76.12	99.37	99.82	100.00	100.00
North Dakota	50.00	50.00	50.00	50.00	50.00	65.00	88.00	88.00	88.00	88.00
Ohio	62.64	62.47	62.32	62.78	63.09	73.85	96.73	96.62	96.95	97.16
Oklahoma	62.30	60.99	59.94	58.57	62.38	73.61	95.69	94.96	94.00	96.67
Oregon	64.06	64.38	64.47	63.62	62.56	74.84	98.07	98.13	97.53	96.79
Pennsylvania	51.82	52.01	51.78	51.82	52.25	66.27	89.41	89.25	89.27	89.58
Rhode Island	50.00	50.42	51.02	51.45	52.57	65.00	88.29	88.71	89.02	89.80
South Carolina	70.64	71.08	71.30	71.58	71.22	79.45	100.00	100.00	100.00	100.00
South Dakota	51.64	51.61	54.94	55.34	56.71	66.15	89.13	91.46	91.74	92.70
Tennessee	64.99	65.05	64.96	65.82	65.87	75.49	98.54	98.47	99.07	99.11
Texas	58.05	57.13	56.18	56.88	58.19	70.64	92.99	92.33	92.82	93.73
Utah	70.56	70.24	69.90	70.26	69.71	79.39	100.00	100.00	100.00	100.00
Vermont	54.01	53.90	54.46	53.47	53.89	67.81	90.73	91.12	90.43	90.72
Virginia	50.00	50.00	50.00	50.00	50.00	65.00	88.00	88.00	88.00	88.00
Washington	50.03	50.00	50.00	50.00	50.00	65.02	88.00	88.00	88.00	88.00
West Virginia	71.35	71.42	71.80	73.24	74.34	79.95	100.00	100.00	100.00	100.00
Wisconsin	58.27	58.23	58.51	58.77	59.37	70.79	93.76	93.96	94.14	94.56
Wyoming	50.00	50.00	50.00	50.00	50.00	65.00	88.00	88.00	88.00	88.00
American Samoa	55.00	55.00	55.00	55.00	55.00	68.50	91.50	91.50	91.50	91.50
Guam	55.00	55.00	55.00	55.00	55.00	68.50	91.50	91.50	91.50	91.50
N. Mariana Islands	55.00	55.00	55.00	55.00	55.00	68.50	91.50	91.50	91.50	91.50
Puerto Rico	55.00	55.00	55.00	55.00	55.00	68.50	91.50	91.50	91.50	91.50
Virgin Islands	55.00	55.00	55.00	55.00	55.00	68.50	91.50	91.50	91.50	91.50

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: FMAP = 1 – [(state per capita income squared ÷ U.S. per capita income squared) × 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 and adding 23 percentage points.

[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 will be increased by 23 percentage points, not to exceed 100 percent, for all states.

Source: U.S. Department of Health and Human Services, *Federal Register* notices for FYs 2015–2019.

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 during the recessions of 2001 and 2007–2009, and leveled off as economic conditions improved. More recently, since fiscal year (FY) 2014, Medicaid spending has grown, in part due to expanded eligibility under the Patient Protection and Affordable Care Act (ACA, P.L. 111-148, as amended).
- 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 FYs 2008–2013, enrollment for adults grew on average 5.8 percent annually, compared to about 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 or 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).
- In July 2018, 73.2 million individuals were enrolled in Medicaid and the State Children's Health Insurance Program (CHIP). Enrollment in July 2018 was about 27.5 percent higher than average monthly enrollment during July to September 2013, a baseline period that precedes the start of open enrollment for exchange plans and state expansions of Medicaid for newly eligible adults under the ACA (Exhibit 11).
- Enrollment growth has slowed and even decreased slightly in recent years. Enrollment in Medicaid and CHIP decreased by about 2.2 percent from July 2017 to July 2018 after a couple of years of modest growth; enrollment grew by about 1.3 percent from calendar years (CYs) 2015–2016 and by about 1.6 percent from CYs 2016–2017. Growth rates continue to vary by state; in 2018, enrollment decreased in the majority of states (37 states and the District of Columbia) (Exhibit 11).
- Medicaid and CHIP expenditures as a share of national health expenditures are projected to grow from 17.2 percent in 2017 to about 18.0 percent in 2026. Medicare's share is projected to increase from 20.2 percent to 24.0 percent during the same time period (Exhibit 12).

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

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.

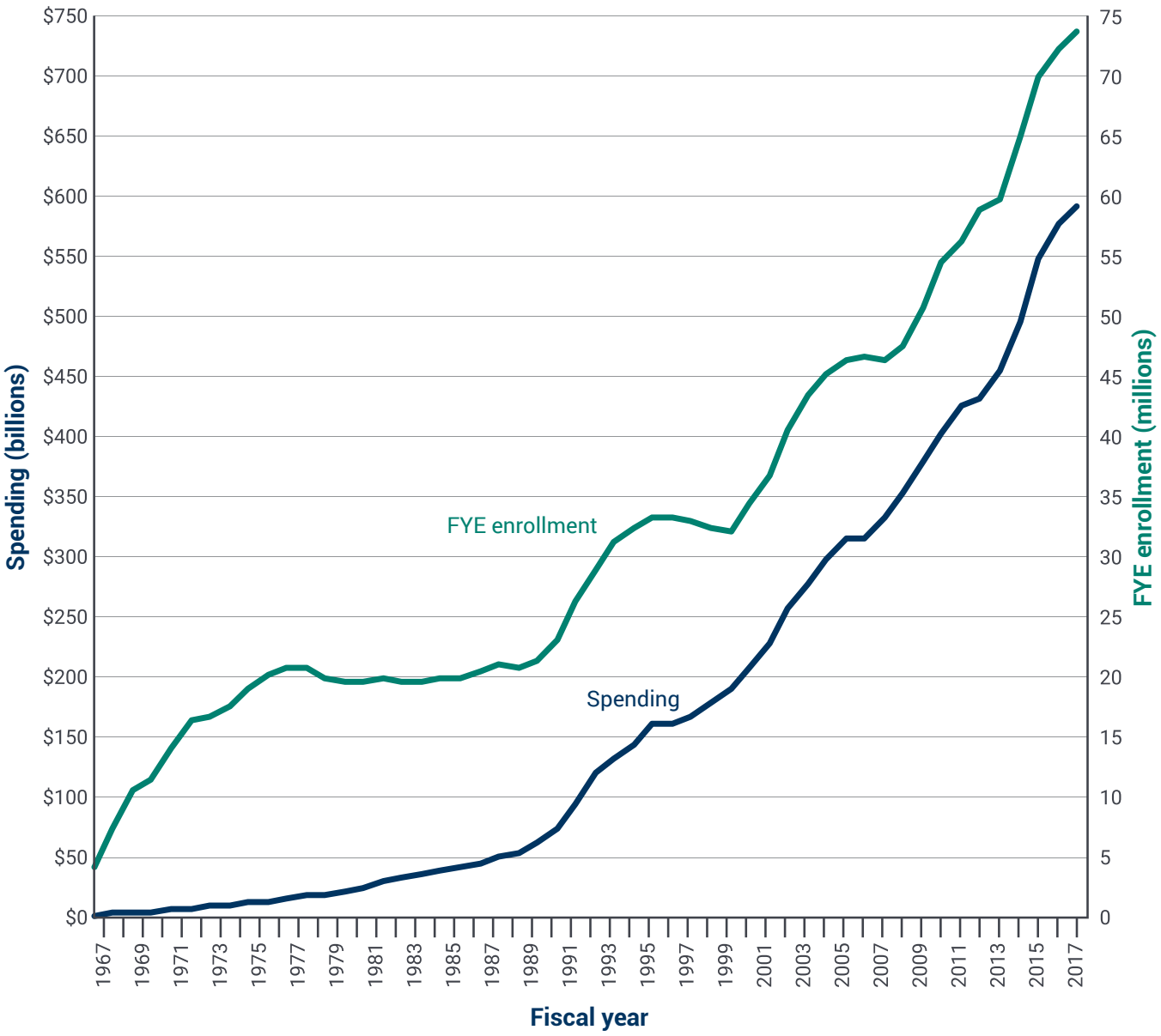
Children and adults who qualify for Medicaid on the basis of a disability are included in the disabled category. In addition, although disability is not a basis of eligibility for aged individuals, states may report some enrollees age 65 and older in the disabled category. Unlike the majority of MACStats, 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.

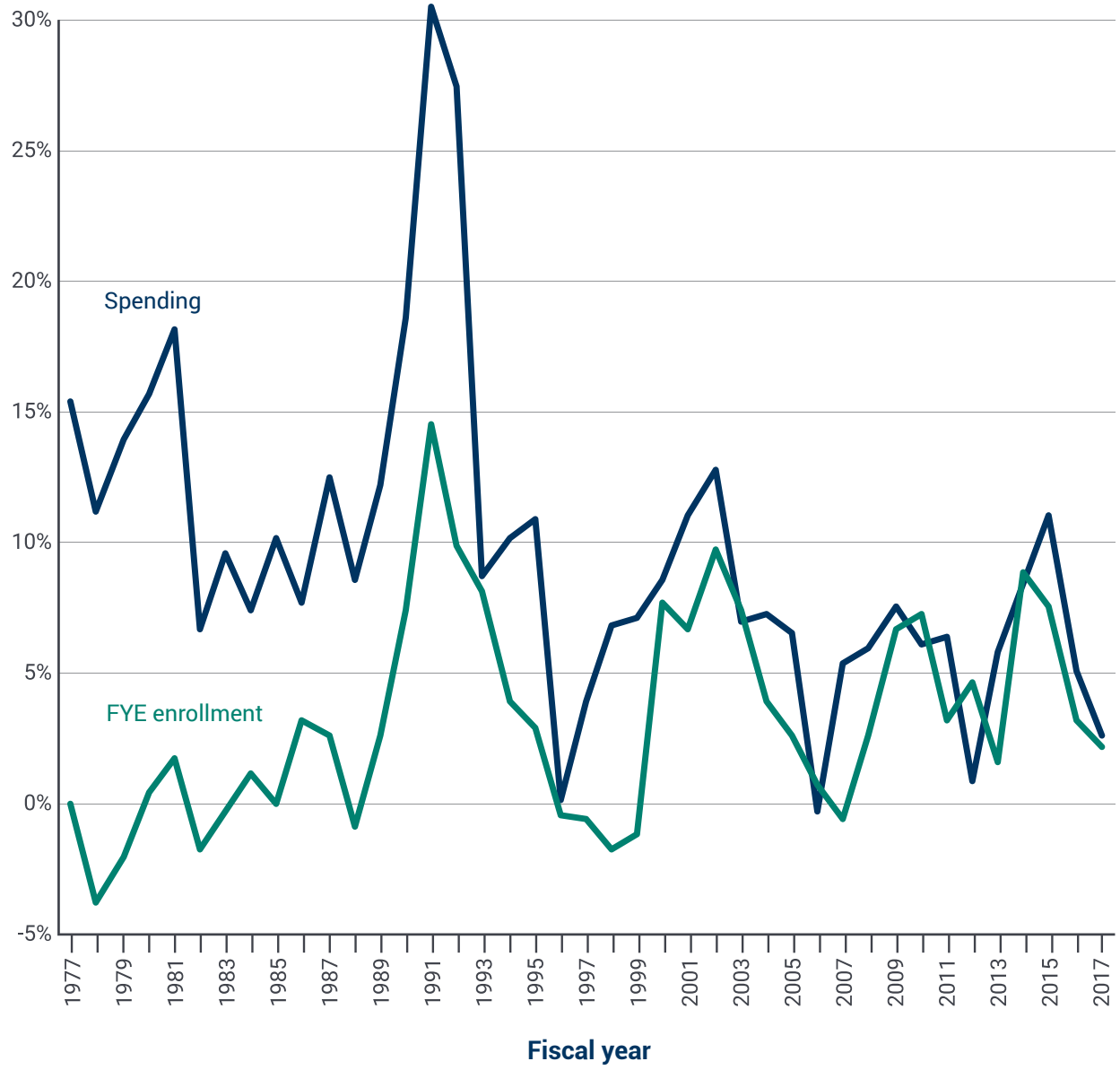
EXHIBIT 8. Medicaid Enrollment and Spending, FYs 1966–2017



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 full-year equivalents 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 2013–2017 are projected; those for FYs 1999–2017 include estimates for Puerto Rico and the Virgin Islands.

Sources: 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 1977—2017



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 2013–2017 are projected; those for FYs 1999–2017 include estimates for Puerto Rico and the Virgin Islands.

Sources: 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 1966–2017 **E 10**

Fiscal year	Spending (billions)	FYE enrollment (millions)	Spending per FYE enrollee	Annual growth		
				Spending	FYE enrollment	Spending per FYE enrollee
1966	$1	4.0	$222	–	–	–
1967	2	7.4	321	165.4%	83.3%	44.8%
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

EXHIBIT 10. (continued)

Fiscal year	Spending (billions)	FYE enrollment (millions)	Spending per FYE enrollee	Annual growth		
				Spending	FYE enrollment	Spending per FYE enrollee
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
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

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 2013–2017 are projected; those for FYs 1999–2017 include estimates for Puerto Rico and the Virgin Islands.

– Dash indicates not applicable; 0.0% indicates an amount less than 0.05% that rounds to zero.

Sources: 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 11. Full-Benefit Medicaid and CHIP Enrollment, Selected Months in 2013–2018 E 11

State	Number of individuals enrolled					Annual and cumulative growth			
	July–September 2013 average	July 2015	July 2016	July 2017	July 2018	July 2015 to July 2016	July 2016 to July 2017	July 2017 to July 2018	July–September 2013 average to July 2018
Total	**56,533,472**[1]	**72,672,694**	**73,628,614**	**74,800,477**	**73,189,584**	**1.3%**	**1.6%**	**-2.2%**	**27.5%**[2]
Alabama	799,176[3]	891,912	896,741	892,956	899,824	0.5	-0.4	0.8	12.6
Alaska	122,334	127,401	162,869	196,121	209,491	27.8	20.4	6.8	71.2
Arizona	1,201,770	1,595,617	1,699,635	1,745,097	1,688,791	6.5	2.7	-3.2	40.5
Arkansas	556,851	823,741	889,082	909,062	878,537	7.9	2.2	-3.4	57.8
California	7,755,381[4]	12,648,637[4]	12,201,179	12,277,389	11,960,965	-3.5	0.6	-2.6	54.2
Colorado	783,420	1,274,849	1,362,887	1,399,170	1,337,830	6.9	2.7	-4.4	70.8
Connecticut	–	754,054	753,413	799,837[5]	844,165	-0.1	6.2	5.5	–
Delaware	223,324	241,749	236,248	244,960	247,466	-2.3	3.7	1.0	10.8
District of Columbia	235,786[6]	255,660[6]	258,918[6]	277,408[6]	258,839	1.3	7.1	-6.7	9.8
Florida	3,695,306	3,558,092[7]	3,620,085[7]	4,357,190	4,229,664	1.7	20.4	-2.9	14.5
Georgia	1,535,090	1,781,537	1,775,301	1,754,492	1,834,246	-0.4	-1.2	4.5	19.5
Hawaii	288,357	332,027	341,072	346,435	337,502	2.7	1.6	-2.6	17.0
Idaho	238,150	278,268	291,057	294,571	273,384	4.6	1.2	-7.2	14.8
Illinois	2,626,943[8]	3,162,522	3,118,055	3,073,670	2,949,575	-1.4	-1.4	-4.0	12.3
Indiana	1,120,674[9]	1,389,519[9]	1,481,425[9]	1,494,850	1,439,013	6.6	0.9	-3.7	28.4
Iowa	493,515	599,305	613,386	666,420	678,106	2.3	8.6	1.8	37.4
Kansas	378,160	398,007	422,549	403,231	386,547	6.2	-4.6	-4.1	2.2
Kentucky	606,805	1,119,198	1,223,869	1,256,677	1,241,612	9.4	2.7	-1.2	104.6
Louisiana	1,019,787	1,075,652	1,308,428	1,449,244	1,449,055	21.6	10.8	-0.0	42.1
Maine	–	280,241	273,367	266,623	261,636	-2.5	-2.5	-1.9	–
Maryland	856,297	1,179,937	1,236,465	1,306,788	1,296,128	4.8	5.7	-0.8	51.4
Massachusetts	1,296,359	1,649,423[10]	1,677,180	1,602,714	1,589,897	1.7	-4.4	-0.8	22.6
Michigan	1,912,009	2,352,127	2,304,480[11, 12]	2,380,232	2,332,229	-2.0	3.3	-2.0	22.0
Minnesota	873,040[13]	1,028,161	1,047,507	1,065,061	1,070,221	1.9	1.7	0.5	22.6
Mississippi	637,229	709,510	696,139	681,976	638,956	-1.9	-2.0	-6.3	0.3
Missouri	846,084	932,026	961,073[14]	967,477[14]	933,441	3.1	0.7	-3.5	10.3
Montana	148,974	176,714	220,378	262,329	278,662	24.7	19.0	6.2	87.1

EXHIBIT 11. (continued)

State	Number of individuals enrolled					Annual and cumulative growth			
	July–September 2013 average	July 2015	July 2016	July 2017	July 2018	July 2015 to July 2016	July 2016 to July 2017	July 2017 to July 2018	July–September 2013 average to July 2018
Nebraska	244,600	237,243	241,723	245,909	243,308	1.9%	1.7%	-1.1%	-0.5%
Nevada	332,560	566,017	609,435	633,019	669,499	7.7	3.9	5.8	101.3
New Hampshire	127,082	184,266	189,484	187,798	182,182	2.8	-0.9	-3.0	43.4
New Jersey	1,283,851	1,789,264	1,782,594	1,780,482	1,754,725	-0.4	-0.1	-1.4	36.7
New Mexico	457,678	717,189	761,033	781,857	728,449	6.1	2.7	-6.8	59.2
New York	5,678,417	6,512,137[8]	6,417,388[8, 12]	6,421,323[12]	6,491,292[8, 12]	-1.5	0.1	1.1	14.3
North Carolina	1,595,952	1,982,496	2,059,981	2,092,418	2,037,412	3.9	1.6	-2.6	27.7
North Dakota	69,980[15]	88,719	89,460	93,148	93,970	0.8	4.1	0.9	34.3
Ohio	2,130,322	2,988,934	2,976,705	2,788,908	2,727,989	-0.4	-6.3	-2.2	28.1
Oklahoma	790,051	821,867	787,331	802,957	788,159	-4.2	2.0	-1.8	-0.2
Oregon	626,356[16]	1,055,685	1,036,984	989,582	963,773	-1.8	-4.6	-2.6	53.9
Pennsylvania	2,386,046	2,665,455	2,861,112	2,947,533	2,970,511	7.3	3.0	0.8	24.5
Rhode Island	190,833	277,232	284,455	313,103	310,587	2.6	10.1	-0.8	62.8
South Carolina	889,744	999,438	1,021,192	1,032,955	999,452	2.2	1.2	-3.2	12.3
South Dakota	115,501	118,715	119,252	118,132	117,558	0.5	-0.9	-0.5	1.8
Tennessee	1,244,516	1,512,658	1,632,972	1,484,821	1,371,010	8.0	-9.1	-7.7	10.2
Texas	4,203,449	4,678,394	4,744,278	4,772,545	4,326,567	1.4	0.6	-9.3	2.9
Utah[9]	294,029	310,273	312,936	307,267	293,770	0.9	-1.8	-4.4	-0.1
Vermont	161,081	185,991	179,421	168,455	161,766	-3.5	-6.1	-4.0	0.4
Virginia	935,434	980,591	984,787	1,015,609	1,032,764	0.4	3.1	1.7	10.4
Washington	1,117,576	1,728,834	1,782,418	1,789,309	1,745,561	3.1	0.4	-2.4	56.2
West Virginia	354,544	542,077	572,107	563,596	543,289	5.5	-1.5	-3.6	53.2
Wisconsin	985,531[17]	1,048,817	1,045,160	1,037,696	1,032,239	-0.3	-0.7	-0.5	4.7
Wyoming	67,518	64,516	63,618	60,075	57,970	-1.4	-5.6	-3.5	-14.1

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] Excludes individuals receiving temporary transitional coverage.

[11] Does not include share of cost and full-benefit Section 1115 waiver enrollees.

[12] Includes partial-benefit 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] Excludes retroactive enrollment.

Source: MACPAC, 2018, analysis of CMS, 2018, Medicaid and CHIP July 2018 application, eligibility, and enrollment data, https://www.medicaid.gov/medicaid/program-information/downloads/july-2018-enrollment-data.zip; CMS, 2017, Medicaid and CHIP September 2017 application, eligibility, and enrollment data, https://www.medicaid.gov/medicaid/program-information/downloads/september-2017-enrollment-data.zip; CMS, 2016, Medicaid and CHIP August and September 2016 application, eligibility, and enrollment data, https://www.medicaid.gov/medicaid/program-information/downloads/september-2016-enrollment-data.zip; and CMS, 2015, Medicaid and CHIP August and September 2015 application, eligibility, and enrollment data, https://www.medicaid.gov/medicaid/program-information/downloads/august-and-september-2015-enrollment-data.zip.

EXHIBIT 12. Historical and Projected National Health Expenditures by Payer for Selected Years, CYs 1970–2026 **E 12**

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	**2,689**	419	15.6	545	20.3	899	33.4	88	3.3	429	16.0	310	11.5
2012	**2,797**	435	15.6	570	20.4	928	33.2	90	3.2	456	16.3	318	11.4
2013	**2,879**	459	15.9	590	20.5	946	32.9	92	3.2	466	16.2	325	11.3
2014	**3,026**	510	16.8	619	20.5	1,000	33.0	99	3.3	468	15.5	330	10.9
2015	**3,201**	559	17.5	649	20.3	1,069	33.4	106	3.3	479	15.0	339	10.6
2016	**3,337**	582	17.5	672	20.1	1,123	33.7	109	3.3	498	14.9	353	10.6
Projected													
2017	**$3,489**	$600	17.2%	$706	20.2%	$1,187	34.0%	$115	3.3%	$517	14.8%	$365	10.5%
2018	**3,675**	641	17.4	748	20.4	1,244	33.8	122	3.3	540	14.7	380	10.3
2019	**3,868**	677	17.5	808	20.9	1,286	33.3	129	3.3	570	14.7	398	10.3
2020	**4,091**	718	17.5	873	21.3	1,349	33.0	136	3.3	598	14.6	417	10.2
2021	**4,322**	761	17.6	943	21.8	1,411	32.6	144	3.3	627	14.5	437	10.1

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	**$4,562**	$806	17.7%	$1,016	22.3%	$1,473	32.3%	$152	3.3%	$656	14.4%	$459	10.1%
2023	**4,818**	853	17.7	1,093	22.7	1,544	32.1	160	3.3	687	14.3	482	10.0
2024	**5,091**	903	17.7	1,176	23.1	1,620	31.8	167	3.3	719	14.1	506	9.9
2025	**5,370**	960	17.9	1,253	23.3	1,698	31.6	176	3.3	753	14.0	531	9.9
2026	**5,696**	1,025	18.0	1,366	24.0	1,776	31.2	185	3.3	789	13.9	555	9.7

Notes: CY is calendar year. Components may not sum to total due to rounding. The latest projections begin after the latest historical year (2016) and go through 2026.

[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, 2018, analysis of Office of the Actuary (OACT), CMS, 2017, *National health expenditures by type of service and source of funds: Calendar years 1960–2016*, https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/NHE2016.zip. For projected data: MACPAC, 2018, analysis of OACT, 2018, *National health expenditure (NHE) amounts by type of expenditure and source of funds: Calendar years 1960–2026* in projections format, as of February 2018, https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/NHE60-26.zip; and OACT, 2018, Table *17: Health insurance enrollment and enrollment growth rates, calendar years, 2010–2026*, 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 1990–2016

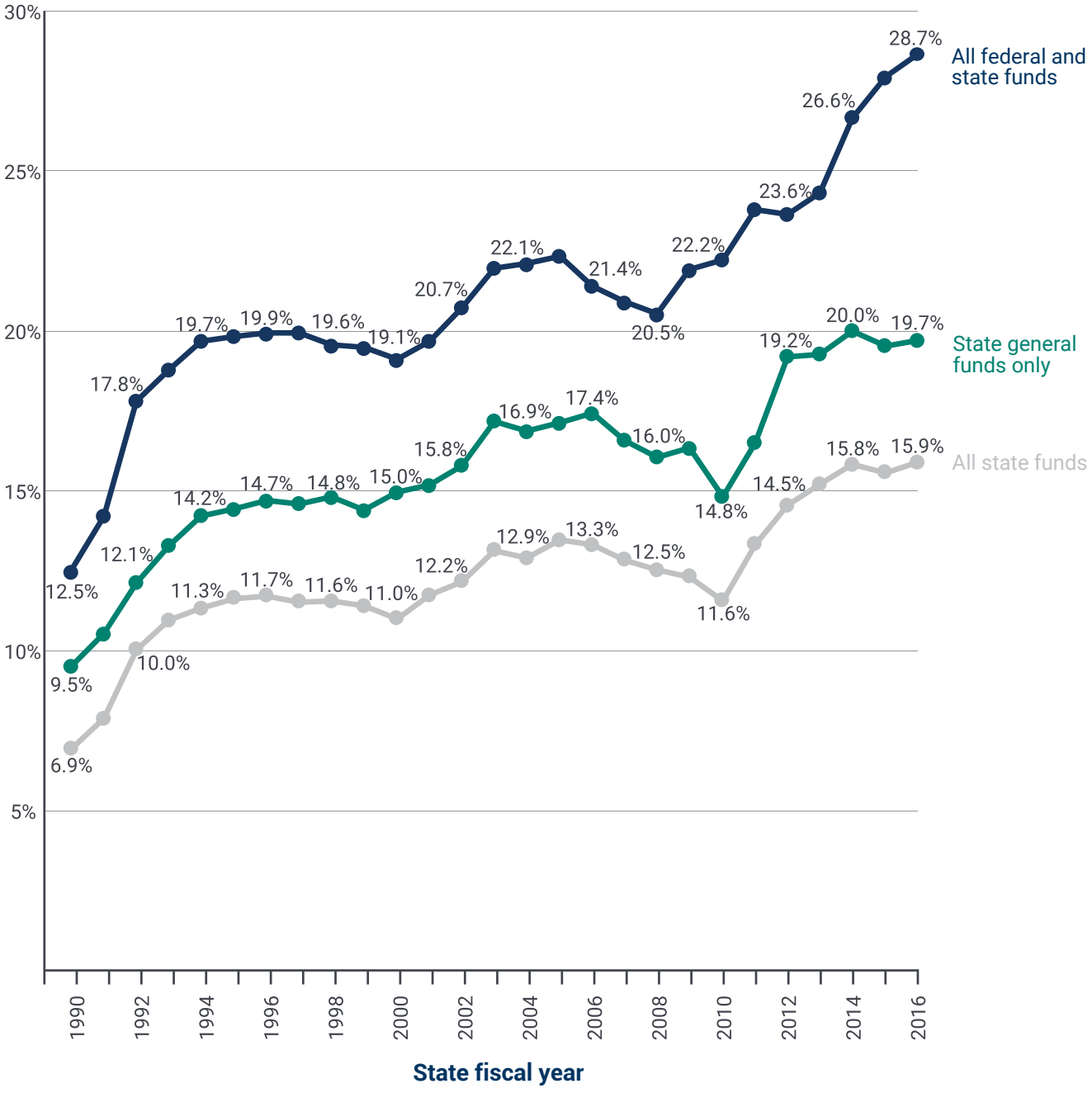


EXHIBIT 13. (continued) **E 13**

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
1990	12.5%	9.5%	6.9%
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	19.7	15.9

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, 2018, 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 $605 billion in fiscal year (FY) 2017 (Exhibit 16). Spending for the State Children's Health Insurance Program (CHIP) was $17.5 billion (Exhibit 33).
- Almost half (49.3 percent) of Medicaid benefit spending in FY 2017 was for capitation payments for managed care, up from 46.3 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 used long-term services and supports (LTSS). LTSS users accounted for 5.9 percent of Medicaid enrollees but 41.9 percent of all Medicaid spending (Exhibit 20).
- Most FY 2013 Medicaid spending for enrollees eligible on the basis of disability and those age 65 and older was for LTSS; for children and adults eligible on a basis other than disability, most spending 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 differences in 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 Medicaid drug spending by more than half (54.5 percent) in FY 2017 (Exhibit 28). Gross drug spending increased 5.2 percent from FY 2016, but net drug spending (i.e., after rebates) decreased by 1.7 percent. Over half (62.4 percent) of Medicaid gross spending for drugs occurred under managed care in FY 2017 (Exhibit 26).
- Disproportionate share hospital (DSH), upper payment limit, and other types of supplemental payments accounted for about half of fee-for-service payments to hospitals in FY 2017 (Exhibit 24).

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

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) E 14b

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) **E 15a**

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) **E 15b**

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 2017 (millions) E 16

State[1]	Benefits			State program administration			Total Medicaid		
	Total	Federal	State	Total	Federal	State	Total	Federal	State
Alabama	**$5,562**	$3,920	$1,642	**$238**	$148	$89	**$5,800**	$4,068	$1,732
Alaska	**1,962**	1,371	591	**122**	67	56	**2,084**	1,437	646
Arizona	**11,824**	8,974	2,849	**277**	194	83	**12,101**	9,169	2,932
Arkansas	**6,364**	4,943	1,421	**418**	291	128	**6,782**	5,234	1,549
California	**82,384**	48,601	33,783	**5,930**	3,650	2,279	**88,314**	52,251	36,063
Colorado	**7,805**	4,508	3,297	**379**	230	148	**8,184**	4,738	3,446
Connecticut	**7,401**	4,294	3,107	**420**	287	133	**7,821**	4,581	3,240
Delaware	**2,134**	1,313	820	**127**	87	40	**2,261**	1,401	860
District of Columbia	**2,783**	2,058	725	**178**	117	60	**2,961**	2,176	785
Florida	**23,169**	14,186	8,983	**752**	442	310	**23,921**	14,628	9,293
Georgia	**10,106**	6,882	3,224	**545**	370	175	**10,651**	7,252	3,399
Hawaii	**2,338**	1,528	810	**109**	82	28	**2,448**	1,610	838
Idaho	**1,822**	1,303	519	**107**	70	37	**1,929**	1,373	556
Illinois	**15,054**	9,343	5,711	**1,009**	606	403	**16,063**	9,950	6,113
Indiana	**11,106**	8,017	3,089	**534**	354	180	**11,640**	8,371	3,270
Iowa	**4,066**	2,548	1,518	**175**	126	50	**4,241**	2,674	1,567
Kansas	**3,214**	1,810	1,405	**212**	145	67	**3,427**	1,955	1,472
Kentucky	**9,527**	7,401	2,126	**253**	183	70	**9,780**	7,584	2,197
Louisiana	**10,914**	7,711	3,202	**341**	229	112	**11,254**	7,940	3,314
Maine	**2,565**	1,654	911	**169**	124	46	**2,735**	1,778	957
Maryland	**11,161**	6,775	4,386	**449**	290	159	**11,610**	7,065	4,545
Massachusetts	**17,121**	9,355	7,766	**1,027**	624	403	**18,148**	9,979	8,169
Michigan	**16,711**	12,126	4,585	**654**	442	212	**17,365**	12,568	4,797
Minnesota	**11,352**	6,493	4,859	**730**	437	292	**12,082**	6,930	5,152
Mississippi	**5,462**	4,081	1,381	**215**	146	69	**5,677**	4,227	1,450
Missouri	**10,096**	6,397	3,699	**432**	281	151	**10,528**	6,678	3,850
Montana	**1,772**	1,419	353	**94**	63	31	**1,866**	1,482	384
Nebraska	**2,042**	1,060	982	**123**	86	37	**2,165**	1,146	1,019
Nevada	**3,530**	2,646	884	**186**	129	57	**3,717**	2,775	941
New Hampshire	**2,055**	1,224	831	**108**	73	35	**2,163**	1,297	866
New Jersey	**14,744**	8,867	5,877	**822**	532	290	**15,566**	9,399	6,166
New Mexico	**4,804**	3,713	1,092	**216**	146	70	**5,020**	3,858	1,162

EXHIBIT 16. (continued)

State[1]	Benefits			State program administration			Total Medicaid		
	Total	Federal	State	Total	Federal	State	Total	Federal	State
New York	**$76,398**	$37,264	$39,134	**$2,165**	$1,268	$897	**$78,563**	$38,532	$40,031
North Carolina	**13,337**	8,937	4,400	**675**	474	201	**14,012**	9,411	4,600
North Dakota	**1,216**	747	469	**104**	70	34	**1,320**	818	503
Ohio	**23,056**	15,889	7,167	**933**	589	343	**23,989**	16,479	7,510
Oklahoma	**4,630**	2,854	1,776	**210**	129	80	**4,840**	2,984	1,856
Oregon	**8,313**	6,199	2,114	**513**	314	199	**8,825**	6,513	2,312
Pennsylvania	**28,081**	17,112	10,969	**1,003**	630	373	**29,084**	17,742	11,341
Rhode Island	**2,623**	1,554	1,069	**163**	111	53	**2,786**	1,665	1,122
South Carolina	**5,964**	4,255	1,709	**304**	212	93	**6,268**	4,467	1,802
South Dakota	**851**	501	350	**52**	31	21	**903**	532	371
Tennessee	**9,088**	5,915	3,174	**573**	384	190	**9,661**	6,298	3,363
Texas	**35,645**	20,112	15,533	**1,508**	967	541	**37,153**	21,079	16,074
Utah	**2,452**	1,718	734	**135**	90	45	**2,587**	1,807	779
Vermont	**1,600**	943	657	**142**	98	45	**1,743**	1,040	702
Virginia	**8,988**	4,504	4,484	**470**	308	162	**9,458**	4,812	4,646
Washington	**11,893**	7,573	4,320	**714**	424	290	**12,607**	7,997	4,610
West Virginia	**4,001**	3,165	836	**157**	112	45	**4,158**	3,277	880
Wisconsin	**8,050**	4,741	3,309	**453**	292	161	**8,503**	5,033	3,470
Wyoming	**592**	304	288	**57**	40	17	**649**	343	305
Subtotal (states)	**$569,730**	**$350,810**	**$218,920**	**$27,681**	**$17,594**	**$10,087**	**$597,411**	**$368,404**	**$229,007**
American Samoa	**33**	18	15	**1**	1	0	**35**	19	15
Guam	**79**	51	28	**4**	3	1	**83**	54	29
Northern Mariana Islands	**30**	17	13	**1**	0	0	**30**	17	13
Puerto Rico	**2,318**	1,540	778	**119**	92	27	**2,436**	1,632	805
Virgin Islands	**54**	34	20	**16**	13	3	**70**	47	23
Subtotal (states and territories)	**$572,244**	**$352,470**	**$219,774**	**$27,821**	**$17,702**	**$10,119**	**$600,065**	**$370,172**	**$229,893**
MFCU	**–**	–	–	**339**	254	85	**339**	254	85
Medicaid survey and certification of nursing and intermediate care facilities	**–**	–	–	**357**	268	89	**357**	268	89
Vaccines for Children program	**–**	–	–	**–**	–	–	**4,427**	4,427	–
Total	**$572,244**	**$352,470**	**$219,774**	**$28,517**	**$18,224**	**$10,293**	**$605,188[2]**	**$375,121[2]**	**$230,067**

EXHIBIT 16. (continued)

Notes: FY is fiscal year. MFCU is Medicaid Fraud Control Unit. Total federal spending shown here ($375,121 million) will differ from total federal outlays shown in FY 2019 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 Medicaid Fraud Control Units (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 July 20, 2018. California's fourth quarter submission was not certified; North Dakota's second, third, and fourth quarter submissions were not certified; Alabama's first quarter submission was 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, 2018, analysis of CMS-64 FMR net expenditure data as of July 20, 2018. For all other spending (MCFUs, survey and certification, VFC program): 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.

EXHIBIT 17. Total Medicaid Benefit Spending by State and Category, FY 2017 (millions) E 17

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	**$5,562**	$2,096	$460	$74	$62	$92	$535	$327	$1,002	$500	$117	$330	-$31
Alaska	**1,962**	591	183	100	37	298	144	45	208	343	0	29	-18
Arizona	**11,824**	1,255	51	5	8	43	487	6	84	1	9,546	339	-2
Arkansas	**6,364**	1,141	354	81	26	50	986	165	1,015	593	1,662	350	-59
California	**82,384**	10,346	806	1,016	15	3,095	10,218	777	4,011	8,540	41,327	2,882	-649
Colorado	**7,805**	2,537	745	123	–	305	297	252	835	1,279	1,323	181	-71
Connecticut	**7,401**	1,805	437	166	196	337	532	507	1,653	1,852	0	482	-565
Delaware[2]	**2,134**	74	12	40	0	2	69	-27	91	134	1,699	47	-8
District of Columbia	**2,783**	398	46	18	4	157	205	107	342	502	972	55	-23
Florida	**23,169**	2,290	239	4	18	190	541	215	967	1,263	15,898	1,657	-112
Georgia	**10,106**	2,091	335	24	33	19	657	250	1,433	1,176	3,738	447	-98
Hawaii[2]	**2,338**	44	0	31	0	27	6	-1	9	112	2,105	52	-48
Idaho	**1,822**	424	130	-0	24	32	196	62	302	376	229	66	-20
Illinois	**15,054**	3,812	298	57	124	162	777	218	1,908	1,354	5,936	505	-97
Indiana	**11,106**	944	95	57	8	410	281	81	2,762	1,323	4,920	286	-61
Iowa[2]	**4,066**	165	48	56	2	37	146	-175	84	48	3,590	155	-92
Kansas[2]	**3,214**	162	5	0	0	1	42	-2	92	0	2,829	105	-20
Kentucky	**9,527**	373	35	3	4	191	443	34	1,182	835	6,226	260	-59
Louisiana	**10,914**	1,402	48	4	–	29	206	68	1,488	763	6,677	353	-125
Maine	**2,565**	599	85	23	47	196	460	79	481	485	3	225	-117
Maryland	**11,161**	1,127	130	140	39	156	1,361	372	1,389	1,346	4,819	351	-69
Massachusetts	**17,121**	2,830	329	287	27	198	1,071	268	1,744	3,435	6,535	555	-158
Michigan	**16,711**	1,551	344	42	12	312	522	358	2,009	784	10,370	524	-117
Minnesota[2]	**11,352**	668	161	34	196	143	683	-67	1,164	2,952	5,329	220	-133
Mississippi	**5,462**	633	113	5	9	32	252	55	1,114	434	2,571	262	-17
Missouri	**10,096**	2,833	13	13	13	425	988	618	1,483	1,764	1,658	381	-92
Montana	**1,772**	662	122	58	43	34	280	98	196	231	15	52	-19
Nebraska[2]	**2,042**	101	11	42	1	2	64	-72	421	373	1,059	79	-40
Nevada	**3,530**	557	146	44	28	56	419	105	311	246	1,469	176	-27
New Hampshire[2]	**2,055**	264	11	23	2	6	194	-0	385	314	837	38	-17

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	**$14,744**	$1,561	$56	$3	$6	$373	$853	$17	$1,940	$1,107	$8,630	$412	-$214
New Mexico	**4,804**	494	26	12	48	6	66	12	31	390	3,592	152	-24
New York[2]	**76,398**	9,218	346	55	185	1,214	6,590	-3,957	8,504	7,029	47,018	1,620	-1,424
North Carolina	**13,337**	4,633	956	318	106	267	1,223	623	897	782	3,247	480	-195
North Dakota	**1,216**	143	40	14	13	19	47	16	377	240	299	15	-6
Ohio	**23,056**	2,657	192	43	11	120	1,762	97	2,312	3,560	11,786	622	-106
Oklahoma	**4,630**	1,779	446	94	32	352	352	393	683	552	130	169	-350
Oregon	**8,313**	599	37	3	31	182	378	75	451	1,918	4,476	239	-77
Pennsylvania	**28,081**	1,533	67	22	2	59	387	20	5,101	5,309	15,017	762	-198
Rhode Island[2]	**2,623**	340	6	10	0	45	455	-2	142	1	1,580	60	-14
South Carolina	**5,964**	1,031	122	127	19	104	341	41	835	608	2,742	235	-240
South Dakota	**851**	235	63	19	3	79	59	23	185	156	1	35	-8
Tennessee	**9,088**	909	41	172	0	59	278	506	254	680	5,802	438	-50
Texas[2]	**35,645**	5,255	123	48	359	27	5,527	-19	1,651	2,411	19,694	1,269	-700
Utah	**2,452**	287	66	23	3	11	130	59	373	321	1,185	52	-57
Vermont[2]	**1,600**	40	1	0	0	0	1,499	-121	125	52	0	5	-1
Virginia	**8,988**	988	139	159	32	64	1,197	18	1,161	1,656	3,340	292	-57
Washington	**11,893**	669	58	177	10	705	441	172	1,030	2,276	6,053	416	-113
West Virginia	**4,001**	619	83	13	9	20	210	86	784	516	1,544	153	-36
Wisconsin	**8,050**	803	43	50	21	344	674	381	851	924	3,759	324	-124
Wyoming	**592**	129	39	13	20	42	26	17	150	139	12	14	-7
Subtotal (states)	**$569,730**	**$77,696**	**$8,739**	**$3,946**	**$1,891**	**$11,130**	**$45,555**	**$3,181**	**$58,000**	**$63,985**	**$283,369**	**$19,204**	**-$6,966**
American Samoa	**33**	28	–	–	–	0	3	1	–	–	–	2	–
Guam	**79**	23	7	2	0	1	23	22	1	0	–	2	–
N. Mariana Islands	**30**	15	–	1	–	3	5	3	–	2	–	1	–
Puerto Rico	**2,318**	–	–	–	–	–	33	–	–	–	2,284	–	–
Virgin Islands	**54**	28	5	2	2	1	4	11	0	0	–	1	–
Total (states and territories)	**$572,244**	**$77,790**	**$8,752**	**$3,951**	**$1,892**	**$11,134**	**$45,622**	**$3,218**	**$58,001**	**$63,987**	**$285,653**	**$19,209**	**-$6,966**
Percent of total, exclusive of collections	–	13.4%	1.5%	0.7%	0.3%	1.9%	7.9%	0.6%	10.0%	11.0%	49.3%	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. 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 and -$0.5 million that rounds to zero.

Additional detail on categories:

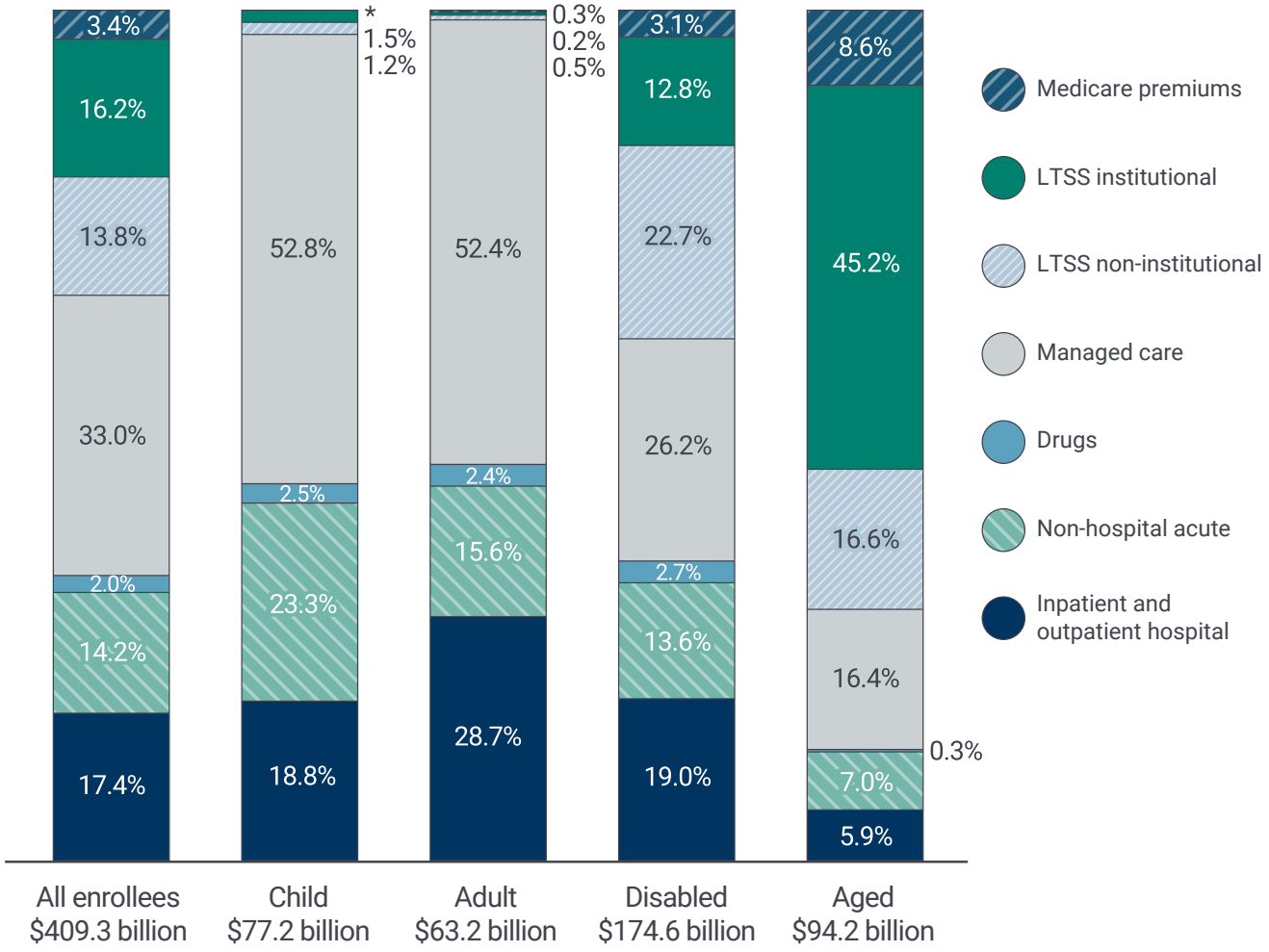
- Hospital includes inpatient, outpatient, critical access hospital, and emergency hospital services, as well as related disproportionate share hospital payments.
- Physician includes physician and surgical services, both regular payments and those associated with the primary care physician payment increase.
- Clinic and health center includes non-hospital outpatient clinic, rural health clinic, federally qualified health center, and freestanding birth center.
- Other acute services includes lab or X-ray; sterilizations; abortions; early and periodic screening, diagnostic, and treatment 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 July 20, 2018. California's fourth quarter submission was not certified; North Dakota's second, third, and fourth quarter submissions were not certified; Alabama's first quarter submission was not certified. Figures presented in this exhibit may change if states revise their expenditure data after this date.

[2] State reports negative fee-for-service (FFS) drug spending after the application of drug rebates. The negative net amount may reflect 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.

Source: MACPAC, 2018, analysis of CMS-64 FMR net expenditure data as of July 20, 2018.

EXHIBIT 18. Distribution of Medicaid Benefit Spending by Eligibility Group and Service Category, FY 2013[1]



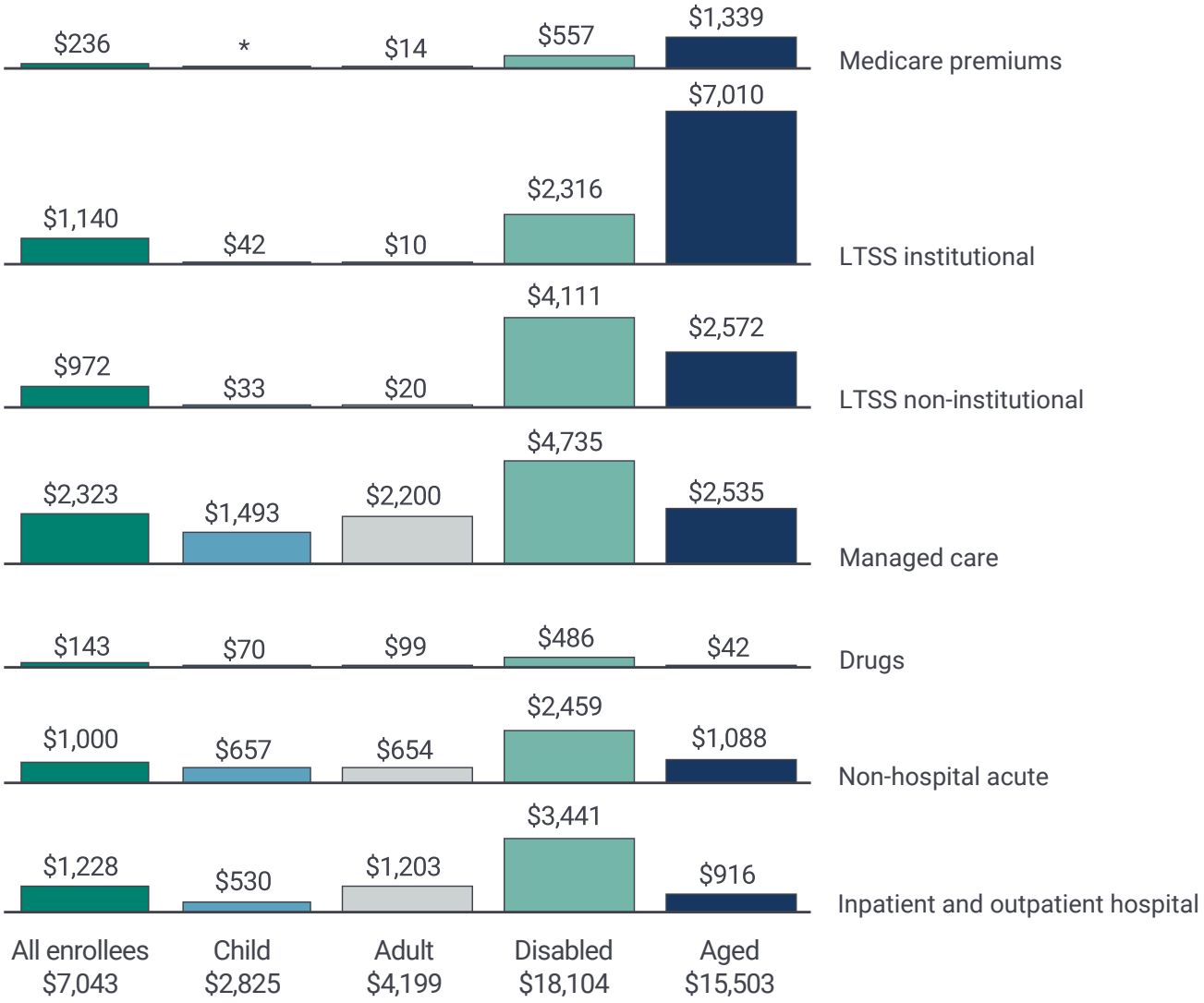
Notes: FY is fiscal year. LTSS is long-term services and supports. Includes federal and state funds. Excludes spending for administration, the territories, and Medicaid-expansion CHIP enrollees. Children and adults under age 65 who qualify for Medicaid on the basis of disability are included in the disabled 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 2013[1]



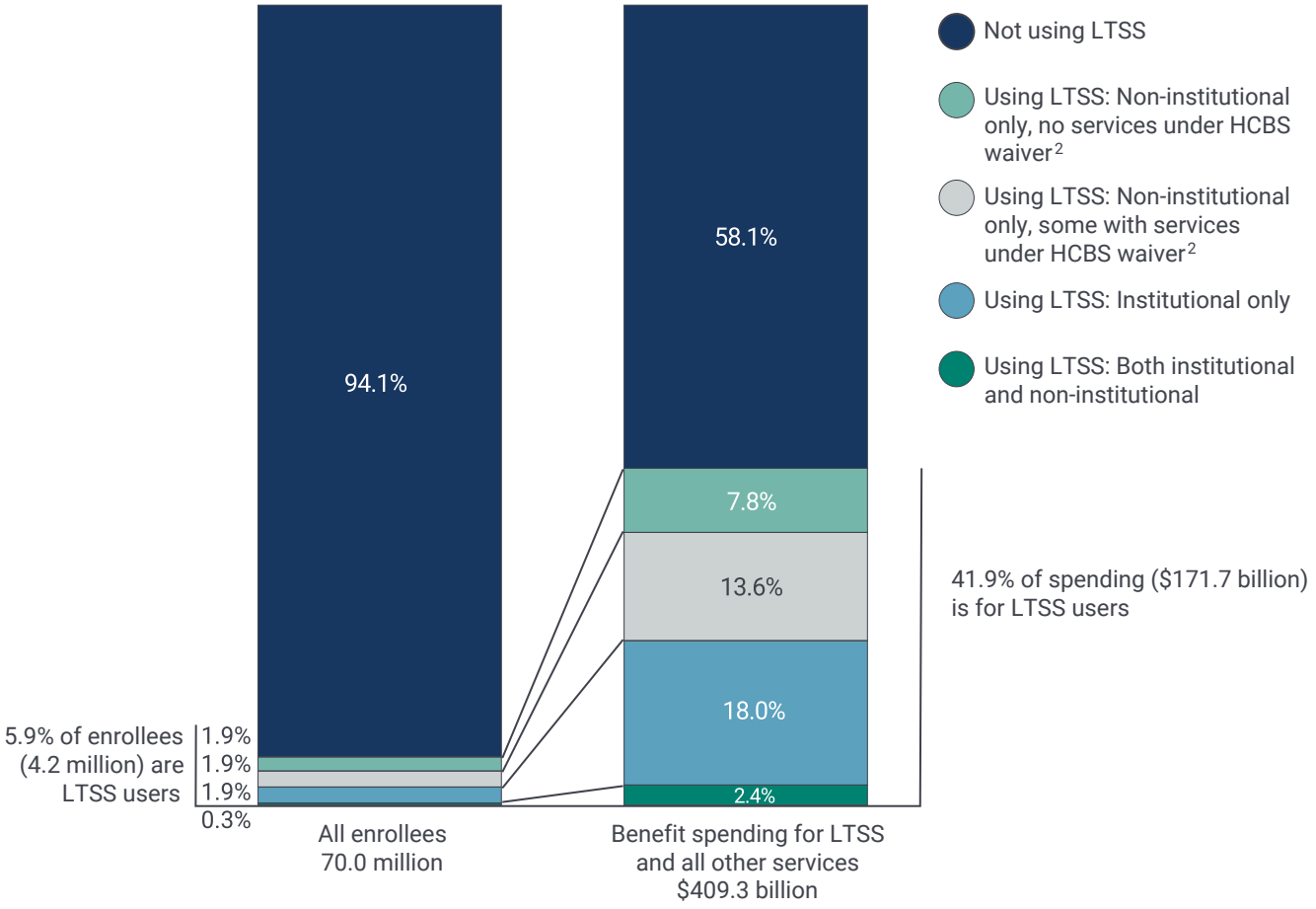
Notes: FY is fiscal year. LTSS is long-term services and supports. Includes federal and state funds. Excludes spending for administration, the territories, and Medicaid-expansion CHIP enrollees. Children and adults under age 65 who qualify for Medicaid on the basis of disability are included in the disabled 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 2013[1]



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 previously 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) E 21a

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	**$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) E 21b

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	**$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 **E 22a**

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 **E 22b**

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 (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] 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 2017

E 23

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	1,021,690	$5,562,217,922	$5,444	–	–	–
Alaska	184,401	1,961,572,200	10,638	35,271	$368,976,367	$10,461
Arizona	1,943,148	11,823,748,029	6,085	111,934	521,438,520	4,658
Arkansas	945,887	6,363,923,522	6,728	311,395	1,896,124,683	6,089
California	12,182,411	82,384,159,832	6,763	3,773,520	14,167,700,564	3,755
Colorado	1,353,449	7,805,267,931	5,767	446,579	1,326,719,113	2,971
Connecticut	894,137	7,401,263,576	8,278	203,418	1,307,488,960	6,428
Delaware	206,743	2,133,796,292	10,321	10,899	58,461,915	5,364
District of Columbia	254,954	2,783,205,645	10,916	68,289	411,867,550	6,031
Florida	4,029,267	23,169,178,008	5,750	–	–	–
Georgia	1,853,128	10,105,996,059	5,453	–	–	–
Hawaii	331,024	2,338,436,723	7,064	22,032	486,141,916	22,065
Idaho	319,132	1,822,302,321	5,710	–	–	–
Illinois	2,889,919	15,054,073,075	5,209	651,045	3,604,556,626	5,537
Indiana	1,339,790	11,106,189,855	8,290	300,224	2,062,809,628	6,871
Iowa	596,208	4,065,931,964	6,820	139,723	613,605,130	4,392
Kansas	383,573	3,214,420,673	8,380	–	–	–
Kentucky	1,332,521	9,527,255,650	7,150	472,035	2,701,675,794	5,723
Louisiana	1,630,705	10,913,541,197	6,693	412,389	2,660,833,314	6,452
Maine	259,837	2,565,081,585	9,872	–	–	–
Maryland	1,201,665	11,161,406,671	9,288	298,900	2,732,085,172	9,140
Massachusetts	1,818,433	17,120,855,005	9,415	–	–	–
Michigan	2,115,865	16,711,203,272	7,898	622,573	3,992,046,026	6,412
Minnesota	1,130,594	11,351,993,115	10,041	196,776	1,661,697,561	8,445
Mississippi	711,972	5,462,308,168	7,672	–	–	–

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	983,475	$10,095,843,109	$10,265	–	–	–
Montana	233,031	1,772,437,233	7,606	75,574	$760,260,549	$10,060
Nebraska	240,341	2,041,523,592	8,494	–	–	–
Nevada	601,200	3,530,342,184	5,872	209,811	1,135,800,128	5,413
New Hampshire	197,722	2,055,479,922	10,396	55,559	424,439,783	7,639
New Jersey	1,708,334	14,743,851,829	8,631	571,217	3,227,989,855	5,651
New Mexico	891,744	4,804,465,265	5,388	261,898	973,867,535	3,719
New York[3]	6,094,024	76,398,082,879	12,537	280,146	-673,800,177	-2,405
North Carolina	2,100,566	13,336,810,348	6,349	–	–	–
North Dakota	92,537	1,216,183,814	13,143	19,598	280,388,275	14,307
Ohio	3,075,806	23,055,842,742	7,496	653,518	4,489,972,316	6,870
Oklahoma	675,675	4,630,014,393	6,852	–	–	–
Oregon	996,908	8,312,733,407	8,339	397,755	2,276,456,190	5,723
Pennsylvania	2,817,620	28,081,163,760	9,966	743,820	5,629,233,820	7,568
Rhode Island	303,295	2,623,111,291	8,649	68,188	450,351,946	6,605
South Carolina	1,257,908	5,963,952,005	4,741	–	–	–
South Dakota	107,171	851,154,180	7,942	–	–	–
Tennessee	1,641,228	9,088,319,089	5,538	–	–	–
Texas	4,332,289	35,644,874,349	8,228	–	–	–
Utah	306,154	2,451,642,619	8,008	–	–	–
Vermont	184,769	1,600,236,799	8,661	–	–	–
Virginia	1,019,752	8,987,642,645	8,814	–	–	–
Washington	1,832,812	11,892,840,575	6,489	593,556	3,191,576,967	5,377
West Virginia	558,488	4,000,838,793	7,164	177,120	1,154,792,685	6,520
Wisconsin	1,188,748	8,049,889,736	6,772	–	–	–
Wyoming	61,733	591,622,270	9,584	–	–	–

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)	**74,433,784**	**$569,730,227,118**	**$7,654**	**12,184,763**	**$63,895,558,711**	**$5,244**
American Samoa	41,214	33,219,896	806	–	–	–
Guam	35,806	79,339,659	2,216	–	–	–
Northern Mariana Islands	15,472	29,887,537	1,932	–	–	–
Puerto Rico	1,256,694	2,317,682,931	1,844	–	–	–
Virgin Islands	24,934	53,582,469	2,149	–	–	–
Total (states and territories)	**75,807,905**	**$572,243,939,610**	**$7,549**	**12,184,763**	**$63,895,558,711**	**$5,244**

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 2017 enrollment was taken from the submission quarter ending December 31, 2017). 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 Section 1115 waiver expenditure authority.

– Dash indicates zero.

[1] Not all states had certified their CMS-64 Financial Management Report (FMR) submissions as of July 20, 2018. California's fourth quarter submission was not certified; North Dakota's second, third, and fourth quarter submissions were not certified; Alabama's first quarter submission was 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 100 percent for quarters in calendar year 2016 and 95 percent for quarters in calendar year 2017.

[3] New York's CMS-64 quarterly enrollment data was missing the last two quarters of FY 2017 for all enrollees and for newly eligible adults. The FYE count displayed here is the average monthly enrollment based on the first two quarters of enrollment. New York reports negative spending for the newly eligible adults due to large negative prior period adjustments.

Source: MACPAC, 2018, analysis of CMS-64 FMR net expenditure data as of July 20, 2018, and CMS-64 enrollment reports as of September 19, 2018.

EXHIBIT 24. Medicaid Supplemental Payments to Hospital Providers by State, FY 2017 (millions) **E 24**

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	**$88,382.9**	**$12,127.8**	**$15,020.2**	**$16,009.7**	**48.8%**
Alabama	**2,095.7**	480.4	630.8	–	53.0
Alaska	**591.3**	4.8	–	–	0.8
Arizona[3]	**1,255.2**	135.6	224.5	100.4	36.7
Arkansas	**1,140.8**	66.2	340.0	–	35.6
California[3, 4, 5]	**16,104.0**	-886.3	3,733.7	5,625.1	52.6
Colorado	**2,536.6**	207.9	982.3	–	46.9
Connecticut	**1,805.5**	27.0	146.1	–	9.6
Delaware	**74.2**	15.9	–	–	21.5
District of Columbia	**398.2**	42.9	35.0	–	19.6
Florida[3]	**2,289.6**	238.0	184.6	577.3	43.7
Georgia	**2,090.7**	434.1	0.0	–	20.8
Hawaii[3, 6]	**43.9**	26.4	3.5	-1.9	63.6
Idaho	**424.2**	26.5	5.0	–	7.4
Illinois	**3,812.3**	342.8	1,526.1	–	49.0
Indiana[3]	**943.9**	496.4	18.5	0.6	54.6
Iowa[7]	**165.1**	54.6	-4.4	–	30.4
Kansas[3]	**162.3**	53.2	0.8	81.7	83.7
Kentucky	**372.8**	179.2	9.7	–	50.7
Louisiana	**1,401.8**	1,091.5	113.2	–	85.9
Maine	**599.0**	–	48.8	–	8.1
Maryland	**1,127.4**	76.7	51.2	–	11.3
Massachusetts[4, 8]	**3,057.1**	–	174.6	1,151.2	43.4
Michigan	**1,551.4**	70.0	1,059.2	–	72.8
Minnesota[8]	**668.1**	75.1	25.8	71.3	25.8
Mississippi	**633.0**	224.1	–	–	35.4
Missouri	**2,833.3**	460.8	140.9	–	21.2
Montana	**662.3**	19.0	151.1	–	25.7
Nebraska	**101.4**	36.5	–	–	36.0
Nevada	**556.6**	58.9	176.9	–	42.4
New Hampshire[4]	**270.2**	214.6	2.2	6.6	82.7
New Jersey[4, 8]	**1,561.1**	444.1	–	354.5	51.2
New Mexico[3, 4]	**493.6**	55.2	139.3	74.7	54.5
New York[4]	**10,727.7**	2,439.1	946.0	1,509.4	45.6
North Carolina	**4,632.7**	353.1	1,149.0	–	32.4
North Dakota	**142.5**	1.2	–	–	0.9
Ohio	**2,657.4**	1,235.4	536.9	–	66.7

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
Oklahoma	**$1,778.8**	$40.7	$824.1	–	48.6%
Oregon[4]	**599.1**	77.2	105.6	$87.5	45.1
Pennsylvania	**1,533.1**	575.9	398.6	–	63.6
Rhode Island	**339.9**	139.7	22.8	–	47.8
South Carolina	**1,030.6**	434.9	110.7	–	52.9
South Dakota	**235.1**	0.8	2.9	–	1.6
Tennessee[3, 8]	**908.9**	81.7	–	805.6	97.6
Texas[3, 4]	**8,386.4**	1,510.7	34.0	5,511.7	84.1
Utah	**286.7**	29.8	43.0	–	25.4
Vermont	**39.6**	37.4	–	–	94.5
Virginia	**987.7**	43.4	515.9	–	56.6
Washington[4]	**723.1**	254.9	–	54.0	42.7
West Virginia	**619.3**	53.6	347.0	–	64.7
Wisconsin	**803.1**	45.6	31.6	–	9.6
Wyoming	**128.7**	0.5	32.5	–	25.6

Notes: FY is fiscal year. DSH is disproportionate share hospital. 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 that may be positive or negative. Amounts reported by states for any given category (e.g., inpatient hospital) sometimes show substantial annual fluctuations. CMS only 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; $0.0 or -$0.0 indicates an amount between $0.05 million and -$0.05 million that rounds to zero.

[1] Not all states had certified their CMS-64 Financial Management Report (FMR) submissions as of July 20, 2018. Alabama's first quarter submission was not certified; California's fourth quarter submission was not certified; North Dakota's second, third, and 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 Social Security 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 expenditure 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] California reported negative DSH payments due to prior period adjustments.

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

[7] Iowa reported negative non-DSH supplemental payments due to prior period adjustments.

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

Source: MACPAC, 2018, analysis of CMS-64 FMR net expenditure data as of July 20, 2018, and CMS-64 Schedule C waiver report data as of October 19, 2018.

EXHIBIT 25. Medicaid Supplemental Payments to Non-Hospital Providers by State, FY 2017 (millions) E 25

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	**$5,455.0**	**$3,143.6**	**57.6%**	**$52,544.9**	**$3,546.2**	**6.7%**	**$10,350.2**	**$860.3**	**8.3%**
Alabama	**80.1**	–	–	**921.6**	–	–	**485.2**	–	–
Alaska	**34.8**	14.8	42.5	**173.4**	–	–	**220.1**	–	–
Arizona	**32.1**	28.5	88.7	**52.3**	6.8	12.9	**56.5**	–	–
Arkansas	**113.6**	0.8	0.7	**901.3**	–	–	**377.5**	40.7	10.8
California[5, 6]	**541.1**	-0.2	-0.0	**3,470.2**	253.5	7.3	**817.5**	153.6	18.8
Colorado	**6.4**	–	–	**828.2**	110.8	13.4	**744.7**	7.3	1.0
Connecticut	**196.8**	105.6	53.7	**1,455.8**	–	–	**633.4**	–	–
Delaware	**21.0**	12.0	57.0	**70.1**	–	–	**12.0**	–	–
District of Columbia	**14.5**	6.3	43.6	**327.2**	–	–	**47.3**	–	–
Florida[5]	**150.0**	118.6	79.0	**816.7**	–	–	**255.8**	27.9	10.9
Georgia	**13.8**	–	–	**1,419.6**	129.7	9.1	**368.8**	–	–
Hawaii	**–**	–	–	**9.5**	0.3	2.6	**0.2**	–	–
Idaho	**2.1**	–	–	**300.1**	73.4	24.5	**153.9**	–	–
Illinois	**142.8**	89.0	62.3	**1,764.8**	–	–	**404.8**	–	–
Indiana[5]	**51.3**	–	–	**2,710.8**	996.5	36.8	**102.8**	28.3	27.6
Iowa[7, 8]	**4.8**	–	–	**79.6**	-0.0	-0.0	**49.4**	24.9	50.4
Kansas	**13.1**	13.0	98.8	**79.3**	–	–	**5.1**	0.8	15.6
Kentucky	**39.0**	38.1	97.8	**1,143.1**	0.4	0.0	**36.5**	8.2	22.5
Louisiana	**66.7**	59.6	89.4	**1,421.2**	3.9	0.3	**48.3**	2.3	4.8
Maine	**98.5**	42.1	42.8	**382.2**	–	–	**115.6**	2.6	2.2
Maryland	**177.8**	67.6	38.0	**1,211.1**	–	–	**156.3**	–	–
Massachusetts[9]	**179.6**	125.5	69.9	**1,564.4**	–	–	**344.1**	48.9	14.2
Michigan	**245.2**	198.3	80.9	**1,764.1**	313.3	17.8	**350.4**	203.8	58.2
Minnesota	**104.0**	10.8	10.3	**1,060.2**	–	–	**334.8**	10.2	3.1
Mississippi	**64.0**	–	–	**1,049.7**	31.5	3.0	**115.3**	9.5	8.3
Missouri	**230.8**	206.9	89.6	**1,251.8**	–	–	**25.3**	–	–
Montana	**22.4**	–	–	**173.2**	16.8	9.7	**163.2**	–	–
Nebraska	**1.8**	1.8	100.0	**419.0**	0.8	0.2	**11.8**	–	–
Nevada	**44.5**	–	–	**266.8**	94.4	35.4	**163.7**	2.4	1.5

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	**$39.5**	$37.7	95.5%	**$345.6**	–	–	**$11.6**	–	–
New Jersey	**452.8**	357.4	78.9	**1,487.2**	–	–	**58.7**	–	–
New Mexico	**3.0**	–	–	**27.6**	–	–	**72.9**	$5.6	7.6%
New York	**989.6**	514.0	51.9	**7,514.2**	$472.8	6.3%	**530.8**	40.7	7.7
North Carolina[10]	**-176.0**	159.8	-90.8	**1,072.9**	–	–	**978.1**	102.8	10.5
North Dakota	**22.9**	1.0	4.3	**353.7**	2.6	0.7	**50.3**	–	–
Ohio	**93.5**	93.4	99.9	**2,218.4**	–	–	**202.7**	48.1	23.8
Oklahoma	**65.1**	3.3	5.0	**617.9**	–	–	**475.4**	–	–
Oregon	**26.8**	20.0	74.5	**424.3**	–	–	**64.7**	–	–
Pennsylvania	**375.1**	297.2	79.2	**4,726.2**	841.7	17.8	**68.7**	–	–
Rhode Island	**4.6**	–	–	**137.4**	–	–	**6.6**	–	–
South Carolina	**67.1**	60.9	90.7	**768.3**	15.8	2.1	**138.1**	31.4	22.7
South Dakota	**4.4**	0.8	16.9	**180.3**	5.2	2.9	**65.8**	–	–
Tennessee	**44.5**	–	–	**209.3**	–	–	**41.0**	–	–
Texas[5, 7, 11]	**306.1**	295.9	96.7	**1,344.6**	4.2	0.3	**470.0**	-15.0	-3.2
Utah	**17.2**	0.9	5.4	**355.6**	83.0	23.3	**68.7**	19.0	27.7
Vermont	**–**	–	–	**124.8**	–	–	**0.8**	–	–
Virginia	**144.4**	9.7	6.7	**1,016.5**	11.8	1.2	**170.8**	27.7	16.2
Washington	**172.0**	133.9	77.8	**858.2**	6.4	0.7	**67.8**	5.7	8.5
West Virginia	**73.2**	18.9	25.8	**710.5**	–	–	**88.9**	22.8	25.6
Wisconsin	**21.2**	–	–	**829.4**	40.7	4.9	**63.1**	–	–
Wyoming	**15.3**	–	–	**134.7**	30.3	22.5	**54.3**	–	–

Notes: FY is fiscal year. ICF/ID is intermediate care facility for persons 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 that 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 July 20, 2018. Alabama's first quarter submission was not certified; California's fourth quarter submission was not certified; North Dakota's second, third, and 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 as well as uncompensated care pool and other non-DSH supplemental payments made under Section 1115 waiver expenditure authority. 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] State made payments to physicians and other practitioners through an uncompensated care pool under Section 1115 waiver expenditure authority.

[6] California reported negative DSH payments to mental health facilities due to prior period adjustments.

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

[8] Iowa reported negative Section 1115 waiver authority payments to mental health facilities due to prior period adjustments.

[9] Massachusetts 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.

[10] North Carolina reported negative total payments to mental health facilities due to prior period adjustments.

[11] Texas reported negative supplemental payments to physicians and other practitioners due to prior period adjustments.

Source: MACPAC, 2018, analysis of CMS-64 FMR net expenditure data as of July 20, 2018, and CMS-64 Schedule C waiver report data as of October 19, 2018.

EXHIBIT 26. Medicaid Gross Spending for Drugs by Delivery System and Brand or Generic Status, FY 2017 (millions) E 26

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]
Total[4]	**$63,973.6**	**80.5%**	**19.5%**	**0.1%**	**$24,066.1**	**82.7%**	**17.2%**	**0.1%**	**$39,907.5**	**79.1%**	**20.8%**	**0.1%**
Alabama	**673.1**	**80.8**	**19.1**	**0.0**	**673.1**	80.8	19.1	0.0	**–**	–	–	–
Alaska	**131.2**	**78.2**	**21.5**	**0.3**	**131.2**	78.2	21.5	0.3	**–**	–	–	–
Arizona	**1,203.9**	**77.1**	**22.6**	**0.3**	**17.0**	94.2	5.3	0.5	**1,186.9**	76.9	22.8	0.3
Arkansas	**356.3**	**77.4**	**22.5**	**0.1**	**356.3**	77.4	22.5	0.1	**–**	–	–	–
California	**7,915.7**	**80.9**	**19.1**	**0.0**	**4,256.6**	87.3	12.7	0.0	**3,659.1**	73.5	26.5	0.0
Colorado	**882.4**	**81.0**	**18.7**	**0.3**	**852.6**	81.0	18.6	0.4	**29.8**	79.0	20.9	0.1
Connecticut	**1,204.1**	**85.7**	**14.2**	**0.0**	**1,204.1**	85.7	14.2	0.0	**–**	–	–	–
Delaware[5]	**152.6**	**83.1**	**16.8**	**0.1**	**3.1**	81.2	18.1	0.8	**149.5**	83.2	16.8	0.1
District of Columbia	**294.0**	**89.9**	**10.1**	**0.0**	**217.5**	94.7	5.3	0.0	**76.5**	76.5	23.5	0.0
Florida	**2,980.2**	**84.1**	**15.8**	**0.1**	**480.4**	89.6	10.3	0.1	**2,499.8**	83.1	16.9	0.0
Georgia	**1,161.2**	**78.3**	**21.7**	**0.0**	**689.5**	85.6	14.4	0.0	**471.7**	67.8	32.2	0.0
Hawaii	**184.7**	**76.5**	**23.4**	**0.1**	**0.1**	65.0	35.0	–	**184.5**	76.5	23.4	0.1
Idaho	**188.0**	**81.0**	**19.0**	**0.0**	**188.0**	81.0	19.0	0.0	**–**	–	–	–
Illinois	**1,949.4**	**79.7**	**20.3**	**0.0**	**511.7**	79.6	20.4	0.0	**1,437.7**	79.7	20.3	0.0
Indiana	**1,490.4**	**78.2**	**21.7**	**0.1**	**346.6**	82.6	17.3	0.1	**1,143.8**	76.9	23.0	0.1
Iowa	**299.1**	**84.6**	**15.4**	**0.0**	**8.5**	75.9	24.1	–	**290.5**	84.9	15.1	0.0
Kansas	**356.0**	**77.4**	**22.5**	**0.1**	**0.6**	79.7	20.3	–	**355.4**	77.4	22.5	0.1
Kentucky	**1,094.8**	**72.9**	**26.9**	**0.2**	**62.1**	76.8	22.7	0.6	**1,032.7**	72.7	27.1	0.2
Louisiana	**1,005.1**	**75.1**	**24.8**	**0.1**	**57.3**	76.0	24.0	0.0	**947.8**	75.1	24.8	0.1
Maine	**219.0**	**87.3**	**12.7**	**0.0**	**219.0**	87.3	12.7	0.0	**–**	–	–	–
Maryland	**1,118.4**	**85.3**	**14.7**	**0.0**	**550.0**	87.6	12.4	0.0	**568.4**	83.1	16.9	0.0
Massachusetts	**1,461.7**	**83.4**	**16.4**	**0.2**	**527.0**	82.2	17.5	0.2	**934.6**	84.1	15.8	0.1
Michigan	**2,095.5**	**80.6**	**19.2**	**0.2**	**1,185.8**	84.6	15.2	0.2	**909.7**	75.4	24.4	0.2
Minnesota	**909.3**	**77.1**	**22.9**	**0.1**	**182.3**	73.7	26.3	0.1	**727.0**	77.9	22.0	0.1
Mississippi	**455.4**	**75.7**	**24.3**	**0.0**	**75.9**	77.9	22.1	0.0	**379.6**	75.2	24.7	0.0
Missouri	**1,211.5**	**72.7**	**27.2**	**0.1**	**1,211.5**	72.7	27.2	0.1	**–**	–	–	–
Montana	**201.1**	**80.4**	**19.5**	**0.1**	**201.1**	80.4	19.5	0.1	**–**	–	–	–
Nebraska	**168.5**	**77.4**	**22.6**	**0.1**	**41.9**	77.4	22.5	0.2	**126.6**	77.4	22.6	0.1

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	$459.0	78.5%	21.4%	0.1%	$224.5	83.3%	16.7%	0.1%	$234.5	73.9%	26.0%	0.0%
New Hampshire	94.7	79.3	20.4	0.3	19.7	96.4	3.6	0.0	75.0	74.8	24.8	0.4
New Jersey	1,713.7	80.1	19.8	0.1	26.1	80.5	19.5	–	1,687.6	80.1	19.8	0.1
New Mexico	440.1	77.3	22.6	0.1	7.4	72.1	27.5	0.4	432.7	77.4	22.5	0.1
New York	6,082.7	81.4	18.6	0.1	655.1	81.7	18.3	0.0	5,427.6	81.3	18.6	0.1
North Carolina	1,784.5	83.0	16.9	0.1	1,784.5	83.0	16.9	0.1	–	–	–	–
North Dakota	55.1	74.0	25.9	0.2	32.7	73.8	26.1	0.2	22.4	74.3	25.6	0.2
Ohio	3,477.1	77.6	22.4	0.0	335.8	79.2	20.8	0.0	3,141.3	77.4	22.5	0.0
Oklahoma	492.5	77.9	22.0	0.0	492.5	77.9	22.0	0.0	–	–	–	–
Oregon	712.6	79.0	21.0	0.0	116.9	65.8	34.2	0.0	595.7	81.6	18.4	0.0
Pennsylvania	3,194.7	81.1	18.9	0.0	75.2	81.3	18.7	0.0	3,119.4	81.1	18.9	0.0
Rhode Island	222.5	79.3	20.7	–	4.2	76.8	23.2	–	218.3	79.3	20.7	–
South Carolina	443.9	81.7	18.2	0.1	132.5	89.4	10.5	0.1	311.4	78.3	21.5	0.1
South Dakota	102.4	77.3	22.7	0.0	102.4	77.3	22.7	0.0	–	–	–	–
Tennessee	1,045.8	83.8	16.0	0.1	983.0	83.0	16.9	0.1	62.8	96.1	3.1	0.8
Texas	3,409.5	82.9	17.1	0.0	223.8	85.3	14.7	0.0	3,185.8	82.7	17.3	0.0
Utah	194.0	77.4	22.6	0.0	102.5	76.2	23.8	0.0	91.5	78.7	21.3	0.0
Vermont	160.6	86.8	13.2	–	160.6	86.8	13.2	–	–	–	–	–
Virginia	944.4	67.9	31.4	0.7	116.2	76.0	23.8	0.2	828.2	66.7	32.5	0.8
Washington	1,152.4	82.7	17.3	0.0	241.8	94.8	5.2	0.0	910.6	79.5	20.5	0.0
West Virginia	564.8	80.0	19.9	0.0	215.7	82.2	17.8	0.0	349.1	78.7	21.3	0.0
Wisconsin	1,137.1	82.4	17.6	0.0	1,137.1	82.4	17.6	0.0	–	–	–	–
Wyoming	36.1	83.6	16.4	0.0	36.1	83.6	16.4	0.0	–	–	–	–

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 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 Health Insurance Portability and Accountability Act of 1996 (P.L. 104-191 as implemented at 45 CFR 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 state totals 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 2017 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, 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.

Source: MACPAC, 2018, analysis of Medicaid drug product data and state drug rebate utilization data as of July 20, 2018.

EXHIBIT 27. Medicaid Drug Prescriptions by Delivery System and Brand or Generic Status, FY 2017 (thousands) E 27

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]
Total[4]	**757,356**	**16.5%**	**83.2%**	**0.2%**	**213,734**	**19.4%**	**80.3%**	**0.4%**	**543,622**	**15.4%**	**84.4%**	**0.2%**
Alabama	**7,428**	**20.9**	**79.0**	**0.2**	**7,428**	20.9	79.0	0.2	**–**	–	–	–
Alaska	**1,339**	**20.0**	**79.6**	**0.3**	**1,339**	20.0	79.6	0.3	**–**	–	–	–
Arizona	**16,920**	**14.1**	**85.3**	**0.6**	**93**	18.2	81.1	0.8	**16,827**	14.1	85.3	0.6
Arkansas	**4,768**	**18.6**	**81.2**	**0.2**	**4,768**	18.6	81.2	0.2	**–**	–	–	–
California	**98,439**	**15.2**	**84.6**	**0.2**	**25,805**	21.0	78.7	0.3	**72,633**	13.2	86.7	0.1
Colorado	**7,732**	**19.3**	**80.3**	**0.4**	**7,287**	19.6	80.0	0.4	**445**	15.0	84.8	0.2
Connecticut	**9,194**	**23.8**	**75.9**	**0.3**	**9,194**	23.8	75.9	0.3	**–**	–	–	–
Delaware	**2,438**	**19.3**	**80.1**	**0.6**	**46**	19.0	74.8	6.2	**2,392**	19.3	80.2	0.5
District of Columbia	**2,325**	**18.5**	**81.5**	**0.0**	**965**	23.6	76.3	0.1	**1,360**	14.8	85.2	0.0
Florida	**31,629**	**17.9**	**81.9**	**0.2**	**2,466**	25.1	74.7	0.2	**29,163**	17.3	82.5	0.2
Georgia	**17,274**	**16.2**	**83.8**	**0.0**	**7,624**	18.0	82.0	0.0	**9,650**	14.9	85.1	0.0
Hawaii	**2,698**	**13.7**	**86.3**	**0.0**	**5**	1.4	98.6	–	**2,693**	13.7	86.3	0.0
Idaho	**2,236**	**18.9**	**80.9**	**0.2**	**2,236**	18.9	80.9	0.2	**–**	–	–	–
Illinois	**30,238**	**15.2**	**84.8**	**0.0**	**7,531**	16.5	83.5	0.0	**22,706**	14.7	85.3	0.0
Indiana	**16,558**	**18.0**	**81.8**	**0.1**	**3,112**	18.7	81.2	0.1	**13,446**	17.9	82.0	0.2
Iowa	**4,035**	**20.0**	**80.0**	**0.0**	**167**	19.0	81.0	–	**3,868**	20.1	79.9	0.0
Kansas	**4,450**	**18.8**	**81.1**	**0.1**	**14**	13.3	86.7	–	**4,437**	18.8	81.1	0.1
Kentucky	**20,338**	**12.9**	**86.6**	**0.5**	**1,128**	10.8	86.1	3.1	**19,210**	13.0	86.6	0.4
Louisiana	**18,081**	**13.7**	**86.1**	**0.2**	**848**	14.8	85.0	0.2	**17,233**	13.6	86.1	0.2
Maine	**2,379**	**23.6**	**76.4**	**0.0**	**2,379**	23.6	76.4	0.0	**–**	–	–	–
Maryland	**14,146**	**17.7**	**82.2**	**0.0**	**4,357**	24.0	76.0	0.0	**9,789**	15.0	85.0	0.0
Massachusetts	**16,555**	**15.7**	**81.9**	**2.4**	**6,811**	15.6	80.6	3.7	**9,743**	15.7	82.8	1.5
Michigan	**31,104**	**14.4**	**85.1**	**0.5**	**10,008**	17.8	82.1	0.2	**21,096**	12.8	86.5	0.7
Minnesota	**12,556**	**14.6**	**85.3**	**0.1**	**2,256**	16.4	83.6	0.1	**10,300**	14.2	85.7	0.1
Mississippi	**5,985**	**16.7**	**83.3**	**0.0**	**875**	17.3	82.7	0.0	**5,110**	16.6	83.4	0.0
Missouri	**12,454**	**18.5**	**81.2**	**0.2**	**12,454**	18.5	81.2	0.2	**–**	–	–	–
Montana	**2,383**	**19.2**	**80.7**	**0.1**	**2,383**	19.2	80.7	0.1	**–**	–	–	–
Nebraska	**2,742**	**16.9**	**82.9**	**0.3**	**633**	16.4	83.4	0.1	**2,109**	17.0	82.7	0.3
Nevada	**6,436**	**13.9**	**86.0**	**0.1**	**2,293**	17.4	82.4	0.1	**4,143**	11.9	87.9	0.2
New Hampshire	**1,126**	**18.5**	**80.9**	**0.6**	**93**	24.4	75.0	0.6	**1,033**	18.0	81.5	0.6
New Jersey	**23,487**	**14.6**	**85.3**	**0.0**	**354**	16.5	83.5	–	**23,134**	14.6	85.4	0.0
New Mexico	**6,305**	**14.7**	**85.3**	**0.0**	**127**	16.6	83.2	0.2	**6,178**	14.7	85.3	0.0
New York	**74,707**	**15.2**	**84.7**	**0.1**	**10,169**	13.8	86.1	0.0	**64,538**	15.5	84.5	0.1
North Carolina	**17,030**	**24.6**	**75.2**	**0.2**	**17,030**	24.6	75.2	0.2	**–**	–	–	–
North Dakota	**818**	**16.7**	**82.6**	**0.7**	**498**	17.2	81.7	1.1	**320**	16.0	83.9	0.1
Ohio	**49,575**	**16.6**	**83.4**	**0.0**	**4,614**	16.9	83.1	0.0	**44,961**	16.6	83.4	0.0
Oklahoma	**5,842**	**18.0**	**81.8**	**0.2**	**5,842**	18.0	81.8	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	10,631	14.6%	85.3%	0.1%	2,261	8.8%	91.2%	0.0%	8,370	16.1%	83.8%	0.1%
Pennsylvania	38,652	15.8	84.2	0.0	1,787	11.5	88.5	0.0	36,865	16.0	84.0	0.0
Rhode Island	3,487	13.1	86.9	–	116	17.2	82.8	–	3,371	13.0	87.0	–
South Carolina	5,449	18.0	81.6	0.4	1,093	20.6	78.9	0.5	4,356	17.3	82.3	0.4
South Dakota	857	25.0	75.0	0.0	857	25.0	75.0	0.0	–	–	–	–
Tennessee	13,701	17.4	81.8	0.8	13,203	16.9	82.5	0.7	498	30.6	65.5	3.9
Texas	35,807	20.1	79.9	0.0	1,828	26.4	73.6	0.0	33,980	19.8	80.2	0.0
Utah	2,522	17.5	82.5	0.0	1,108	17.5	82.5	0.0	1,415	17.4	82.6	0.0
Vermont	1,540	27.4	72.6	–	1,540	27.4	72.6	–	–	–	–	–
Virginia	10,815	16.5	83.0	0.5	2,042	17.4	81.8	0.8	8,773	16.3	83.3	0.4
Washington	16,488	14.0	86.0	0.0	1,445	13.7	86.2	0.1	15,043	14.0	85.9	0.0
West Virginia	9,425	16.7	83.2	0.1	3,130	16.9	83.0	0.0	6,294	16.5	83.4	0.1
Wisconsin	11,824	20.3	79.6	0.1	11,744	20.4	79.5	0.1	80	8.3	91.3	0.4
Wyoming	443	21.0	78.9	0.0	443	21.0	78.9	0.0	–	–	–	–

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 USC § 552a) and the Health Insurance Portability and Accountability Act of 1996 (P.L. 104-191 as implemented at 45 CFR 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 state totals 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 that did not include suppression indicates that about 4 million prescriptions (0.7 percent) were suppressed in the FY 2014 data.

Source: MACPAC, 2018, analysis of Medicaid drug product data and state drug rebate utilization data as of July 20, 2018.

EXHIBIT 28. Medicaid Gross Spending and Rebates for Drugs by Delivery System, FY 2017 (millions) E 28

State	Gross spending			Rebates		
	Total	Fee for service	Managed care	Total	Fee for service	Managed care
Total[1]	**$63,973.6**	**$24,066.1**	**$39,907.5**	**-$34,877.7**	**-$18,854.8**	**-$16,022.9**
Alabama	**673.1**	673.1	–	**-346.6**	-346.6	–
Alaska	**131.2**	131.2	–	**-86.8**	-86.8	–
Arizona	**1,203.9**	17.0	1,186.9	**-671.3**	-17.8	-653.4
Arkansas	**356.3**	356.3	–	**-226.0**	-226.0	–
California	**7,915.7**	4,256.6	3,659.1	**-4,831.1**	-2,397.8	-2,433.4
Colorado	**882.4**	852.6	29.8	**-745.0**	-697.5	-47.5
Connecticut	**1,204.1**	1,204.1	–	**-783.7**	-783.7	–
Delaware[2]	**152.6**	3.1	149.5	**-117.5**	-31.8	-85.7
District of Columbia	**294.0**	217.5	76.5	**-174.3**	-119.4	-54.9
Florida	**2,980.2**	480.4	2,499.8	**-1,723.6**	-300.2	-1,423.4
Georgia	**1,161.2**	689.5	471.7	**-640.3**	-481.0	-159.2
Hawaii	**184.7**	0.1	184.5	**-109.2**	-0.9	-108.3
Idaho	**188.0**	188.0	–	**-132.0**	-133.4	1.4
Illinois	**1,949.4**	511.7	1,437.7	**-1,061.8**	-322.6	-739.2
Indiana	**1,490.4**	346.6	1,143.8	**-742.7**	-239.9	-502.8
Iowa[3]	**299.1**	8.5	290.5	**-384.9**	-187.5	-197.4
Kansas	**356.0**	0.6	355.4	**-199.5**	-2.0	-197.5
Kentucky	**1,094.8**	62.1	1,032.7	**-684.8**	-52.4	-632.4
Louisiana	**1,005.1**	57.3	947.8	**-437.1**	-37.3	-399.8
Maine	**219.0**	219.0	–	**-162.6**	-162.6	–
Maryland	**1,118.4**	550.0	568.4	**-580.3**	-228.0	-352.3
Massachusetts	**1,461.7**	527.0	934.6	**-851.2**	-355.6	-495.5
Michigan	**2,095.5**	1,185.8	909.7	**-1,284.4**	-825.1	-459.4
Minnesota	**909.3**	182.3	727.0	**-518.2**	-288.1	-230.1
Mississippi	**455.4**	75.9	379.6	**-288.0**	-80.8	-207.2
Missouri	**1,211.5**	1,211.5	–	**-668.9**	-668.9	–
Montana	**201.1**	201.1	–	**-118.1**	-118.1	–

EXHIBIT 28. (continued)

State	Gross spending			Rebates		
	Total	Fee for service	Managed care	Total	Fee for service	Managed care
Nebraska[3]	**$168.5**	$41.9	$126.6	**-$125.6**	-$125.6	–
Nevada	**459.0**	224.5	234.5	**-324.0**	-173.0	-$150.9
New Hampshire	**94.7**	19.7	75.0	**-68.2**	-23.5	-44.8
New Jersey	**1,713.7**	26.1	1,687.6	**-743.5**	-23.9	-719.6
New Mexico	**440.1**	7.4	432.7	**-237.4**	-7.6	-229.8
New York[4]	**6,082.7**	655.1	5,427.6	**-3,568.3**	-4,821.3	1,253.1
North Carolina	**1,784.5**	1,784.5	–	**-1,198.7**	-1,198.7	–
North Dakota	**55.1**	32.7	22.4	**-51.7**	-30.7	-21.0
Ohio	**3,477.1**	335.8	3,141.3	**-1,673.3**	-254.7	-1,418.6
Oklahoma	**492.5**	492.5	–	**-295.0**	-295.0	–
Oregon	**712.6**	116.9	595.7	**-385.8**	-61.6	-324.2
Pennsylvania	**3,194.7**	75.2	3,119.4	**-1,801.8**	-84.1	-1,717.7
Rhode Island	**222.5**	4.2	218.3	**-124.0**	-9.4	-114.6
South Carolina	**443.9**	132.5	311.4	**-286.5**	-113.2	-173.3
South Dakota	**102.4**	102.4	–	**-45.3**	-45.3	–
Tennessee[5]	**1,045.8**	983.0	62.8	**-669.5**	-669.5	–
Texas	**3,409.5**	223.8	3,185.8	**-2,156.8**	-321.6	-1,835.2
Utah	**194.0**	102.5	91.5	**-124.0**	-62.6	-61.3
Vermont	**160.6**	160.6	–	**-121.6**	-121.6	–
Virginia	**944.4**	116.2	828.2	**-414.0**	-97.9	-316.1
Washington	**1,152.4**	241.8	910.6	**-688.5**	-173.5	-515.0
West Virginia	**564.8**	215.7	349.1	**-417.9**	-166.5	-251.4
Wisconsin	**1,137.1**	1,137.1	–	**-754.5**	-750.2	-4.3
Wyoming	**36.1**	36.1	–	**-32.2**	-32.2	–

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 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 Health Insurance Portability and Accountability Act of 1996 (P.L. 104-191 as implemented at 45 CFR Parts 160 and 164). The drug rebate information comes from the CMS-64 and does allow states to separately identify fee-for-service 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 state totals 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 2017 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, 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.

[3] State recently carved the pharmacy benefit into managed care, implemented a new managed care program, or expanded its managed care program. This change creates a large difference between gross spending and rebate collections for fee for service and managed care, resulting in anomalous rebate amounts at the delivery-system level.

[4] New York made large prior period adjustments to both fee-for-service and managed care rebates that ultimately result in a shift in rebates from managed care to fee for service. The state reports a positive managed care rebate amount due to prior period adjustments.

[5] 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 fee-for-service rebates.

Source: MACPAC, 2018, analysis of Medicaid state drug rebate utilization data as of July 20, 2018 and CMS-64 FMR net expenditure data as of July 20, 2018.

EXHIBIT 29. Percentage of Medicaid Enrollees in Managed Care by State, July 1, 2016 E 29

State	Total Medicaid enrollees	Percentage of enrollees in managed care						
		Comprehensive managed care[1]	Limited-benefit plans					PCCM
			MLTSS	BHO (PIHP and/or PAHP)	Dental	Transportation	Other	
Total	**78,567,000**	**67.5%**	**0.4%**	**14.3%**	**9.7%**	**17.0%**	**1.8%**	**6.9%**
Alabama	**1,037,037**	0.0	–	–	–	–	1.7	40.1
Alaska[2]	**155,865**	–	–	–	–	–	–	–
Arizona	**1,849,166**	84.4	–	–	–	–	–	–
Arkansas[3]	**799,488**	0.0	–	–	–	65.5	–	63.6
California	**13,739,388**	76.9	–	0.0	6.9	–	0.0	–
Colorado	**1,344,548**	10.0	–	95.7	–	–	–	70.1
Connecticut[4]	**860,758**	–	–	–	–	–	–	–
Delaware	**221,229**	88.6	–	–	–	–	–	–
District of Columbia	**251,791**	71.9	–	–	–	21.4	–	–
Florida	**3,900,380**	81.7	2.4	–	–	–	–	–
Georgia	**1,973,586**	68.0	–	–	–	–	0.5	–
Hawaii[5]	**358,302**	98.9	–	1.5	–	–	–	–
Idaho	**295,267**	0.8	–	88.4	94.2	89.0	–	91.5
Illinois	**3,230,870**	60.9	–	–	–	–	–	11.3
Indiana	**1,421,696**	75.9	–	–	–	–	–	–
Iowa	**624,973**	90.0	–	–	24.1	2.1	–	–
Kansas	**435,850**	89.7	–	–	–	–	–	–
Kentucky	**1,361,722**	92.7	–	–	–	90.0	–	–
Louisiana	**1,504,333**	84.0	–	7.6	87.5	–	–	–
Maine	**277,697**	–	–	–	–	86.4	–	55.0
Maryland	**1,324,796**	81.5	–	–	–	–	–	–
Massachusetts	**1,889,306**	46.3	–	24.5	–	–	–	20.7
Michigan[6]	**4,448,582**	49.9	0.3	49.3	18.5	–	–	–
Minnesota	**1,088,610**	74.9	–	–	–	–	–	–
Mississippi	**726,473**	68.7	–	–	–	–	–	–

EXHIBIT 29. (continued)

State	Total Medicaid enrollees	Percentage of enrollees in managed care						
		Comprehensive managed care[1]	Limited-benefit plans					PCCM
			MLTSS	BHO (PIHP and/or PAHP)	Dental	Transportation	Other	
Missouri	**982,776**	50.3%	–	–	–	47.5%	–	–
Montana	**207,340**	–	–	–	–	–	–	58.5%
Nebraska	**244,355**	78.4	–	95.2%	–	–	–	–
Nevada	**629,265**	63.8	–	–	–	88.6	–	6.1
New Hampshire	**206,997**	66.2	–	–	–	–	–	–
New Jersey	**1,679,572**	92.7	–	–	–	100.0	–	–
New Mexico	**884,368**	77.4	–	–	–	–	–	–
New York	**6,139,403**	73.5	2.6%	–	–	–	–	–
North Carolina	**2,028,935**	0.1	–	77.9	–	–	–	73.7
North Dakota	**93,422**	22.9	–	–	–	–	0.2%	51.7
Ohio	**3,022,121**	79.9	–	–	–	–	–	–
Oklahoma	**792,387**	0.0	–	–	–	67.1	–	67.2
Oregon[7]	**1,109,321**	80.6	–	0.4	4.7%	–	–	–
Pennsylvania	**2,753,618**	81.1	–	91.3	–	22.2	–	–
Rhode Island	**325,177**	70.9	–	–	29.0	–	–	–[8]
South Carolina	**1,235,361**	60.1	–	–	–	100.0	–	0.0
South Dakota	**125,395**	–	–	–	–	–	–	75.2
Tennessee[9]	**1,684,268**	92.4	–	–	52.8	–	83.3	–
Texas	**4,051,664**	88.4	–	12.3	72.5	96.8	–	0.3
Utah	**294,707**	83.1	–	97.9	47.2	84.0	–	–
Vermont[10]	**200,481**	62.1	–	–	–	–	–	–
Virginia	**1,111,999**	68.4	–	–	–	–	–	–
Washington[11]	**1,820,084**	84.4	–	100.0	–	100.0	–	0.5
West Virginia	**553,318**	70.5	–	–	–	–	–	–
Wisconsin	**1,204,511**	62.6	3.6	0.1	–	–	0.2	–
Wyoming	**64,442**	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 (PACE). 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 was not able to provide total Medicaid enrollment as of July 1, 2016. The total Medicaid enrollment reported here is from the April–June 2016 enrollment data collected through the CMS-64, updated September 2017, and accessed February 15, 2017, at https://www.medicaid.gov/medicaid/program-information/downloads/cms-64-enrollment-report-apr-jun-2016.pdf.

[3] Arkansas was unable to report enrollment as of July 1, 2016. Enrollment figures represent cumulative enrollment for the state fiscal year (July 1, 2015–June 30, 2016).

[4] Connecticut was not able to provide total Medicaid enrollment as of July 1, 2016. The total Medicaid enrollment reported here is from the April–June 2016 enrollment data collected through the CMS-64 accessed February 15, 2017, at https://www.medicaid.gov/medicaid/program-information/downloads/cms-64-enrollment-report-apr-jun-2016.pdf.

[5] Some plans that appear to be limited-benefit plans (BHO, dental, 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] Some plans that appear to be limited-benefit plans (BHO, dental, 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 Greater Oregon Behavioral Health as BHO and enrollment in Access Dental Plan, Advantage Dental Services, Capitol Dental Care, CareOregon Dental, Family Dental Care, and ODS Community Health as dental.

[8] Rhode Island operated a PCCM program in 2016 but ended it before July 1, 2016.

[9] Some plans that appear to be limited-benefit plans (BHO, dental, 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 USA 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 MCO entity.

[11] Washington's enrollment in comprehensive MCOs includes 21,412 beneficiaries in health homes that provide services under contract with a comprehensive MCO.

Source: MACPAC, 2018, analysis of data from CMS, 2018, Medicaid managed care enrollment and program characteristics, 2016, Baltimore, MD: CMS, https://www.medicaid.gov/medicaid/managed-care/downloads/enrollment/2016-medicaid-managed-care-enrollment-report.pdf.

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

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	**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 E 30b

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 2017 (millions) **E 31**

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	**$238**	$36	$28	$21	$11	$141	-$0
Alaska	**122**	22	0	7	5	88	–
Arizona	**277**	30	162	23	11	51	–
Arkansas	**418**	117	76	21	51	154	–
California	**5,930**	534	2,098	186	362	2,750	–
Colorado	**379**	53	65	21	8	231	-0
Connecticut	**420**	39	157	22	14	187	–
Delaware	**127**	36	26	7	1	57	–
District of Columbia	**178**	28	44	10	7	89	–
Florida	**752**	73	107	32	28	512	–
Georgia	**545**	98	178	31	6	232	-0
Hawaii	**109**	13	49	16	4	27	–
Idaho	**107**	26	22	4	6	50	–
Illinois	**1,009**	54	144	59	68	684	–
Indiana	**534**	78	186	28	12	231	–
Iowa	**175**	48	86	9	8	24	–
Kansas	**212**	56	52	16	3	84	-0
Kentucky	**253**	39	79	37	20	78	–
Louisiana	**341**	40	102	31	7	161	–
Maine	**169**	53	46	17	12	41	–
Maryland	**449**	54	119	30	23	223	–
Massachusetts	**1,027**	98	185	39	39	666	–
Michigan	**654**	134	137	57	18	308	–
Minnesota	**730**	67	170	24	12	458	–
Mississippi	**215**	53	26	38	9	88	-0
Missouri	**432**	64	88	33	13	235	–
Montana	**94**	22	21	6	3	42	-0
Nebraska	**123**	24	42	6	7	44	–
Nevada	**186**	50	71	5	10	52	–

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	**$108**	$30	$42	$3	$3	$30	–
New Jersey	**822**	66	353	21	44	339	-$2
New Mexico	**216**	32	51	25	12	96	–
New York	**2,165**	213	72	167	79	1,634	–
North Carolina	**675**	53	350	36	41	196	–
North Dakota	**104**	26	49	1	2	27	-0
Ohio	**933**	86	244	51	16	537	–
Oklahoma	**210**	35	8	17	16	133	–
Oregon	**513**	34	105	25	21	328	-0
Pennsylvania	**1,003**	96	282	44	23	557	-0
Rhode Island	**163**	25	43	9	10	77	-0
South Carolina	**304**	62	99	14	16	114	–
South Dakota	**52**	7	1	5	2	37	–
Tennessee	**573**	98	164	36	15	261	-1
Texas	**1,508**	291	503	43	32	644	-5
Utah	**135**	23	42	3	10	57	–
Vermont	**142**	22	40	10	7	64	–
Virginia	**470**	48	174	17	30	201	–
Washington	**714**	87	83	45	13	486	-0
West Virginia	**157**	59	29	5	24	41	-0
Wisconsin	**453**	112	104	29	10	201	-1
Wyoming	**57**	17	15	7	4	15	-0
Subtotal (states)	**$27,681**	**$3,558**	**$7,418**	**$1,452**	**$1,207**	**$14,057**	**-$11**
American Samoa	**1**	–	–	1	–	1	–
Guam	**4**	–	–	1	0	2	–
Northern Mariana Islands	**1**	–	–	0	–	0	–
Puerto Rico	**119**	18	0	50	–	50	–
Virgin Islands	**16**	2	10	0	–	3	–
Subtotal (states and territories)	**$27,821**	**$3,579**	**$7,428**	**$1,503**	**$1,208**	**$14,114**	**-$11**

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]	**$339**	–	–	–	$339	–	–
Medicaid survey and certification of nursing and intermediate care facilities[6]	**357**	–	–	–	357	–	–
Total	**$28,517**	**$3,579**	**$7,428**	**$1,503**	**$1,904**	**$14,114**	**-$11**
Percent of total, exclusive of collections	–	12.5%	26.0%	5.3%	6.7%	49.5%	–

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 July 20, 2018. California's fourth quarter submission was not certified; North Dakota's second, third, and fourth quarter submissions were not certified; Alabama's first quarter submission was 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, 2018, analysis of CMS-64 FMR net expenditure data as of July 20, 2018. For MCFUs and survey and certification: CMS, 2018, Fiscal year 2019 justification of estimates for appropriations committees, Baltimore, MD: CMS, http://www.cms.gov/About-CMS/Agency-Information/PerformanceBudget/Downloads/FY2019-CJ-Final.pdf.

EXHIBIT 32. Child Enrollment in CHIP and Medicaid by State, FY 2017 (thousands) E 32

State	CHIP and Medicaid	CHIP-funded coverage			Medicaid-funded coverage
	Total	Medicaid expansion	Separate CHIP	Total	Total
Total	**46,333**	**5,498**	**3,965**	**9,463**	**36,870**
Alabama	**821**	112	109	**221**	**600**
Alaska	**118**	19	–	**19**	**99**
Arizona	**1,018**	84	32	**115**	**903**
Arkansas[1]	**603**	69	75	**144**	**459**
California	**6,867**	1,940	89	**2,029**	**4,839**
Colorado	**684**	87	90	**176**	**508**
Connecticut	**378**	–	29	**29**	**349**
Delaware	**121**	2	12	**14**	**107**
District of Columbia	**98**	12	0	**12**	**86**
Florida	**2,835**	183	283	**466**	**2,370**
Georgia[1]	**1,553**	73	164	**237**	**1,316**
Hawaii	**178**	28	–	**28**	**150**
Idaho	**251**	7	30	**37**	**214**
Illinois	**1,761**	124	200	**324**	**1,436**
Indiana	**819**	84	42	**126**	**692**
Iowa	**434**	21	71	**92**	**342**
Kansas	**350**	16	49	**65**	**285**
Kentucky	**642**	58	39	**96**	**546**
Louisiana	**867**	145	13	**158**	**708**
Maine	**170**	14	9	**23**	**147**
Maryland	**680**	142	–	**142**	**538**
Massachusetts	**775**	90	130	**220**	**555**
Michigan[2]	**1,243**	74	6	**80**	**1,164**
Minnesota	**667**	1	3	**4**	**663**
Mississippi	**528**	36	55	**91**	**437**
Missouri	**713**	51	43	**94**	**619**
Montana	**148**	12	32	**44**	**104**
Nebraska	**223**	54	2	**56**	**167**
Nevada	**506**	30	50	**80**	**425**
New Hampshire	**113**	18	–	**18**	**95**
New Jersey	**980**	103	137	**240**	**740**
New Mexico	**433**	14	0	**14**	**419**
New York	**2,982**	284	479	**763**	**2,219**
North Carolina	**1,428**	157	117	**274**	**1,154**
North Dakota	**51**	3	2	**5**	**45**

EXHIBIT 32. (continued)

State	CHIP and Medicaid	CHIP-funded coverage			Medicaid-funded coverage
	Total	Medicaid expansion	Separate CHIP	Total	Total
Ohio	**1,549**	250	–	**250**	**1,299**
Oklahoma	**723**	190	11	**201**	**522**
Oregon	**618**	60	118	**178**	**441**
Pennsylvania	**1,589**	107	256	**363**	**1,226**
Rhode Island	**139**	26	1	**27**	**112**
South Carolina	**723**	88	–	**88**	**635**
South Dakota	**100**	15	5	**20**	**80**
Tennessee	**1,023**	9	94	**103**	**920**
Texas	**4,653**	364	774	**1,138**	**3,515**
Utah	**309**	31	32	**62**	**247**
Vermont	**80**	6	–	**6**	**74**
Virginia	**874**	97	106	**203**	**671**
Washington	**872**	–	65	**65**	**807**
West Virginia[3]	**283**	12	26	**37**	**246**
Wisconsin	**710**	99	81	**179**	**530**
Wyoming	**50**	2	6	**7**	**43**

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 eligiblity 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 September 17, 2018, and may be revised at a later date.

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

[1] CMS notes that the CHIP and Medicaid total is accurate, but that "some Title XIX Medicaid children may be reported with the Title XXI CHIP data" (CMS 2018, note i).

[2] CHIP-funded Medicaid enrollees are "included in Medicaid enrollment counts, rather than in CHIP for FY 2016 and FY 2017. Therefore, the CHIP enrollment totals are artificially low and the Medicaid enrollment totals are artificially high for both fiscal years" (CMS 2018, note v).

[3] "Due to de-duplication of data and other data quality improvement efforts made in Quarter 1 of FY 2017, the Separate CHIP and Medicaid Expansion totals are artificially low in FY 2017" (CMS 2018, note viii).

Sources: CMS, 2018, Table: Unduplicated number of children ever enrolled (as of May 30), http://www.medicaid.gov/chip/downloads/fy-2017-childrens-enrollment-report.pdf. MACPAC, 2018, analysis of CHIP Statistical Enrollment Data System data as of September 17, 2018.

EXHIBIT 33. CHIP Spending by State, FY 2017 (millions) **E 33**

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[3]	**$332.3**	$335.8	-$3.5	**$132.1**	$135.6	-$3.5	**$192.8**	$192.8	$0.0	**$7.4**	$7.4	$0.0	–
Alaska	**32.6**	28.6	4.0	**29.7**	26.0	3.7	**–**	–	–	**3.0**	2.6	0.4	–
Arizona[3]	**215.0**	215.0	-0.0	**175.7**	175.6	0.2	**30.9**	31.1	-0.1	**8.3**	8.4	-0.0	–
Arkansas[3]	**158.0**	158.0	-0.0	**61.8**	61.8	-0.0	**94.2**	94.2	–	**2.0**	2.0	–	–
California	**3,890.4**	3,213.5	676.9	**3,702.7**	3,059.1	643.6	**103.6**	85.3	18.4	**84.1**	69.2	14.9	–
Colorado	**262.4**	232.3	30.1	**91.6**	80.5	11.1	**166.3**	147.8	18.5	**4.5**	4.0	0.5	–
Connecticut	**42.2**	95.6	-53.4	**–**	–	–	**38.0**	33.5	4.5	**4.2**	3.7	0.5	$58.4
Delaware	**38.3**	34.8	3.5	**4.7**	4.3	0.4	**31.9**	29.0	2.9	**1.7**	1.6	0.2	–
District of Columbia	**36.5**	36.5	–	**34.5**	34.5	–	**–**	–	–	**1.9**	1.9	–	–
Florida	**715.4**	684.5	30.9	**300.5**	287.8	12.7	**372.8**	356.5	16.3	**42.1**	40.2	1.8	–
Georgia[3]	**406.2**	406.4	-0.2	**110.0**	110.0	-0.0	**272.7**	272.9	-0.2	**23.5**	23.5	-0.0	–
Hawaii	**67.2**	61.5	5.7	**64.7**	59.1	5.5	**–**	–	–	**2.5**	2.3	0.2	–
Idaho[3]	**76.2**	76.1	0.1	**12.2**	12.2	0.1	**60.5**	60.5	-0.0	**3.4**	3.4	-0.0	–
Illinois	**262.7**	237.3	25.4	**99.3**	87.9	11.4	**138.0**	126.2	11.8	**25.3**	23.2	2.2	–
Indiana	**217.5**	217.0	0.4	**149.6**	149.2	0.4	**56.3**	56.3	0.0	**11.6**	11.6	0.0	–
Iowa	**134.7**	124.9	9.8	**29.6**	27.4	2.2	**93.4**	86.6	6.8	**11.6**	10.8	0.8	–
Kansas	**111.7**	103.0	8.7	**25.0**	23.1	1.9	**76.9**	70.9	6.0	**9.8**	9.1	0.8	–
Kentucky[3]	**212.9**	212.9	0.0	**124.8**	124.6	0.1	**82.8**	82.9	-0.1	**5.3**	5.3	-0.0	–
Louisiana	**368.8**	355.7	13.1	**276.6**	266.8	9.8	**77.9**	75.1	2.8	**14.3**	13.8	0.5	–
Maine	**34.9**	34.2	0.7	**20.5**	20.1	0.4	**13.4**	13.2	0.2	**1.0**	1.0	0.0	–
Maryland	**316.7**	278.7	38.0	**315.4**	277.5	37.8	**-18.6**	-16.3	-2.2	**19.9**	17.5	2.4	–
Massachusetts	**768.7**	677.3	91.4	**287.5**	253.7	33.8	**404.4**	356.0	48.4	**76.8**	67.6	9.2	–
Michigan	**255.9**	251.7	4.1	**228.9**	225.8	3.2	**21.8**	21.0	0.8	**5.1**	4.9	0.2	–
Minnesota[3]	**13.7**	115.2	-101.5	**1.7**	1.5	0.2	**10.8**	10.9	-0.0	**1.2**	1.2	-0.0	101.7
Mississippi	**262.1**	262.1	–	**108.1**	108.1	–	**151.0**	151.0	–	**3.0**	3.0	–	–
Missouri	**225.2**	219.2	6.0	**125.3**	121.9	3.4	**87.7**	85.5	2.3	**12.2**	11.8	0.3	–
Montana	**101.1**	100.0	1.1	**21.1**	20.9	0.2	**74.7**	73.9	0.8	**5.3**	5.2	0.1	–
Nebraska	**83.1**	75.5	7.6	**72.2**	65.8	6.4	**4.3**	3.9	0.5	**6.6**	5.9	0.7	–
Nevada	**69.2**	68.0	1.2	**21.7**	21.3	0.4	**44.8**	44.0	0.8	**2.7**	2.6	0.0	–
New Hampshire	**34.5**	43.5	-9.0	**34.5**	30.4	4.1	**0.0**	0.0	0.0	**0.0**	0.0	0.0	13.1
New Jersey	**529.9**	466.5	63.4	**241.0**	211.8	29.1	**235.0**	207.2	27.8	**53.9**	47.5	6.4	–

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[3]	**$107.2**	$107.3	-$0.1	**$105.4**	$105.5	-$0.1	**$0.0**	$0.0	–	**$1.8**	$1.8	–	–
New York	**1,445.7**	1,272.2	173.5	**665.8**	585.9	79.9	**737.2**	648.7	$88.5	**42.7**	37.6	$5.1	–
North Carolina	**461.3**	460.5	0.8	**259.6**	259.1	0.5	**189.2**	188.8	0.4	**12.6**	12.5	0.0	–
North Dakota	**27.2**	24.2	3.1	**17.7**	15.6	2.1	**6.6**	6.0	0.6	**2.9**	2.6	0.3	–
Ohio	**570.1**	542.9	27.2	**535.9**	510.0	25.9	**–**	–	–	**34.2**	32.9	1.3	–
Oklahoma	**236.4**	224.5	11.9	**234.6**	222.8	11.8	**-8.7**	-8.4	-0.3	**10.4**	10.0	0.4	–
Oregon	**295.2**	289.4	5.8	**82.8**	81.2	1.5	**201.3**	197.3	4.0	**11.2**	10.9	0.2	–
Pennsylvania	**682.0**	608.7	73.3	**267.4**	238.7	28.7	**402.7**	359.4	43.3	**11.9**	10.6	1.3	–
Rhode Island	**36.0**	45.3	-9.3	**22.5**	20.7	1.8	**12.6**	11.2	1.4	**0.9**	0.8	0.1	$12.6
South Carolina	**166.5**	166.5	–	**158.1**	158.1	–	**–**	–	–	**8.4**	8.4	–	–
South Dakota	**31.7**	29.0	2.7	**22.7**	20.8	1.9	**8.5**	7.8	0.8	**0.5**	0.5	0.0	–
Tennessee	**211.7**	208.4	3.3	**42.5**	41.8	0.7	**149.3**	147.0	2.3	**19.9**	19.6	0.3	–
Texas	**1,812.0**	1,672.9	139.1	**794.0**	733.1	60.9	**957.2**	883.7	73.5	**60.7**	56.1	4.7	–
Utah[3]	**138.3**	138.4	-0.2	**91.4**	91.6	-0.2	**41.2**	41.2	-0.0	**5.7**	5.7	-0.0	–
Vermont	**12.1**	27.8	-15.7	**12.1**	11.0	1.1	**-1.1**	-1.1	0.0	**1.1**	1.1	-0.0	16.8
Virginia	**333.6**	293.0	40.6	**137.8**	121.0	16.9	**174.5**	153.3	21.2	**21.3**	18.7	2.6	–
Washington	**154.2**	242.5	-88.3	**34.1**	30.0	4.1	**118.0**	103.7	14.3	**2.1**	1.8	0.3	106.9
West Virginia	**64.8**	64.8	–	**16.2**	16.2	–	**44.7**	44.7	–	**3.9**	3.9	–	–
Wisconsin	**207.7**	223.1	-15.4	**96.7**	90.9	5.8	**100.3**	94.3	6.0	**10.7**	10.1	0.6	27.9
Wyoming	**13.3**	11.7	1.6	**2.5**	2.2	0.3	**9.9**	8.8	1.2	**0.9**	0.8	0.1	–
Subtotal (states)	**$17,283.0**	**$16,074.5**	**$1,208.5**	**$10,502.9**	**$9,440.5**	**$1,062.4**	**$6,062.1**	**$5,637.9**	**$424.1**	**$717.9**	**$658.6**	**$59.3**	**$337.3**
American Samoa	**3.7**	3.6	0.1	**3.7**	3.6	0.1	**–**	–	–	**–**	–	–	–
Guam	**32.8**	30.2	2.6	**32.8**	30.2	2.6	**–**	–	–	**–**	–	–	–
Northern Mariana Islands	**10.2**	9.6	0.7	**10.2**	9.6	0.7	**–**	–	–	**–**	–	–	–
Puerto Rico	**184.3**	168.7	15.7	**184.3**	168.7	15.7	**–**	–	–	**–**	–	–	–
Virgin Islands	**9.0**	8.2	0.8	**9.0**	8.2	0.8	**–**	–	–	**–**	–	–	–
Total (states and territories)	**$17,522.9**	**$16,294.6**	**$1,228.3**	**$10,742.9**	**$9,660.7**	**$1,082.2**	**$6,062.1**	**$5,637.9**	**$424.1**	**$717.9**	**$658.6**	**$59.3**	**$337.3**

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 CHIP. In cases where the sum of Section 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, Rhode Island, 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, 2018, analysis of Medicaid and CHIP Budget Expenditure System data from CMS as of July 23, 2018.

EXHIBIT 34. Federal CHIP Allotments, FYs 2016–2018 (millions) **E 34**

State	FY 2016 federal CHIP allotments[1]	FY 2017 federal CHIP allotments	FY 2018 federal CHIP allotments
Alabama	$457.3	$319.7	$338.5
Alaska	20.4	32.6	34.6
Arizona	123.7	206.4	219.6
Arkansas	174.5	194.4	205.8
California	1,995.2	2,668.6	2,825.9
Colorado	228.3	254.4	270.4
Connecticut	61.9	77.4	82.0
Delaware	38.5	35.3	37.3
District of Columbia	25.6	42.5	45.8
Florida	595.0	686.6	734.1
Georgia	418.2	404.8	429.7
Hawaii	46.3	52.3	55.4
Idaho	66.4	82.9	88.4
Illinois	406.2	547.4	579.7
Indiana	165.7	191.1	202.3
Iowa	147.6	145.7	154.6
Kansas	112.2	124.7	132.0
Kentucky	232.0	268.2	284.0
Louisiana	238.9	358.8	380.0
Maine	32.3	35.7	37.8
Maryland	290.8	295.9	313.4
Massachusetts	535.8	671.3	710.9
Michigan	592.6	264.8	280.4
Minnesota	98.6	115.2	122.3
Mississippi	246.7	316.8	335.5
Missouri	172.9	175.2	185.5
Montana	95.8	103.5	110.3
Nebraska	78.2	72.5	77.1
Nevada	63.3	70.0	74.9
New Hampshire	39.2	38.2	40.5
New Jersey	406.8	462.9	490.2
New Mexico	122.5	136.0	144.1
New York	1,074.6	1,233.5	1,306.3
North Carolina	448.2	479.5	508.7
North Dakota	21.2	21.9	23.4
Ohio	352.6	409.3	433.4

EXHIBIT 34. (continued)

State	FY 2016 federal CHIP allotments[1]	FY 2017 federal CHIP allotments	FY 2018 federal CHIP allotments
Oklahoma	$189.2	$249.0	$264.0
Oregon	211.3	249.8	266.0
Pennsylvania	365.1	527.3	558.4
Rhode Island	65.4	72.8	77.1
South Carolina	162.0	154.2	164.0
South Dakota	23.6	26.9	28.8
Tennessee	213.3	465.0	493.2
Texas	1,345.1	1,382.1	1,476.3
Utah	148.9	131.6	140.5
Vermont	29.3	30.2	32.0
Virginia	265.2	291.1	308.3
Washington	215.3	242.5	259.3
West Virginia	65.4	61.0	64.6
Wisconsin	225.8	224.5	237.7
Wyoming	10.9	12.6	13.4
Subtotal (states)	**$13,761.9**	**$15,716.6**	**$16,678.5**
American Samoa	2.1	2.9	3.1
Guam	8.0	26.6	28.1
Northern Mariana Islands	1.0	6.7	7.1
Puerto Rico	179.8	192.5	203.8
Virgin Islands	5.3	6.9	7.3
Total (states and territories)	**$13,958.3**	**$15,952.1**	**$16,927.9**

Notes: FY is fiscal year.

[1] Per statute, FY 2016 federal CHIP allotments were based on each state's prior-year federal CHIP spending. In addition, because a 23 percentage point increase in the CHIP matching rate went into effect in FY 2016, the FY 2016 allotments were calculated based on the FY 2015 amount increased by 23 percentage points (as if the increased matching rate had been in effect in FY 2015). The FY 2016 allotment increase factor, which was approximately 5 percent for most states, was then applied.

Sources: MACPAC, 2018, analysis of Medicaid and CHIP Budget Expenditure System data as of March 15, 2018. CMS, 2018, phone call to MACPAC, March 9.

SECTION 4

Medicaid and CHIP Eligibility

Section 4: Medicaid and CHIP Eligibility

Key Points

- Thirty-one 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 (P.L. 111-148, as amended). Five additional states have approved a Medicaid expansion but have not implemented it as of April 2018. Most of these new adult enrollees 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 2017 and 2018 (Exhibit 37).
- In 2018, in the lower 48 states and the District of Columbia, 100 percent FPL is $12,140 for an individual plus $4,320 for each additional family member (Exhibit 38).

EXHIBIT 35. Medicaid and CHIP Income Eligibility Levels as a Percentage of the Federal Poverty Level for Children and Pregnant Women by State, April 2018 **E 35**

State	CHIP program type[1] (as of April 2018)	Medicaid coverage[2]						Separate CHIP coverage		Medicaid or CHIP coverage
		Infants under age 1		Age 1–5		Age 6–18				
		Medicaid funded	CHIP funded	Medicaid funded	CHIP funded	Medicaid funded	CHIP funded	Birth through age 18[3]	Unborn children[4]	Pregnant women and deemed newborns[5]
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	235	–	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
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	194	–	142	–	142	107–142	350	–	194; 200
New Mexico	Medicaid expansion	240	200–300	240	200–300	190	138–240	–	–	250

EXHIBIT 35. (continued)

State	CHIP program type[1] (as of April 2018)	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			
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 2018, 100 percent of the federal poverty level (FPL) in the lower 48 states and the District of Columbia was $12,140 for an individual plus $4,320 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 2018. 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.

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 Section 1115 waivers; in addition, the unborn children of pregnant women may receive CHIP-funded coverage under a state plan option.

EXHIBIT 35. (continued)

– 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 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 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 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 the mother was enrolled at the time of the 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 three counties in California, separate CHIP covers children with family income up to and including 317 percent FPL.

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

[8] In Minnesota, Medicaid-expansion CHIP coverage for incomes less than or equal to 283 percent FPL level applies only to infants (defined by the state as being under age two).

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

[10] Although Tennessee covers children with CHIP-funded Medicaid, new enrollment is currently capped, except for children who roll over from traditional Medicaid.

Sources: MACPAC, 2018, analysis of CMS, 2018, State Medicaid and CHIP income eligibility standards (for selected MAGI groups, based on state decisions as of April 1, 2018), https://www.medicaid.gov/medicaid/program-information/medicaid-and-chip-eligibility-levels/index.html; Kaiser Family Foundation (KFF), 2018, *Medicaid and CHIP eligibility, enrollment, renewal, and cost sharing policies as of January 2018: 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-2018; CMS, 2018, Medicaid state plan amendments, https://www.medicaid.gov/state-resource-center/medicaid-state-plan-amendments/index.html; and CMS, 2018, CHIP state plan amendments, https://www.medicaid.gov/chip/state-program-information/index.html. CMS, 2018, phone call to MACPAC, August 21.

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 2018 E 36

State	Parents and caretaker relatives of dependent children[1]	Additional individuals age 19–64[2]
Alabama	13%	–
Alaska	139	133% (age 19–20 only: 139%)
Arizona	106	133
Arkansas	17	133
California	109	133
Colorado	68	133
Connecticut	133	133
Delaware	87	133
District of Columbia	216	210 (age 19–20 only: 216)
Florida	29	Age 19–20 only: 29
Georgia	34	–
Hawaii	105	133
Idaho[3]	23	–
Illinois	133	133
Indiana	19	133
Iowa	53	133
Kansas	33	–
Kentucky	24	133
Louisiana	19	133
Maine[3]	100	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	18	–
Montana	24	133
Nebraska[3]	58	–
Nevada	32	133

EXHIBIT 36. (continued)

State	Parents and caretaker relatives of dependent children[1]	Additional individuals age 19–64[2]
New Hampshire	67%	133%
New Jersey	31	133
New Mexico	45	133
New York	133[4]	133[4]
North Carolina	43	Age 19–20 only: 44
North Dakota	52	133
Ohio	90	133
Oklahoma	41[5]	–[6]
Oregon	40	133
Pennsylvania	33	133
Rhode Island	116	133
South Carolina	62	–
South Dakota	56	–
Tennessee	101	–
Texas	15	–
Utah[3]	55[5]	–[6]
Vermont	52	133
Virginia[3]	48	–
Washington	40	133
West Virginia	19	133
Wisconsin	95	95
Wyoming	54	–

Notes: As of January 2018, 100 percent of the federal poverty level (FPL) in the lower 48 states and the District of Columbia was $12,140 for an individual plus $4,320 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 2018. 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 4.

[3] Additional states have opted to expand Medicaid, but had not implemented as of April 2018. These include Idaho, Maine, Nebraska, and Utah, which opted to expand coverage to the new adult group by voter referendum, and Virginia, which adopted the expansion through the state budget.

[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.

[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, 2018, analysis of CMS, 2018, State Medicaid and CHIP income eligibility standards (for selected MAGI groups, based on state decisions as of April 1, 2018), https://www.medicaid.gov/medicaid/program-information/medicaid-and-chip-eligibility-levels/index.html; Kaiser Family Foundation (KFF), 2018, *Medicaid and CHIP eligibility, enrollment, renewal, and cost sharing policies as of January 2018: 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-2018; and CMS, 2018, Medicaid state plan amendments, https://www.medicaid.gov/state-resource-center/medicaid-state-plan-amendments/index.html. CMS, 2018, phone call to MACPAC, July 26.

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, 2018 **E 37**

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	60[6]	–	–	–	179
Arizona	§ 1634	74	–	100%	–	222
Arkansas	§ 1634	74	–	80 (aged only)	11%	222
California	§ 1634	74	–	100	59	–
Colorado	§ 1634	74	–	–	–	222
Connecticut	§ 209(b)	–	63%[7]	–	63	222
Delaware	§ 1634	74	–	–	–	185
District of Columbia	§ 1634	74	–	100	64	222
Florida	§ 1634	74	–	88	18	222
Georgia	§ 1634	74	–	–	31	222
Hawaii	§ 209(b)	–	65	100	41	–
Idaho	SSI criteria	74	–	77	–	222
Illinois	§ 209(b)	–	100	100	100	–
Indiana	§ 1634	74	–	100	–	222
Iowa	§ 1634	74	–	–	48	222
Kansas	SSI criteria	74	–	–	47	222
Kentucky	§ 1634	74	–	–	21	222
Louisiana	§ 1634	74	–	–	10	222
Maine	§ 1634	74	–	100	31	222
Maryland	§ 1634	74	–	–	35	222
Massachusetts[8]	§ 1634	74	–	100 (aged); 133 (disabled)	52	222
Michigan	§ 1634	74	–	100	40	222
Minnesota	§ 209(b)	–	80	100	80	222
Mississippi	§ 1634	74	–	–	–	222
Missouri	§ 209(b)	–	85	85	85	130
Montana	§ 1634	74	–	–	52	–
Nebraska	SSI criteria	74	–	100	39	–
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%	–	58%	222%
New Jersey	§ 1634	74%	–	100%	36	222
New Mexico	§ 1634	74	–	–	–	222
New York	§ 1634	74	–	83	83	–
North Carolina	§ 1634	74	–	100	24	–
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	42	222
Rhode Island	§ 1634	74	–	100	89	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	–	–	20	222
Wisconsin	§ 1634	74	–	82	58	222
Wyoming	§ 1634	74	–	–	–	222

Notes: SSI is Supplemental Security Income. § 209(b) refers to Section 209(b) of the Social Security Act Amendments of 1972; § 1634 refers to Section 1634 of the Social Security Act. In 2018, 100 percent of the federal poverty level (FPL) in the lower 48 states and the District of Columbia is $12,140 for an individual and $4,320 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 or older or 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 increased from 2017 because during this period the SSI federal benefit rate increased by 2.0 percent and the FPL increased by 0.7 percent.

[3] Under the poverty level option, states may choose to provide Medicaid coverage to individuals who are age 65 or 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 2018). 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 location; the highest income standard for region A is listed. The income standard in regions B and C is 52 percent of 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, 2018, analysis of eligibility information from state websites and Medicaid state plans as of September 2018.

EXHIBIT 38. Income as a Percentage of the Federal Poverty Level for Various Family Sizes, 2018 E 38

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%	$12,140	$16,460	$20,780	$25,100	$4,320	$1,012	$1,372	$1,732	$2,092	$360
	133	16,146	21,892	27,637	33,383	5,746	1,346	1,824	2,303	2,782	479
	138	16,753	22,715	28,676	34,638	5,962	1,396	1,893	2,390	2,887	497
	150	18,210	24,690	31,170	37,650	6,480	1,518	2,058	2,598	3,138	540
	185	22,459	30,451	38,443	46,435	7,992	1,872	2,538	3,204	3,870	666
	200	24,280	32,920	41,560	50,200	8,640	2,023	2,743	3,463	4,183	720
	250	30,350	41,150	51,950	62,750	10,800	2,529	3,429	4,329	5,229	900
	300	36,420	49,380	62,340	75,300	12,960	3,035	4,115	5,195	6,275	1,080
	400	48,560	65,840	83,120	100,400	17,280	4,047	5,487	6,927	8,367	1,440
Alaska	100	15,060	20,290	25,520	30,750	5,400	1,255	1,691	2,127	2,563	450
	133	20,030	26,986	33,942	40,898	7,182	1,669	2,249	2,828	3,408	599
	138	20,783	28,000	35,218	42,435	7,452	1,732	2,333	2,935	3,536	621
	150	22,590	30,435	38,280	46,125	8,100	1,883	2,536	3,190	3,844	675
	185	27,861	37,537	47,212	56,888	9,990	2,322	3,128	3,934	4,741	833
	200	30,120	40,580	51,040	61,500	10,800	2,510	3,382	4,253	5,125	900
	250	37,650	50,725	63,800	76,875	13,500	3,138	4,227	5,317	6,406	1,125
	300	45,180	60,870	76,560	92,250	16,200	3,765	5,073	6,380	7,688	1,350
	400	60,240	81,160	102,080	123,000	21,600	5,020	6,763	8,507	10,250	1,800

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%	$13,860	$18,670	$23,480	$28,290	$4,970	$1,155	$1,556	$1,957	$2,358	$414
	133	18,434	24,831	31,228	37,626	6,610	1,536	2,069	2,602	3,135	551
	138	19,127	25,765	32,402	39,040	6,859	1,594	2,147	2,700	3,253	572
	150	20,790	28,005	35,220	42,435	7,455	1,733	2,334	2,935	3,536	621
	185	25,641	34,540	43,438	52,337	9,195	2,137	2,878	3,620	4,361	766
	200	27,720	37,340	46,960	56,580	9,940	2,310	3,112	3,913	4,715	828
	250	34,650	46,675	58,700	70,725	12,425	2,888	3,890	4,892	5,894	1,035
	300	41,580	56,010	70,440	84,870	14,910	3,465	4,668	5,870	7,073	1,243
	400	55,440	74,680	93,920	113,160	19,880	4,620	6,223	7,827	9,430	1,657

Notes: FPL is federal poverty level. The FPLs shown here are based on the U.S. Department of Health and Human Services (HHS) 2018 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, 2018, Annual update of the HHS poverty guidelines, *Federal Register* 83, no. 12 (January 18): 2643.

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 with 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 in the past 12 months. However, measures of service use vary depending on the data source: the percentage of children with Medicaid or CHIP reported as having seen a dentist differs substantially between the NHIS (78.9 percent in 2017) and MEPS (39.8 percent in 2016), with similar differences 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 reported as seeing a general doctor or having a well-child checkup slightly less than those with private coverage, but more than those who are uninsured (Exhibit 40). They are more likely to have trouble finding a doctor or to experience delayed care than those with private coverage (Exhibit 42).
- Adults age 19–64 whose primary coverage is Medicaid report having a usual source of care slightly less 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, 2017 **E 39**

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%**	**55.3%**	**35.4%**	**5.1%**
Coverage				
Length of time with any coverage during the year				
Full year	**91.5***	97.0*	95.6	–
Part year	**4.6**	2.9*	4.2	31.7*
No coverage during year	**2.9***	–	–	68.3*
Demographics				
Age				
0–5	**29.9***	28.5*	33.4	20.6*
6–11	**32.0**	31.5	32.8	31.0
12–18	**38.0***	40.0*	33.8	48.3*
Gender				
Male	**51.1**	51.1	49.8	55.1
Female	**48.9**	48.9	50.2	44.9
Race				
Hispanic	**25.0***	15.5*	38.4	38.2
White, non-Hispanic	**53.0***	66.3*	33.6	42.9*
Black, non-Hispanic	**14.7***	9.6*	22.7	11.5*
Other non-white, non-Hispanic	**7.3***	8.6*	5.3	7.4
Parents present in family				
Mother, no father	**22.9***	12.6*	39.5	21.9*
Father, no mother	**3.7**	3.0*	4.3	5.0
Both present	**70.1***	83.2*	49.3	71.2*
No parents	**3.3***	1.2*	6.9	†
Family income				
Has income less than 138 percent FPL	**27.7***	6.7*	59.4	33.0*
Has income in ranges shown below				
Less than 100 percent FPL	**18.7***	4.0*	41.2	22.5*
100–199 percent FPL	**22.1***	10.7*	37.8	33.2
200–399 percent FPL	**28.4***	34.5*	17.9	31.1*
400 percent FPL or higher	**30.6***	50.8*	2.8	13.0*

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	**97.4%**	98.4%*	96.8%	89.0%*
Receives SSI[6]	**1.2***	†	3.0	†
Family receives WIC	**5.9***	1.4*	13.3	3.0*
Health				
Current health status				
Excellent or very good	**84.8***	90.1*	76.6	82.5*
Good	**13.5***	9.1*	20.0	15.4
Fair or poor	**1.8***	0.8*	3.4	†
Body Mass Index (BMI)[7]				
Healthy weight (BMI less than 25)	**77.1***	82.4*	66.9	75.6
Overweight (BMI 25–29)	**14.9***	11.7*	20.6	16.8
Obese (BMI 30 or higher)	**8.1***	5.9*	12.6	7.7*
Special needs, impairments, and health conditions				
Has special health care needs[8]	**22.4***	19.8*	26.9	18.2*
Receives special education or early intervention services[9]	**9.0***	7.6*	11.2	6.0*
Has impairment requiring special equipment	**1.3**	1.4	1.5	†
Has impairment limiting ability to crawl, walk, run, or play[9]	**1.9***	1.3*	3.0	†
Has impairment limiting ability to crawl, walk, run, or play that is expected to last 12 or more months[9]	**1.7***	1.0*	2.7	†
Ever been told he or she has selected conditions				
ADHD or ADD[10]	**8.9***	7.8*	10.8	5.2*
Asthma	**13.4***	12.3*	15.9	10.8*
Autism[10]	**2.2**	2.1	2.5	†
Cerebral palsy[9]	**0.2**	†	0.4	–
Congenital heart disease[9]	**†**	†	†	†
Diabetes	**0.2**	†	†	†
Down syndrome[9]	**†**	†	†	–
Intellectual disability[9]	**0.9***	0.6*	1.4	†
Other developmental delay[9]	**3.9***	3.3*	5.3	†

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 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] 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 to 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, 2018, analysis of NHIS data.

EXHIBIT 40. Use of Care among Non-Institutionalized Individuals Age 0–18 by Primary Source of Health Coverage, 2017, NHIS Data **E 40**

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%**	**55.3%**	**35.4%**	**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	**8.3**	6.3*	8.4	29.6*
At least 1	**91.7**	93.7*	91.6	70.4*
1	**24.2**	23.9	24.6	27.7
2–3	**38.1**	39.5	36.8	29.8*
4 or more	**29.4**	30.3	30.2	12.9*
Saw selected health professional				
General doctor	**83.9**	87.2*	82.3	58.8*
General doctor, nurse practitioner, physician assistant, midwife, or obstetrician-gynecologist	**85.9**	89.3*	84.2	61.3*
Medical specialist	**14.8**	16.4*	13.5	7.0*
Eye doctor	**27.7***	30.3*	24.5	23.8
Mental health professional[6]	**9.0***	8.5*	10.3	3.3*
Doctor, for emotional or behavioral problem[7]	**5.3***	4.5*	7.1	†
Dentist[8]	**81.2***	84.8*	78.9	58.6*
Any health professional, excluding dental[9]	**90.2***	93.0*	88.3	72.4*
Any health professional, including dental	**96.8**	98.1*	96.6	83.7*
Had at least 1 overnight hospital stay[10]	**4.7**	4.4	5.4	†
Received care at home	**0.9**	0.7*	1.3	†
Receipt of appropriate care (past 12 months)				
Had well-child checkup[7]	**85.2**	87.8*	85.3	56.2*
Had more than 15 office or clinic visits	**2.5**	2.2	2.8	†
Number of emergency room visits				
None	**83.0***	87.6*	76.5	85.5*
At least 1	**17.0***	12.4*	23.5	14.5*
1	**11.8***	9.8*	14.1	12.1
2–3	**3.9***	2.2*	7.0	†
4 or more	**1.2***	0.4*	2.5	†
Had at least 1 emergency room visit, and most recent visit was for a serious health problem	**12.0***	9.0*	16.1	10.4*

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.

– Dash indicates zero; 0.0% indicates an amount less than 0.05% that rounds to 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 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, 2018, analysis of NHIS data.

EXHIBIT 41. Use of Care among Non-Institutionalized Individuals Age 0–18 by Primary Source of Health Coverage, 2016, MEPS Data **E 41**

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%**	**54.0%**	**36.9%**	**7.1%**
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	**27.3***	22.4*	31.3	44.5*
At least 1	**72.7***	77.6*	68.7	55.5*
1	**23.2**	22.6	24.5	23.1
2–3	**25.3**	26.9*	23.8	18.9
4 or more	**24.3***	28.1*	20.5	13.5*
Had at least 1 overnight hospital stay	**2.3**	2.0	2.8	†
Received care at home	**1.0***	0.7*	1.7	†
Saw a general dentist	**44.0***	48.8*	39.8	27.3*
Saw an orthodontist	**9.5***	12.3*	5.4	8.0
Receipt of appropriate care (past 12 months)				
Had at least 1 dental check-up[6]	**85.2**	86.5	85.0	76.5*
Had more than 15 office-based or hospital outpatient visits	**2.8**	2.7	3.1	†
Number of emergency room visits				
None	**87.9***	89.8*	85.4	89.1
At least 1	**12.1***	10.2*	14.6	10.9
1	**9.8**	8.9*	11.0	9.1
2–3	**2.1***	1.2*	3.3	†
4 or more	**0.2**	†	†	†

Notes: MEPS is 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-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 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 41. (continued)

[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 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] Prior to the December 2016 databook, the characteristic was previously "Had cleaning, prophylaxis, or polishing," which was restricted to those who had a dental event in that year. Due to the change in the characteristic, these estimates should not be compared to versions of the exhibit published prior to the December 2016 databook.

Source: MACPAC, 2018, analysis of MEPS data.

EXHIBIT 42. Measures of Access to Care among Non-Institutionalized Individuals Age 0–18 by Primary Source of Health Coverage, 2017 **E 42**

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%**	**55.3%**	**35.4%**	**5.1%**
Connection to the health care system (past 12 months)				
Has a usual source of care[6]	**95.2**	97.2*	95.2	71.3*
Had the same usual source of medical care 12 months ago	**87.7**	90.1*	87.2	65.2*
Had trouble finding a doctor or was told that coverage or new patients were not accepted[7]	**4.1***	2.9*	5.8	5.5
Timeliness of care (past 12 months)				
Delayed medical care due to any access barrier indicated below	**11.1***	8.4*	14.4	21.2*
Delayed because of costs	**2.5***	1.8	1.8	15.7*
Delayed for provider-related reasons[8]	**8.5***	7.0*	11.4	8.0
Delayed due to lack of transportation	**1.6***	†	3.3	†
Unmet need for selected types of care due to cost				
Medical care	**1.4**	0.8	1.1	10.6*
Mental health care or counseling[9]	**1.1**	1.0	1.2	†
Dental care[9]	**4.5**	2.8*	4.6	21.0*
Prescription drugs	**1.9**	1.1*	2.2	7.8*
Eyeglasses[9]	**1.9**	1.0*	2.1	8.2*
Specialist care	**1.4**	1.0*	1.7	†
Follow-up care	**1.4**	0.8*	1.6	6.4*

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.

EXHIBIT 42. (continued)

[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 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] Excludes emergency room.

[7] Parent reported one of these barriers in the past 12 months: trouble finding a doctor or provider, doctor's office or clinic did not accept child's insurance coverage, or office or clinic did not accept the child as a new patient.

[8] 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.

[9] Survey information is limited to children age two or older.

Source: MACPAC, 2018, analysis of NHIS data.

EXHIBIT 43. Coverage, Demographic, and Health Characteristics of Non-Institutionalized Individuals Age 19–64 by Primary Source of Health Coverage, 2017 **E 43**

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%**	**4.1%**	**69.3%**	**11.0%**	**12.6%**
Coverage					
Length of time with any coverage during year					
Full year	**84.0***	98.7*	95.4*	90.3	–
Part year	**7.4***	1.3*	4.6*	9.7	25.7*
No coverage during year	**8.6***	–	–	–	74.3*
Demographics					
Age					
19–25	**14.8***	3.3*	13.9*	20.5	18.6
26–44	**41.7***	15.3*	41.2*	46.3	49.5
45–54	**21.8***	26.2*	22.8*	18.2	18.1
55–64	**21.7***	55.1*	22.1*	15.0	13.7
Gender					
Male	**49.0***	47.0*	50.0*	37.4	53.1*
Female	**51.0***	53.0*	50.0*	62.6	46.9*
Race					
Hispanic	**17.7***	13.8*	12.9*	26.1	38.4*
White, non-Hispanic	**61.7***	63.1*	68.1*	44.7	40.6
Black, non-Hispanic	**12.7***	18.0	10.7*	20.5	14.5*
Other non-white, non-Hispanic	**7.9**	5.2*	8.3*	8.7	6.4
Marital status					
Married	**52.9***	36.4*	59.9*	28.3	40.1*
Widowed	**1.8***	5.4*	1.4*	2.7	1.6*
Divorced or separated	**10.8***	26.2*	8.8*	15.4	11.7*
Living with partner	**9.4***	5.3*	7.7*	15.5	15.5
Never married	**25.1***	26.7*	22.2*	38.0	31.0*
Family income					
Less than 138 percent FPL	**18.8***	49.4	7.6*	58.4	37.1*
Has income in ranges below					
Less than 100 percent FPL	**12.4***	†	4.7*	40.5	24.9*
100–199 percent FPL	**16.0***	54.4	9.3*	34.7	29.6*
200–399 percent FPL	**27.3***	†	28.1*	19.3	30.3*

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	**44.1%***	†	57.8%*	5.3%	15.0%*
Education					
Less than high school	**10.0***	22.6%	4.1*	24.9	26.9
High school diploma or GED certificate	**23.2***	35.2	19.3*	35.2	30.2*
Some college	**31.3**	33.1	31.4*	29.2	30.1
College or graduate degree	**35.4***	9.0	45.1*	10.7	12.8
Other demographic characteristics					
Citizen of United States	**90.8**	97.7*	93.6*	88.9	73.8*
Parent of a dependent child	**34.6***	10.9*	34.2*	42.9	37.7*
Currently working	**74.7***	10.9*	84.4*	47.8	68.6*
Veteran	**5.3***	7.5*	4.3*	2.4	2.8
Receives SSI or SSDI[6]	**5.3***	72.3*	0.8*	15.0	0.8*
Receives SSI	**2.5***	23.1*	0.3*	11.7	0.6*
Receives SSDI	**3.5***	60.1*	0.6*	5.1	†
Health					
Current health status					
Excellent or very good	**63.8***	14.1*	71.4*	42.5	57.5*
Good	**25.4***	30.9	22.9*	34.2	29.9*
Fair or poor	**10.8***	55.0*	5.6*	23.4	12.6*
Body Mass Index (BMI)					
Healthy weight (BMI less than 25)	**34.3***	23.1*	35.8*	30.3	32.7
Overweight (BMI 25–29)	**34.1**	29.4	34.8*	31.5	35.3
Obese (BMI 30 or higher)	**31.6***	47.5*	29.4*	38.2	32.0*
Smoking status					
Current smoker	**15.6***	29.6	11.2*	27.8	25.0
Former smoker	**18.7***	25.7*	19.1*	15.6	15.7
Never smoked	**65.7***	44.7*	69.8*	56.7	59.4
Limitations and health conditions					
Has basic action difficulty or complex activity limitation					
Any basic action difficulty[7]	**26.0***	83.3*	19.8*	42.4	26.1*
Any complex activity limitation[8]	**12.5***	83.0*	5.8*	30.2	9.8*

EXHIBIT 43. (continued)

Characteristic	Primary coverage source at time of interview[1]				
	Total	Medicare	Private[2]	Medicaid or CHIP[3]	Uninsured[4]
Either one	**27.7%***	90.8%*	20.9%*	46.1%	27.5%*
Has functional limitation[9]	**10.9***	62.4*	6.3*	21.3	9.6*
Has difficulty walking without equipment	**3.2***	31.0*	1.1*	7.6	1.7*
Has health condition requiring special equipment	**4.2***	32.2*	2.3*	8.1	7.1
Needs help with any of the following ADLs					
Personal care	**1.5***	14.6*	0.3*	5.1	†
Bathing	**0.9***	8.6*	0.2*	3.0	†
Eating	**0.3***	3.6*	†	1.0	†
Transferring	**0.7***	7.7*	†	2.2	†
Toileting	**0.5***	5.1*	†	1.5	†
Getting around in home	**0.6***	6.8*	†	1.2	†
Number of ADLs needing assistance					
None	**98.7***	87.5*	99.8*	95.8	99.5*
1–2	**0.6***	5.3*	0.1*	2.1	†
3–4	**0.4***	3.3*	†	1.3	†
5–6	**0.3**	4.0	†	†	†
Unable to work now due to health problem	**7.2***	66.7*	2.1*	19.1	5.0*
Limited in amount or kind of work due to health	**10.5***	78.7*	4.2*	26.5	7.6*
Lost all natural teeth	**4.1***	15.3*	3.2*	6.4	4.3*
Has depressed or anxious feelings[10]	**3.7***	16.3*	1.8*	8.8	5.3*
Currently pregnant[11]	**2.7***	†	2.6*	4.3	†
Ever been told he or she has selected conditions					
Hypertension	**23.3***	54.2*	21.7*	27.9	17.6*
Coronary heart disease	**2.0**	11.1*	1.5*	2.5	1.1*
Heart attack	**1.7***	10.6*	1.0*	2.8	1.5*
Stroke	**1.8***	11.2*	1.0*	3.8	1.4*
Cancer	**5.5**	13.7*	5.5*	5.3	2.7*
Diabetes	**7.3***	27.2*	5.8*	10.2	6.4*
Arthritis	**17.3***	51.6*	15.7*	20.3	10.5*
Asthma	**13.9***	21.9	13.3*	18.8	10.4*

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)	**3.1%***	11.2%*	2.4%*	5.1%	2.7%*
Liver condition (past 12 months)	**1.8***	6.4*	1.3*	3.4	1.6*
Weak or failing kidneys (past 12 months)	**1.2***	7.7*	0.7*	2.6	1.2*

Notes: FPL is federal poverty level. GED is General Equivalence Diploma. SSI is Supplemental Security Income. SSDI is Social Security Disability Insurance. ADL is activity of daily living. 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-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 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, 2018, analysis of NHIS data.

EXHIBIT 44. Use of Care among Non-Institutionalized Individuals Age 19–64 by Primary Source of Health Coverage, 2017, NHIS Data **E 44**

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%**	**4.1%**	**69.3%**	**11.0%**	**12.6%**
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	**19.1**	4.4*	15.2	17.0	48.0*
At least 1	**80.9**	95.6*	84.8	83.0	52.0*
1	**20.7***	6.0*	22.5*	17.7	18.6
2–3	**27.5***	17.8*	30.3*	22.5	18.4*
4 or more	**32.7***	71.8*	31.9*	42.8	15.0*
Saw selected health professional					
General doctor	**66.5**	84.9*	70.3	67.4	37.1*
General doctor, nurse practitioner, physician assistant, midwife, or obstetrician-gynecologist	**74.7**	89.5*	78.8*	75.5	45.2*
Medical specialist	**23.4**	51.9*	24.3	22.6	9.0*
Eye doctor	**38.2***	43.7*	43.0*	28.6	18.5*
Mental health professional	**9.9***	21.0	8.3*	18.3	5.8*
Dentist	**63.6***	47.0	72.0*	50.8	33.6*
Any health professional, excluding dental[6]	**82.7**	94.0*	86.7*	81.9	55.8*
Any health professional, including dental	**90.0***	96.4*	94.0*	87.5	66.0*
Had at least 1 overnight hospital stay	**7.2***	21.6*	5.8*	12.1	5.9*
Received care at home	**1.3***	10.3*	0.8*	2.5	†
Receipt of appropriate care (past 12 months)					
Had cholesterol checked[7]					
All individuals	**65.1**	85.1*	68.5*	64.4	38.2*
Men age 35–64	**70.9**	86.0*	73.8	73.0	40.5*
Individuals with elevated risk of cardiac disease[7, 8]	**73.9***	88.9*	79.1*	69.6	44.6*
Had flu shot					
All individuals	**37.5***	49.6*	40.7*	32.3	17.6*

EXHIBIT 44. (continued)

Characteristics	Primary coverage source at time of interview[1]				
	Total	Medicare	Private[2]	Medicaid or CHIP[3]	Uninsured[4]
Individuals age 50–64	**45.5%**	52.3%*	47.4%	44.0%	23.4%*
Had any test for colorectal cancer (age 50–64)	**25.0**	33.5*	25.2	25.4	10.8*
Had Pap smear or test for cervical cancer (women age 21–60)	**54.0**	39.3*	58.0*	53.1	36.1*
Had professional counseling about smoking (current smokers)	**51.7***	81.4*	52.8*	60.3	27.8*
Had more than 15 office or clinic visits	**5.2***	17.7*	4.6*	8.1	1.9*
Number of emergency room visits					
None	**82.2***	61.1*	86.1*	67.8	80.8*
At least 1	**17.8***	38.9*	13.9*	32.2	19.2*
1	**11.5***	19.6	10.0*	17.2	11.6*
2–3	**4.6***	11.7	3.0*	10.1	5.4*
4 or more	**1.8***	7.6*	0.9*	4.9	2.2*
Had at least 1 emergency room visit, and most recent visit was for a serious health problem	**14.1***	34.3*	11.0*	25.6	14.3*

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 online 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-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.

EXHIBIT 44. (continued)

[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 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 only, the NHIS included additional blood pressure and cholesterol screening questions as part of the supplemental questions pertaining to the Million Hearts® Initiative. After 2014, the NHIS reverted back to the originial 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.

Source: MACPAC, 2018, analysis of NHIS data.

EXHIBIT 45. Use of Care among Non-Institutionalized Individuals Age 19–64 by Primary Source of Health Coverage, 2016, MEPS Data **E 45**

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%**	**3.8%**	**68.2%**	**10.6%**	**15.7%**
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	**31.4**	7.3*	26.8*	31.8	57.3*
At least 1	**68.6**	92.7*	73.2*	68.2	42.7*
1	**15.1**	6.6*	15.8	14.7	14.3
2–3	**18.9**	16.8	20.8*	17.2	12.1*
4 or more	**34.6**	69.2*	36.6	36.3	16.3*
Had at least 1 overnight hospital stay	**5.6***	17.7*	4.5*	10.7	4.1*
Received care at home	**1.3***	14.1*	0.6*	2.5	†
Saw a general dentist	**35.5***	30.0*	42.5*	22.1	16.0*
Saw an orthodontist	**1.3**	†	1.4	1.3	0.9
Receipt of appropriate care (past 12 months)					
Had at least 1 dental check-up[6]	**65.2***	46.5	73.7*	51.3	42.0*
Had more than 15 office-based or hospital outpatient visits	**8.2**	24.8*	8.2	9.6	2.9*
Number of emergency room visits					
None	**87.5***	66.4*	90.3*	76.7	88.1*
At least 1	**12.5***	33.6*	9.7*	23.3	11.9*
1	**9.4***	19.2*	7.9*	15.7	9.0*
2–3	**2.6***	12.8*	1.5*	6.1	2.6*
4 or more	**0.5***	1.6	0.2*	1.5	†

Notes: MEPS is 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 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.

EXHIBIT 45. (continued)

† 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 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 or private coverage. Components do not sum to 100 percent because not all coverage sources are shown.

[6] Prior to the December 2016 databook, the characteristic was previously "Had cleaning, prophylaxis, or polishing," which was restricted to those who had a dental event in that year. Due to the change in the characteristic, these estimates should not be compared to previously published versions of the exhibit prior to the December 2016 databook.

Source: MACPAC, 2018, analysis of MEPS data.

EXHIBIT 46. Measures of Access to Care among Non-Institutionalized Individuals Age 19–64 by Primary Source of Health Coverage, 2017 **E 46**

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%**	**4.1%**	**69.3%**	**11.0%**	**12.6%**
Connection to the health care system (past 12 months)					
Has a usual source of care[6]	**83.6**	94.4*	88.5*	84.6	50.3*
Had the same usual source of medical care 12 months ago	**75.4**	86.9*	79.9*	75.3	45.6*
Had trouble finding a doctor or was told that coverage or new patients were not accepted[7]	**6.7***	9.3	5.5*	11.0	8.9
Timeliness of care (past 12 months)					
Delayed medical care due to any access barrier indicated below	**20.0***	32.9*	16.0*	24.9	34.1*
Delayed because of costs	**9.7**	15.7*	6.6*	8.6	26.8*
Delayed for provider-related reasons[8]	**12.0***	19.1	11.1*	16.6	11.0*
Delayed due to lack of transportation	**1.9***	9.1*	0.7*	5.8	2.8*
Unmet need for selected types of care due to cost					
Medical care	**6.7**	13.2*	3.5*	7.5	22.3*
Mental health care or counseling	**2.5**	5.7*	1.6*	3.4	5.8*
Dental care	**11.8***	25.7*	7.0*	18.8	27.5*
Prescription drugs	**6.6***	17.9*	3.7*	9.6	16.9*
Eyeglasses	**6.5***	18.2*	3.7*	10.4	14.5*
Specialist care	**4.8**	11.4*	3.0*	6.0	12.3*
Follow-up care	**3.9**	8.2*	2.2*	4.3	12.1*

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-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

EXHIBIT 46. (continued)

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.

[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 and 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] Individual reported one of these barriers in the past 12 months: trouble finding a doctor or provider, doctor's office or clinic did not accept individual's insurance coverage, or office or clinic did not accept the individual as a new patient.

[8] 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, 2018, 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 only include 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 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).

CMS is in the process of implementing a new version of the MSIS, referred to as the Transformed MSIS (T-MSIS) that 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 do not have complete information for fiscal year (FY) 2014 available in the MSIS. Although all states have begun submitting T-MSIS data to CMS, these data are still being verified for completeness and accuracy and are not available for publication at this time.

Because T-MSIS data are not available, MACPAC was 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.[3] 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:[4]

- 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.[5] (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 only receive 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.[6] 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.[7]

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.[8]

However, the NHIS is known to produce higher estimates of service use than the MEPS.[9] 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 does have 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."[10] This definition encompasses children with disabilities and also children with chronic conditions (e.g., asthma, juvenile diabetes, 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.[11]

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.[12] 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.[13] 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.[14]
- The child needs or uses medications prescribed by a doctor (other than vitamins).[15]
- The child needs or uses specialized therapies such as physical, occupational, or speech therapy.[16]
- The child has above-routine need or use of medical, mental health, home care, or education services.[17]
- The child needs or receives treatment or counseling for an emotional, behavioral, or developmental problem.[18]

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.[19] 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.[20] 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.[21]
- 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.[22]
- 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).[23]

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 Commission on Medicaid and the Uninsured, 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.[24] 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.
- Beginning with the 2015 edition of the MACStats data book, we excluded incentive and uncompensated care pool payments made under Section 1115 waiver expenditure authority from CMS-64 totals used to adjust MSIS spending.[25] 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 fee for service 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 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) **E 47a**

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) **E 47b**

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 **E 48**

Service category	MSIS service types[1]	CMS-64 service types
Hospital	• Inpatient hospital • Outpatient hospital	• 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 aliens[2] • Emergency hospital services • Critical access hospitals
Non-hospital acute care	• 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	• 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	• Drugs (gross spending)	• Drugs (gross spending) • Drug rebates

EXHIBIT 48. (continued)

Service category	MSIS service types[1]	CMS-64 service types
Managed care and premium assistance	• HMO (i.e., comprehensive risk-based managed care; includes PACE) • PHP • PCCM	• 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	• Home health • Personal care • HCBS waiver	• Home health • Personal care • Personal care—1915(j) • HCBS waiver • HCBS—1915(i) • HCBS—1915(j) • HCBS–1915(k)
LTSS institutional	• Nursing facility • ICF/ID • Inpatient psychiatric for individuals under age 21 • Mental health facility for individuals age 65 and older	• 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]		• 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-Beneficiares-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.[26]
- 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 MACPAC's June reports to Congress, which are accessible through 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] 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.

[4] See, for example, 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.

[5] 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.

[6] Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, 2018, About the National Health Interview Survey, http://www.cdc.gov/nchs/nhis/about_nhis.htm.

[7] Agency for Health Care Research and Quality (AHRQ), 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.

[8] 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.

[9] 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.

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

[11] 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 Social Security Act).

[12] 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).

[13] 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.

[14] 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.

[15] 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.

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

[17] 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.

[18] 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.

[19] 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.

[20] For a discussion of these data sources, see 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.

[21] 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.

[22] 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.

[23] 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.

[24] See 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 CMS, 2016, Medicaid disproportionate share hospital (DSH) payments, https://www.medicaid.gov/medicaid/financing-and-reimbursement/dsh/index.html.

[25] For more on these payments, see MACPAC, 2015, Using Medicaid supplemental payments to drive delivery system reform, in *Report to Congress on Medicaid and CHIP*, June 2015, Washington, DC: MACPAC, https://www.macpac.gov/wp-content/uploads/2015/06/Using-Medicaid-Supplemental-Payments-to-Drive-Delivery-System-Reform.pdf.

[26] We generally exclude children enrolled in Medicaid-expansion CHIP from Medicaid analyses because their funding stream (CHIP, under Title XXI of the Social Security Act) differs from that of other Medicaid enrollees (Medicaid, under Title XIX of the Social Security 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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MACPAC
Advising Congress on Medicaid and CHIP Policy

1800 M Street NW
Suite 650 South
Washington, DC 20036

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