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Report to Congressional Requesters

June 2014

MEDICAID

Assessment of Variation among States in Per-Enrollee Spending

GAO-14-456

GAO Highlights

Highlights of GAO-14-456, a report to congressional requesters

June 2014

MEDICAID

Assessment of Variation among States in Per-Enrollee Spending

Why GAO Did This Study

Federal Medicaid expenditures totaled about $267 billion in fiscal year 2013. With the expansion of Medicaid under the Patient Protection and Affordable Care Act and rising health care costs, the Congressional Budget Office projects that such expenditures will grow to about $576 billion by fiscal year 2024. GAO was asked to examine variation among states in Medicaid spending and factors that influence such spending, and state approaches to setting rates per enrollee for Medicaid managed care plans.

This report examines (1) Medicaid spending per enrollee by state; (2) selected factors that influence Medicaid spending per enrollee, by state; and (3) how states account for factors that influence expected per-enrollee spending when setting rates for Medicaid managed care plans. GAO analyzed Medicaid enrollment and combined federal and state expenditure data provided by CMS for fiscal year 2008, and examined illustrative examples of factors that have been reported to influence health care spending, such as age, disability status, and scope of benefits received. GAO used 2008 data because they allowed a comparable view of spending per enrollee and factors that influence spending per enrollee—as 2008 was the most recent year for which certain data on factors influencing spending were readily available. GAO also interviewed officials in three states and five consulting firms with experience setting Medicaid managed care rates.

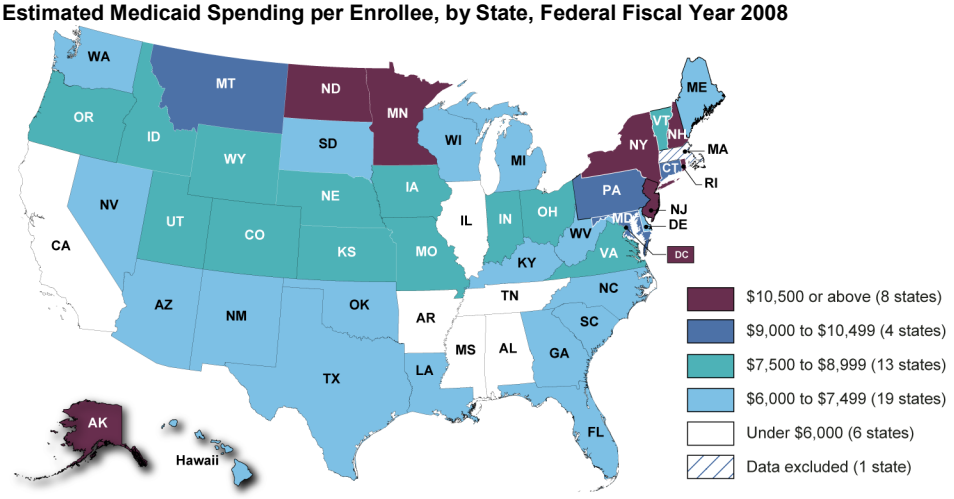
The Department of Health and Human Services provided technical comments on a draft of this report, which GAO incorporated as appropriate.

View GAO-14-456. For more information, contact Carolyn L. Yocom, Director, Health Care, (202) 512-7114, yocomc@gao.gov.

What GAO Found

Estimates of Medicaid spending developed from Centers for Medicare & Medicaid Services (CMS) data sources suggest wide variation among states in Medicaid spending per enrollee, overall and for each of four main eligibility groups—children, adults, disabled, and aged.

Estimated Medicaid Spending per Enrollee, by State, Federal Fiscal Year 2008



Sources: GAO analysis of Centers for Medicare & Medicaid Services data; Map Resources (map). | GAO-14-456

Notes: Spending per enrollee includes federal and state spending on regular Medicaid payments for covered services, as well as supplemental payments, such as payments to hospitals for low-income patients, but does not include administrative costs. Estimates also do not reflect states' subsequent changes to the spending originally reported for this year. Enrollment is measured in terms of full-year-equivalent enrollees, regardless of scope of benefits. Massachusetts was excluded because of errors in fiscal year 2008 CMS data for this state.

Although estimates of spending per enrollee are based on the best data readily available from CMS, these data do not permit full assessment of state spending variation. Limitations include the difficulty of determining spending on services enrollees received during a particular time period and lack of complete, accurate information about supplemental payments. GAO has previously recommended that CMS take steps to improve states' reporting of supplemental payments and that Congress consider requiring CMS to take such steps.

Certain factors that influence overall per-enrollee Medicaid spending, such as distribution of enrollees among eligibility groups, enrollee health service needs, and scope of benefits offered, varied widely by state. For example, in calendar year 2008, the percentage of enrollees in higher-need eligibility groups—individuals who are disabled or aged—ranged from about 15 percent to 38 percent across states.

States consider a range of demographic and health factors to predict expected spending per enrollee when setting Medicaid managed care rates. According to consulting firm officials, states often consider detailed information on enrollee heath status, particularly for aged and disabled enrollees.

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Abbreviations

CDC	Centers for Disease Control and Prevention
CMS	Centers for Medicare & Medicaid Services
DSH	Disproportionate Share Hospital
FFS	fee-for-service
FMAP	Federal Medical Assistance Percentage
HHS	Department of Health and Human Services
MACPAC	Medicaid and CHIP Payment and Access Commission
MAX	Medicaid Analytic eXtract
MSIS	Medicaid Statistical Information System
OACT	Office of the Actuary
PCI	per capita income
PPACA	Patient Protection and Affordable Care Act
T-MSIS	Transformed-MSIS

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June 16, 2014

The Honorable Orrin G. Hatch
Ranking Member
Committee on Finance
United States Senate

The Honorable Fred Upton
Chairman
Committee on Energy and Commerce
House of Representatives

In fiscal year 2013, Medicaid, the federal-state health coverage program for certain low-income individuals, had over 70 million enrollees and expenditures totaling about $460 billion.[1] Of these expenditures, the federal government financed about $267 billion, with the rest financed by the states. With the expansion of Medicaid under the Patient Protection and Affordable Care Act (PPACA) and rising health care costs, increased Medicaid enrollment and spending are expected over the next 10 years—with federal Medicaid expenditures projected to grow to about $576 billion by 2024.[2] Prior studies have shown considerable differences among states both in total Medicaid spending and in average spending per enrollee. Much of the state variation in total Medicaid spending can be attributed to differences in enrollment, but the reasons for variation in average spending per enrollee are not as well understood.

States and the federal government are interested in better understanding and controlling Medicaid program spending. At the state level, this interest is reflected in payment reform proposals and strategies such as

[1]States administer their individual Medicaid programs subject to approval and oversight by the Centers for Medicare & Medicaid Services (CMS), a federal agency within the Department of Health and Human Services (HHS). Medicaid serves certain categories of low-income individuals, such as children, pregnant women, parents, persons with disabilities, and persons aged 65 and older.

[2]See Congressional Budget Office, *Updated Budget Projections: 2014 to 2024* (Washington, D.C.: April 2014). Under PPACA, states are permitted to expand eligibility for Medicaid to nonpregnant, nonelderly adults whose income does not exceed 133 percent of the federal poverty level and will receive enhanced federal funding for this newly eligible population. As of April 1, 2014, 26 states and the District of Columbia had decided to implement this expansion.

the use of managed care service delivery systems, in which states seek to control costs by contracting with health plans to cover services provided to Medicaid enrollees for a fixed, or capitated, monthly rate per enrollee.[3] At the federal level, Medicaid has been the focus of proposals to reform the structure of Medicaid financing and change the methods used to allocate funds across states. Some of these proposals would limit the amount of federal funding states receive, while other proposals aim to control spending by reducing the variation in average state spending per enrollee.[4]

As we have emphasized in prior work, to help ensure that Medicaid funds are allocated equitably, any new approach to program financing must take into account that the costs of providing Medicaid services can differ across states, due to a variety of factors.[5] These factors include the size of the Medicaid population and certain factors that influence states' costs of providing Medicaid services per enrollee, such as differences in the health service needs of enrollees and the cost of delivering health care. Such considerations have some parallels to how states set managed care capitation rates to take into account that the costs of providing Medicaid services can differ among plans depending on the health service needs and other characteristics of individuals enrolled in each plan.

Given concerns regarding Medicaid spending and the interest in program financing reform, you asked us to examine the variation among states in Medicaid spending and factors that influence state spending on Medicaid services for enrollees. In addition, because states have experience examining the factors that affect per-enrollee Medicaid spending in order

[3]See National Conference of State Legislators, *Payment Reform* (Denver, Colo.: 2013).

[4]For example, a fiscal year 2012 appropriations bill passed by the House would have made Medicaid a block grant program, and other recently proposed legislation would place per capita caps on federal Medicaid funding. Under block grant proposals, the federal government generally provides states fixed grant amounts indexed to grow at a specified rate over time. In general, such block grants would not otherwise increase to reflect changes in states' Medicaid costs and enrollment. Under per capita cap proposals, the federal government generally provides states with a specified amount of funding per enrollee, but enrollment and overall spending are not necessarily limited.

[5]For example, we previously reported that the formula used under the current financing structure is an incomplete measure to equitably allocate federal funding among states and that available data sources could be used to more equitably allocate funding. See GAO, *Medicaid: Alternative Measures Could Be Used to Allocate Funding More Equitably*, GAO-13-434 (Washington, D.C.: May 10, 2013).

to set capitation rates for health plans in their managed care programs, you asked us to examine states' approaches to setting these rates. In this report, we (1) examine what Centers for Medicare & Medicaid Services (CMS) data show about the variation among states in Medicaid spending per enrollee; (2) describe the variation among states in factors that influence Medicaid spending per enrollee; and (3) describe how states set capitation rates for Medicaid managed care plans to account for factors that influence plans' expected spending per enrollee.

To examine what CMS data show about the variation among states in Medicaid spending per enrollee, we developed estimates for federal fiscal year 2008 using Medicaid enrollment data and combined federal and state expenditure data provided by the CMS Office of the Actuary (OACT).[6] We chose fiscal year 2008 so that our estimates of Medicaid spending per enrollee were for the same year as the most readily available data on certain factors that influence this spending. We obtained from OACT (1) Medicaid enrollment data showing the number of full-year-equivalent enrollees, by state and eligibility group, which OACT calculated from enrollment data in the Medicaid Statistical Information System (MSIS),[7] and (2) Medicaid expenditure estimates broken out by state, eligibility group, and service type, which OACT estimated using enrollment and expenditure data from MSIS and expenditure data from the CMS-64 data system. Our estimates of per-enrollee spending based on these data include supplemental payments to providers that are not linked to individual enrollees, including Disproportionate Share Hospital (DSH) payments, but do not include administrative costs.[8] In our estimates of per-enrollee spending, we distributed DSH payments among eligibility groups based on each group's share of state spending for services provided in the types of facilities eligible to receive DSH payments. We also explored an alternative method of distributing DSH payments among eligibility groups. (See appendix I for more information

[6]In this report, we use "fiscal year" to refer to the federal fiscal year, and references to Medicaid spending refer to combined federal and state expenditures.

[7]Both enrollment and expenditure data include all enrollees, regardless of the scope of benefits offered.

[8]Federal Medicaid law requires states to make DSH payments to qualifying hospitals that serve large numbers of Medicaid and uninsured low-income patients. Data in CMS's *2010 Actuarial Report on the Financial Outlook for Medicaid* indicate that, nationally, administrative costs represented about 5 percent of Medicaid outlays in fiscal year 2009.

about the methodology used by OACT to generate its estimates and our use of the OACT estimates to develop estimates of spending per enrollee.) To assess the reliability of the data, we reviewed documentation for these data sources, interviewed CMS officials knowledgeable about the data, and compared our estimates to those from other data sources. On the basis of this assessment, we excluded states with significant errors or omissions in fiscal year 2008 data from certain analyses.[9] We determined that for the rest of the states, the data were sufficiently reliable for our purposes.

To describe the variation among states in factors that influence Medicaid spending per enrollee, we analyzed differences among states on selected indicators of enrollee health service needs and the geographic costs of delivering health care services. We focused on indicators that have been reported to influence health care spending and were readily available from previously published sources of Medicaid data and other federal data, such as U.S. Census Bureau or Centers for Disease Control and Prevention (CDC) data. For indicators drawn from Medicaid data, we relied to the extent possible on the *Medicaid Analytic eXtract (MAX) 2008 Chartbook*, the most recent year available.[10] For certain Medicaid indicators that were not published in the MAX 2008 Chartbook, we obtained data directly from the MSIS 2008 Annual Person Summary File and the MSIS 2008 State Summary DataMart.[11] We focused our review on 2008 fiscal or calendar year data for greater comparability with the readily available MAX data. We did not attempt to identify causal links

[9]We excluded Massachusetts from all analyses of state Medicaid spending because, according to CMS officials, the state's fiscal year 2008 enrollment data included information on many individuals who were not eligible for Medicaid and were instead covered with state funds. We excluded Maine from analyses of state Medicaid spending at the eligibility-group level (children, adults, disabled, and aged), because the state was unable to accurately report spending by service category, which OACT uses to estimate state spending by eligibility group. See appendix I for more information on OACT's methodology.

[10]See CMS, *Medicaid Analytic eXtract 2008 Chartbook*, research conducted by Mathematica Policy Research (Washington, D.C.: 2012). MSIS data are available in several formats. MAX files are considered to have the highest-quality MSIS data, but also have delayed availability.

[11]The MSIS Annual Person Summary files include enrollment data and annual expenditure data for each person by type of service. The MSIS State Summary DataMart files include aggregated summary information on Medicaid enrollees, such as the number of enrollees in particular age or eligibility groups.

between state Medicaid spending and factors that influence spending, nor did we analyze all factors that may influence such spending. To assess the reliability of the data, we reviewed documentation for these data sources and interviewed CMS officials knowledgeable about the data. On the basis of this assessment, we excluded four states—Arizona, New Mexico, Wisconsin, and Maine—from analyses related to long-term care service use.[12] We excluded one state—Massachusetts—from all analyses based on the MSIS 2008 Annual Person Summary File or MSIS 2008 State Summary DataMart.[13] Otherwise, we determined that the data were sufficiently reliable for our purposes.

To describe how states set Medicaid managed care capitation rates to account for factors that influence plans' expected spending per enrollee, we reviewed documents from consulting firms, states, and CMS, as well as information from other sources, regarding how states establish Medicaid managed care capitation rates. We also interviewed officials at five consulting firms that have worked with at least 40 states to establish state Medicaid managed care capitation rates.[14] In addition, we interviewed officials from three states regarding their experiences establishing such capitation rates,[15] and interviewed CMS officials about the managed care data that CMS receives from states. Our review focused on how states account for factors influencing Medicaid spending, and we did not examine other aspects of the rate setting process, such as documenting the actuarial soundness of rates.

[12]In Arizona, New Mexico, and Wisconsin, more than 2 percent of all enrollees—and therefore likely a higher percentage of aged enrollees—received long-term care services through managed care plans and therefore were not represented in the fee-for-service data used to identify enrollees who had received long-term care services during the year. Maine was unable to accurately report spending by service category, such as long-term care services.

[13]According to CMS officials, fiscal year 2008 MSIS data for Massachusetts mistakenly included information on many individuals who were not eligible for Medicaid and were instead covered with state funds; however, the problem was corrected in MAX.

[14]We interviewed representatives from the following consulting firms: Deloitte Consulting LLP, Mercer Government Human Services Consulting, Milliman, Optumas, and PricewaterhouseCoopers LLP. We included the District of Columbia as a state.

[15]We selected three states—Arizona, Florida, and New York—that have a high proportion of their Medicaid population, including individuals in the aged or disabled eligibility groups, enrolled in managed care plans.

We conducted this performance audit from February 2013 to June 2014 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Each state administers its Medicaid program in accordance with its own Medicaid plan—which must be reviewed and approved by CMS—and determines, among other things, the groups of individuals covered, services provided, and the service delivery system, such as fee-for-service (FFS) or managed care. Within broad federal requirements, states have flexibility in deciding which individuals to cover and the range of medical services to provide in their Medicaid programs. For example, states must cover certain groups of individuals, such as children and pregnant women, but may elect to cover these groups above the required minimum income levels. States' Medicaid programs generally must cover a set of mandatory services, including those provided by primary and specialty care physicians, as well as services provided in hospitals, clinics, and other settings. States may also elect to cover additional optional benefits and services, such as home- and community-based services or rehabilitative services.[16] Subject to federal requirements, states have discretion in establishing the amount, duration, and scope of the mandatory and optional services covered in their Medicaid programs and may place appropriate limits on services based on certain criteria; thus, states may limit the number of visits or the days of care that are provided. In some cases, not all Medicaid enrollees are eligible for all covered services, such as those who receive only family planning benefits

[16]One study estimated that, nationally, optional populations accounted for about 30 percent of Medicaid enrollment in 2007, while optional services—primarily long-term care services—accounted for about 33 percent of Medicaid expenditures. See Kaiser Commission on Medicaid and the Uninsured, *January 2012 Update: Medicaid Enrollment and Expenditures by Federal Core Requirements and State Options* (Washington, D.C.: Kaiser Family Foundation, 2012).

through demonstration waivers, or those who only qualify to receive assistance with Medicare premiums and cost sharing.[17]

States and the federal government share in the financing of the Medicaid program, with the federal government matching most state expenditures for Medicaid services on the basis of a statutory formula known as the Federal Medical Assistance Percentage (FMAP).[18] States pay health care providers or managed care plans for covered services provided to Medicaid enrollees, and then submit claims to CMS in order to receive federal matching funds for these payments. In addition to payments made directly to providers or managed care plans for services provided to enrollees, most states receive federal matching funds for other types of Medicaid payments, known as supplemental payments. For example, federal Medicaid law requires states to make DSH payments to qualifying hospitals that serve large numbers of Medicaid and uninsured low-income patients. States are required to report to CMS separate data on the two types of DSH payments: payments to inpatient hospitals and payments to inpatient mental health facilities.[19] States also make other supplemental

[17]Under Section 1115 of the Social Security Act, states may apply for and receive CMS approval for demonstration waivers that allow states to deviate from their traditional Medicaid program. Specifically, states may receive a waiver for certain Medicaid requirements and approval to claim federal matching funds for items not otherwise covered by Medicaid. For example, states may apply for a Section 1115 demonstration waiver in order to provide only family planning benefits for individuals—typically women of childbearing age—who are not otherwise eligible for Medicaid. In addition, most Medicaid enrollees who are aged 65 and older or disabled are also eligible for Medicare, the federal health insurance program that covers seniors aged 65 and older, disabled persons, and individuals with end-stage renal disease. While many of these enrollees, referred to as "dual-eligibles," qualify for the full range of Medicaid benefits provided in their state, others qualify only to receive assistance for Medicare premiums and cost-sharing.

[18]The FMAP is calculated using a statutory formula based on the state's per capita income (PCI) in relation to the national PCI: FMAP = 1.00 – 0.45 (State PCI / U.S. PCI) and may range from 50 to 83 percent. The federal government pays a larger portion of Medicaid expenditures in states with low PCI relative to the national average, and a smaller portion for states with higher PCIs.

[19]Under federal law, states may only claim federal matching funds for DSH payments made to qualifying hospitals up to the states' DSH allotments, which are based on a statutory formula and vary across the states. Individual hospitals may only receive DSH payments up to their hospital-specific limit. States also make DSH payments out of their allotment to institutions for mental disease and other mental health facilities that provide inpatient services. However, federal law limits the total amount of federal matching funds that states may claim for DSH payments made to these mental health facilities. 42 U.S.C. § 1396r-4.

payments, which we refer to as non-DSH supplemental payments, to hospitals and other providers that, for example, serve high-cost Medicaid enrollees.[20] Unlike regular Medicaid payments, supplemental payments are not necessarily made on the basis of claims for specific services to individual enrollees.

CMS maintains two readily available sources of data on state Medicaid spending: the CMS-64 data set and MSIS.[21] MSIS also contains state enrollment data. These two data sources have different roles and structures, and taken together have the potential to provide a robust picture of Medicaid spending.

- The CMS-64 data set contains aggregate state data on program-benefit and administrative spending by quarter, such as each state's total quarterly expenditures for inpatient hospital services or prescription drugs. The CMS-64 data set also contains information on spending not linked to specific enrollees, such as DSH and other supplemental payments, but no information on spending for individual enrollees or on the services they received under Medicaid.[22] States submit the CMS-64 quarterly data in order to obtain reimbursement for the federal share of Medicaid expenditures. CMS reviews the CMS-64 submissions, and the data are the most reliable accounting of total Medicaid spending available. However, because the CMS-64

[20]Unlike DSH payments, non-DSH supplemental payments are not required to be made under federal law or regulations. One type of non-DSH supplemental payment, also known as upper payment limit payments, can be made to providers above the standard Medicaid payment rates but within the upper payment limit, which is the estimated amount that Medicare pays for comparable services. In addition, under upper payment limit arrangements, payments are subject to aggregate limits by provider type, but there are not firm dollar limits on individual providers or at the state level. See 42 C.F.R. §§ 447.272, 447.321. Some states also receive CMS approval to make supplemental payments to hospitals and other providers under Section 1115 demonstration waivers. These supplemental payments are governed by the terms and conditions of the individual demonstration waiver and may be subject to firm dollar limits and other requirements.

[21]States also maintain data that could be used to analyze per-enrollee spending, such as encounter data used by some states to develop managed care capitation rates. However, states' data are not suitable for purposes of examining spending across states as such data may not be fully comparable across states.

[22]State Medicaid agencies are required to submit the quarterly expenditure data by means of the Quarterly Medicaid Statement of Expenditures for the Medical Assistance Program, also known as the form CMS-64, within 30 days of the end of each quarter. 42 C.F.R. § 430.30. The data are stored in the Medicaid Budget and Expenditure System.

does not include enrollee-specific data it cannot be used on its own to assess per-enrollee spending. The CMS-64 data system is programmed to produce two reports that summarize states' total spending for a given fiscal year; the reports differ primarily in their treatment of states' subsequent adjustments to their reported spending.

- MSIS is a national enrollment and claims data set and the federal source of Medicaid spending data that can be linked to specific enrollees on the basis of their medical claims for care.[23] Unlike the CMS-64 data set, however, MSIS only contains information about Medicaid expenditures that are tied to specific enrollees, and thus does not include some provider payments such as DSH or non-DSH supplemental payments. Although CMS reviews these data for reliability and uses them for policy analysis, program utilization, and forecasting spending, it does not use these data to determine the federal share of states' Medicaid expenditures, nor do states use the data to manage the daily operations of their Medicaid programs. CMS is in the process of implementing a project to improve and expand MSIS, but the time frames for completion are uncertain.[24]

Estimates of per-enrollee Medicaid spending can be obtained by combining the more reliable aggregated spending data from the CMS-64 with detailed enrollee-level information available from MSIS. For example, estimates of overall Medicaid spending per enrollee for a given fiscal year can be obtained by dividing total Medicaid expenditures, as shown in the

[23]States are required to have in operation a mechanized claims-processing and information-retrieval system based on certain federal requirements. *See* 42 U.S.C. § 1396b(r). For all claims filed on or after January 1, 1999, states have been required to electronically transmit claims data, including detailed individual enrollee encounter data, in a format consistent with MSIS. *See* 42 U.S.C. § 1396b(r)(1)(F).

[24]This project will result in a new data system known as Transformed–MSIS, or T-MSIS. The goals of T-MSIS include improving the timeliness, quality, and level of detail of the MSIS data and providing a link to the CMS-64 data in order to support improved program and financial management, evaluations, fraud identification, and program efficiency. T-MSIS data are not intended to replace the CMS-64 data. T-MSIS is scheduled to be implemented July 1, 2014. In September, 2013, the HHS Office of Inspector General reported that CMS had made some progress in implementing T-MSIS with 12 volunteer states, but raised concerns about the completeness and accuracy of T-MSIS data upon national implementation. See Department of Health and Human Services Office of Inspector General, *Early Outcomes Show Limited Progress for the Transformed Medicaid Statistical Information System*, OEI-05-12-00610 (Washington, D.C.: September 2013).

annual state summary reports available from the CMS-64 data system, by total state Medicaid enrollment as derived from MSIS. In addition, through a more complex process, estimates of per-enrollee spending can be developed for particular eligibility groups. For example, the CMS-64 expenditures can be distributed among the four major Medicaid eligibility groups—children, adults, disabled, and aged—based on MSIS expenditure patterns by eligibility group.[25]

CMS Data Suggest Wide Variation among States in Medicaid Spending per Enrollee, but Data Limitations Hinder a More Complete Assessment

Estimates of Medicaid spending per enrollee developed from CMS data sources suggest wide variation among states. However, due to certain data limitations, these estimates do not permit full assessment of differences in per-enrollee spending among states.

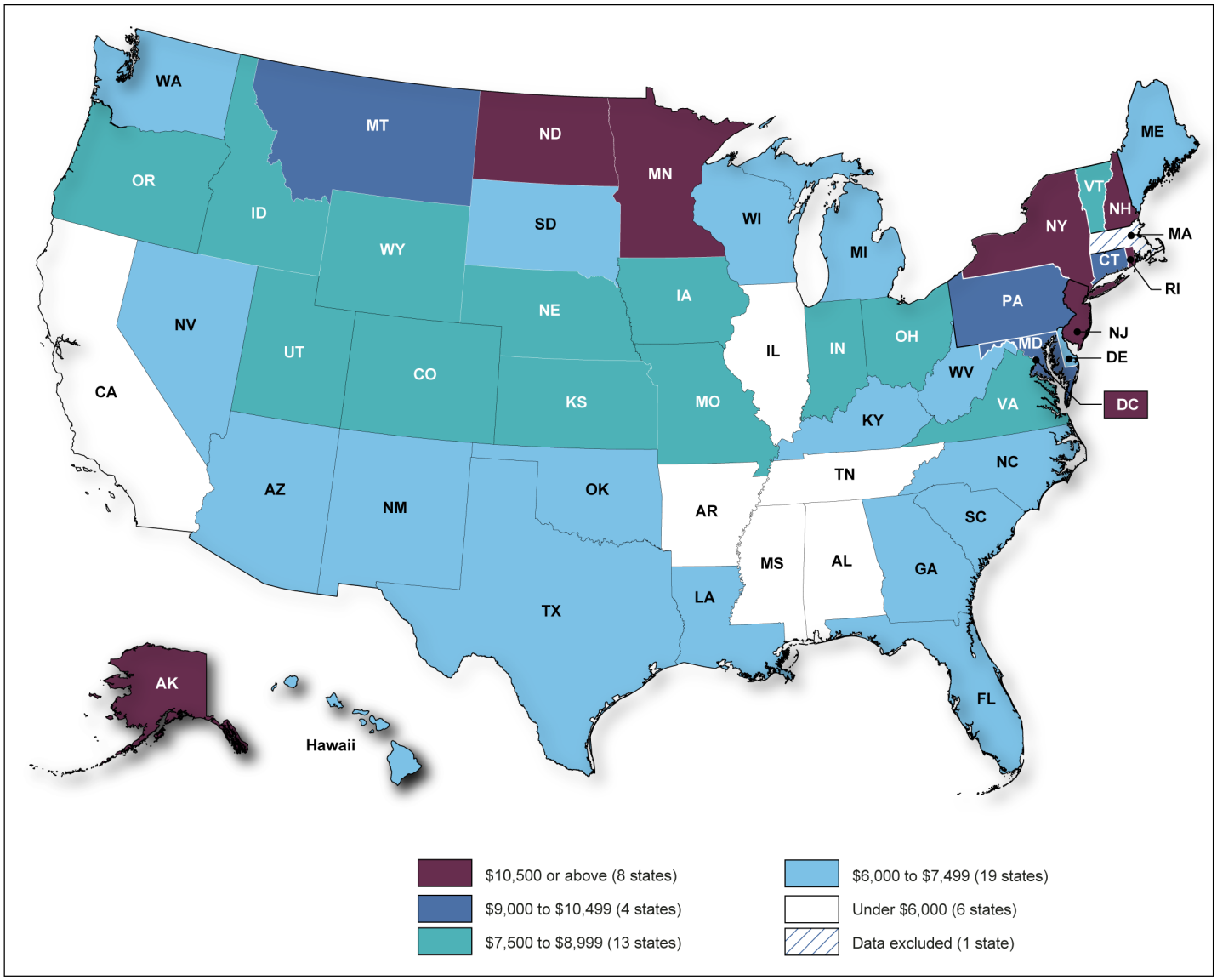
CMS Data Suggest Wide Variation in Spending per Enrollee

CMS data suggest wide variation among states in Medicaid spending per enrollee, both overall and for each of the four major Medicaid eligibility groups—children, adults, disabled, and aged. Estimates based on expenditure data from CMS-64 annual summary reports and enrollment and expenditure data from MSIS indicate that overall spending per enrollee ranged from about $3,800 in California to about $11,700 in Rhode Island in fiscal year 2008.[26] (See fig. 1 for a general comparison of per-enrollee spending levels across states, and table 1 in appendix II for specific state-by-state estimates.)

[25]For examples, see CMS, *2012 Actuarial Report on Financial Outlook for Medicaid* (Baltimore, Md.: 2012), and Medicaid and CHIP Payment and Access Commission (MACPAC), *March 2013 Report to the Congress on Medicaid and CHIP* (Washington, D.C.: March 15, 2013).

[26]These spending estimates include federal and state spending on regular Medicaid payments made to providers and managed care plans for covered services, as well as DSH and non-DSH supplemental payments, but do not include administrative costs. Enrollment is measured in terms of full-year-equivalent enrollees. Both enrollment and expenditure data include all enrollees, regardless of the scope of benefits offered.

Figure 1: Estimated Medicaid Spending per Enrollee, by State, Fiscal Year 2008

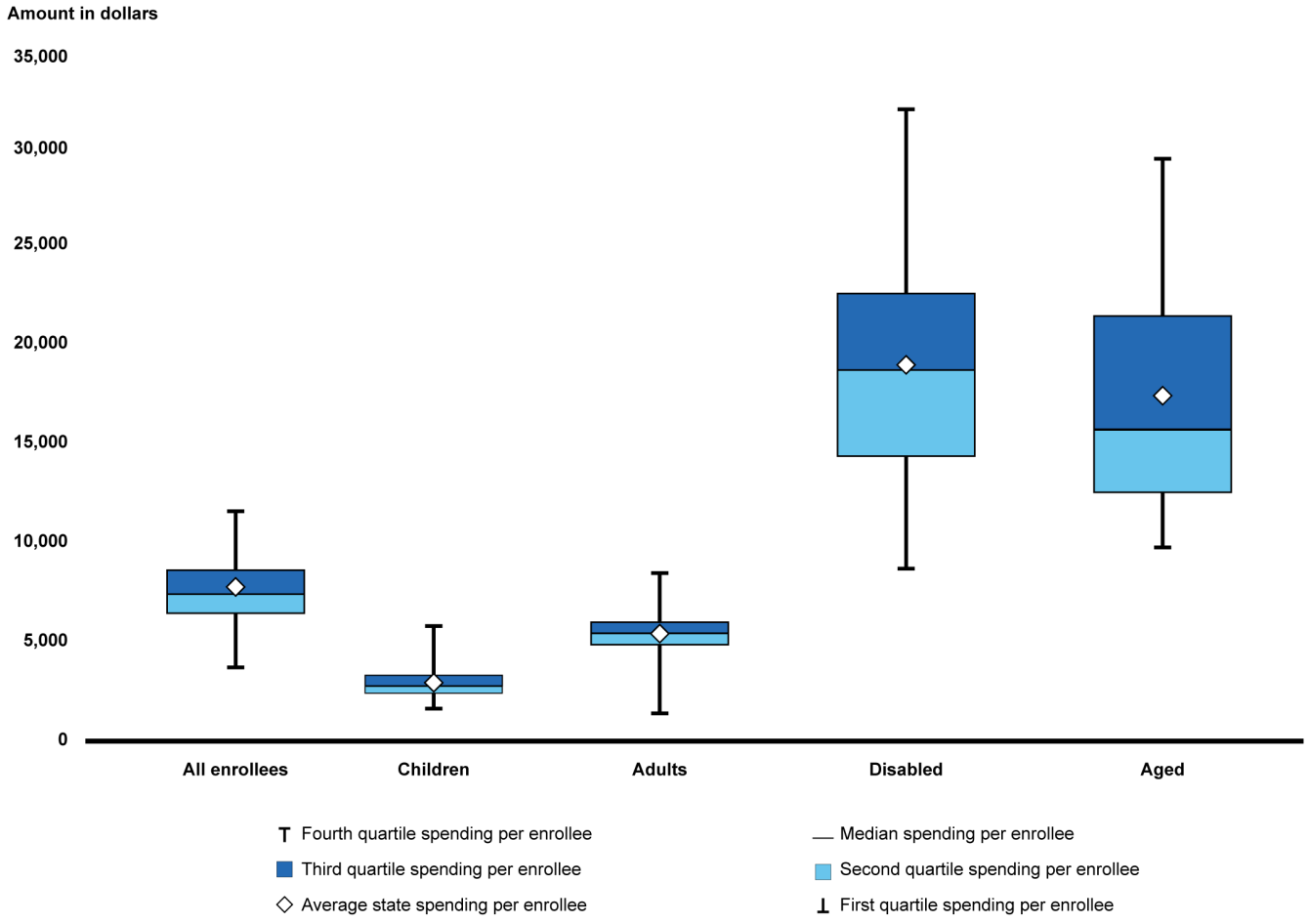


Sources: GAO analysis of Centers for Medicare & Medicaid Services data; Map Resources (map). | GAO-14-456

Notes: Estimates of spending per enrollee include federal and state spending on regular Medicaid payments to providers and managed care plans for covered services provided to enrollees, as well as Disproportionate Share Hospital (DSH) and non-DSH supplemental payments, but do not include administrative costs. Estimates also do not reflect states' subsequent changes, including adjustments or collections, to the spending originally reported for this year. Enrollment is measured in terms of full-year-equivalent enrollees. Both enrollment and expenditure data include all enrollees, regardless of the scope of benefits offered. For purposes of this analysis, we include the District of Columbia as a state. We excluded Massachusetts because of errors in fiscal year 2008 CMS data for this state.

These data also suggest wide variation among states in spending per enrollee by eligibility group. (See fig. 2.) For example, estimated per-enrollee spending for disabled enrollees ranged from about $9,000 in Alabama to over $32,000 in New York; and per-enrollee spending for aged enrollees ranged from about $10,000 to about $30,000 for these two states. (See table 1 in appendix II for state-by-state estimates.) The variation in estimated per-enrollee spending was smaller for the adult and child eligibility groups than for the disabled and aged groups, but was still substantial. For example, in fiscal year 2008, the estimates indicate that Vermont spent more than three times as much per child and per adult as California (about $5,900 versus about $1,700 for children, and about $5,700 versus about $1,500 for adults).

Figure 2: Estimated State Medicaid Spending per Enrollee, by Eligibility Group, Fiscal Year 2008



Source: GAO analysis of Centers for Medicare & Medicaid Services data. | GAO-14-456

Notes: Spending per enrollee includes federal and state spending on regular Medicaid payments to providers and managed care plans for covered services provided to enrollees as well as Disproportionate Share Hospital (DSH) and non-DSH supplemental payments, but does not include administrative costs. Estimates also do not reflect states' subsequent changes, including adjustments or collections, to the spending originally reported for this year. Enrollment is measured in terms of full-year-equivalent enrollees. Both enrollment and expenditure data include all enrollees, regardless of the scope of benefits offered. We excluded Massachusetts from all calculations and Maine from calculations at the eligibility group level because of errors or omissions in fiscal year 2008 data for these states. Average state spending per enrollee represents the sum of each state's spending per enrollee divided by the number of states. For purposes of this analysis, we include the District of Columbia as a state. Each box in the figure denotes the dollar range for states in the second and third quartiles in spending per enrollee. The horizontal line between the boxes denotes the median, the diamond denotes the average, and the vertical lines extending above and below each box denote the highest and lowest quartile state spending per enrollee.

Data Limitations Hinder Assessment of State Variation in Spending per Enrollee

Although these estimates of spending per enrollee are based on the best data readily available from CMS Medicaid data sets—expenditure data from annual summary reports from the CMS-64 data set and expenditure and enrollment data from MSIS—they do not permit a full assessment of variation in per-enrollee spending among states, due to certain limitations of the CMS-64 data. These limitations include (1) the difficulty of determining spending on services received by enrollees during a specific time period, and (2) the lack of complete, accurate information about supplemental payments. These limitations constrain the accuracy of per-enrollee spending estimates based on these data, particularly at the eligibility group level, and thus hinder a complete assessment of how spending varies among states.

Difficulty of Determining Spending on Services Received during a Specific Time Period

The first data limitation is that annual summary reports currently available from the CMS-64 data system do not accurately reflect spending on the services that were provided to enrollees during the year. This is because, in these annual reports, the spending originally reported for the year is not updated to account for adjustments to that spending, or collections, that states report in subsequent years.[27] For example, if a state reports spending $500 million for nursing facility care in a given year, but then adjusts that amount up by $50 million, it is not possible to ascertain from the annual reports that the state's actual spending for this care in this year was $550 million.

While these reports provide accurate records of the amount of expenditures states reported to CMS in a fiscal year to claim their federal matching funds—the programmatic purpose for which they were designed—the treatment of adjustments and collections in these reports limits the accuracy of estimates of per-enrollee spending based on these data. For example, in one of the two summary reports that provide data on states' total spending by type of service, all adjustments reported by a state that year are summed by type—for example, adjustments increasing

[27]Adjustments are made by states to correct overpayments, underpayments, or reporting errors to spending reported in prior quarterly reports. Collections include reimbursement from private or public insurance plans or other third parties that are liable for some portion of enrollees' health care costs, as well as recoveries made through efforts to reduce waste, fraud, and abuse. The annual summary reports "roll up," or aggregate, the dollar amounts states reported in their quarterly reports for the year.

claims—and reported as separate line items.[28] The reported sums may include adjustments applicable to spending for the current year as well as prior years.[29] As a result, neither including nor excluding the adjustments in the total spending shown in the report for a given year will yield an accurate picture of states' spending on the services provided to enrollees that year.[30] Collections received by the states that apply to previous year claims are also reported as a line item in the summary reports for the year in which they were reported rather than the year of the claims to which they apply.[31]

Because the amount of adjustments and collections relative to current year spending is not consistent across states and fluctuates over time in some states, estimates of per-enrollee spending based on these annual summary reports, in combination with MSIS data, are not comparable across states or over time. The large amount of adjustments and collections reported by some states in fiscal year 2008 suggests that the states' actual spending for the services received by enrollees that year could differ significantly from estimates that do not account for these changes. For example, adjustments and collections represented 24 percent of reported spending for California in fiscal year 2008 and 5 to 9 percent of reported spending for five other states.[32] (See table 2 in appendix III for state-by-state data on total spending and adjustments and collections.)

[28]This report is called the CMS-64 Base Financial Management Report. The other annual summary report that provides data on states' total spending by type of service is called the CMS-64 Net Services Financial Management Report.

[29]These sums may also include adjustments to spending for Medicaid expansion programs under the State Children's Health Insurance Program as well as for the traditional Medicaid program.

[30]In the other summary report, the CMS-64 Net Services Financial Management Report, the adjustments are applied to the current year's spending, by type of service, and program. For example, if a state reported negative adjustments totaling $20 million to its spending on inpatient care services during the prior fiscal year, that $20 million would be subtracted from the state's current reported spending for that service, rather than being subtracted from its spending on inpatient care services for the prior year.

[31]As they do for adjustments, states must also submit a separate form to report collections but are not required to indicate the time period in which the original claims were paid.

[32]For California and the other five states (Alaska, Georgia, Indiana, Mississippi, and Utah), most of the difference is due to adjustments rather than collections. According to CMS officials, some states consistently report more adjustments than others.

The effect of the adjustments and collections may be magnified when per-enrollee spending is estimated separately by eligibility group. To the extent that certain eligibility groups account for a disproportionate share of the spending that a state subsequently adjusts, failure to apply those adjustments to the original spending will disproportionately affect estimates of the spending for services provided to that group of enrollees. For example, because aged or disabled enrollees account for a greater share of spending for institutional long-term care, an adjustment to spending for that care will affect estimates of spending for aged or disabled enrollees more than those for children or adults.

While the CMS-64 annual summary reports do not apply adjustments or collections to spending for the relevant time periods, the information needed to apply most of these changes is available in the CMS-64 data system. In fiscal year 2008, adjustments accounted for most of the changes states reported to their spending—particularly in states where adjustments and collections were highest relative to total spending—and states are required to report not only the dollar amount of adjustments, but also the time period to which they apply.[33] (For collections, states are required to report only the dollar amount.) Although this detailed information about adjustments is available in the CMS-64 data system, CMS officials told us that the system has not been programmed to produce a report that updates reported spending to account for subsequent adjustments. To manually extract and compile this information in order to apply adjustments to the correct time period of

[33]When states submit their quarterly CMS-64 expenditure reports, they must also submit an additional form or forms detailing any adjustments to spending reported for prior periods. In each form, the state indicates the amount of adjustment, positive or negative, by type of service, and the federal match that was claimed for that spending.

spending would be a laborious process that could involve compiling information from dozens of reports.[34]

Lack of Complete, Accurate Information about Supplemental Payments

The second data limitation is the lack of complete and accurate information about states' use of supplemental payments, and the consequent uncertainty about whether and how these payments should be included in estimates of Medicaid spending per enrollee, particularly at the eligibility group level. This information gap is partly due to historical differences in the reporting requirements for the two types of supplemental payments: DSH and non-DSH. CMS requires states to report DSH payments as a separate line item in their CMS-64 reports, but the agency did not require states to separately report non-DSH supplemental payments until fiscal year 2010.[35] As we have previously reported, state reporting of non-DSH payments in the CMS-64 was incomplete in 2010,[36] and according to CMS officials, reporting is still incomplete, as some states continue to fold at least some non-DSH

[34]The number of forms states must submit to report adjustments—and which would therefore need to be reviewed to manually apply adjustments to the appropriate time period—partly depends on the time period over which the original spending occurred. According to CMS officials, states report any adjustments to previously reported spending on separate forms by the quarter—or, in the case of spending from fiscal year 2008 or before, by the year—in which the spending was originally reported. For example, if a state needed to correct amounts reported throughout fiscal years 2009 and 2010, it would need to submit at least eight prior period adjustment forms—four for each year. The number of forms required also depends on whether the original spending was for the traditional Medicaid program operated under the Medicaid state plan, for programs operated under waivers, or both, because adjustments to spending for waiver programs must be reported separately for each waiver. CMS officials also told us that states report most adjustments within 2 years, but may report some adjustments, including those resulting from federal audits, 3 or more years after the original spending occurred. In such a case, adjusting a state's reported spending for a given year could involve compiling a dozen or more subsequent quarterly reports.

[35]In addition, while states were required to submit annual audits and reports on DSH payments in 2010, there are not similar reporting requirements for non-DSH supplemental payments. We have previously recommended that CMS take steps to improve states' reporting of supplemental payments and that Congress consider requiring CMS to take such steps. See GAO, *Medicaid: More Transparency of and Accountability for Supplemental Payments Are Needed,* GAO-13-48 (Washington, D.C.: Nov. 26, 2012).

[36]GAO, *Medicaid: States Reported Billions More in Supplemental Payments in Recent Years,* GAO-12-694 (Washington, D.C.: July 20, 2012).

supplemental payments into the spending reported for related services.[37] As a result, it is not possible to exclude non-DSH supplemental payments from the spending reported in the CMS-64 prior to fiscal year 2010, or to fully exclude these payments from the spending reported in the following years. Since some states appear to use non-DSH supplemental payments more than DSH payments, while others appear to do the reverse,[38] excluding one type of supplemental payment from estimates of per-enrollee spending while including another would skew comparisons among states. For this reason, we included DSH payments in our estimates of per-enrollee spending.

Even if it were possible to exclude both types of payments from estimates of per-enrollee spending, it is not clear that it would be appropriate to do so. Some researchers have suggested that supplemental payments should not be included, or should not be included in their entirety, in estimates of spending for Medicaid enrollees because these funds are intended to offset providers' uncompensated care costs not only for Medicaid enrollees but also for uninsured low- income individuals.[39] However, it could also be argued that these payments should be included in estimates of per-enrollee spending because it is possible that states' use of these payments may relate to how much they pay providers directly for the services furnished to enrollees. For example, if hospitals have higher uncompensated care costs in states with lower base payment rates, this would make these facilities eligible for larger DSH payments.

[37]For example, some non-DSH supplemental payments to hospitals may be included with spending for inpatient or outpatient care. According to HHS officials, CMS has held training for states on completing the CMS-64 form and are continuing to work with states to help ensure accurate reporting of non-DSH supplemental payments on the CMS-64. Officials also noted that, in 2013, CMS began requiring states to annually submit data to demonstrate that Medicaid provider payments, including certain types of non-DSH supplemental payments, are below federal limits. CMS anticipates these submissions will assist the agency to identify errors in state reporting.

[38]Data from fiscal year 2013 suggest that many states that reported higher DSH payments reported lower non-DSH supplemental payments and vice versa.

[39]See Debra Lipson, Margaret Colby, Tim Lake, Su Liu, and Sarah Turchin, *Value for the Money Spent? Exploring the Relationship between Medicaid Costs and Quality* (Washington, D.C.: Mathematica Policy Research, 2010), p. 6. Another argument for excluding these funds is that some states have used these payments to inappropriately increase federal Medicaid matching payments. See GAO, *High Risk Series: An Update*, GAO-11-278 (Washington, D.C.: February 2011), p. 163.

Including supplemental payments in estimates of spending per enrollee by eligibility group requires judgment as to the share of payments that should be attributed to each group. For fiscal year 2008, this judgment concerns only DSH payments, as non-DSH supplemental payments were folded into payments for services rather than separately reported. Our analysis found that how DSH payments are distributed among eligibility groups can significantly affect estimates of spending per enrollee by eligibility group, particularly for states with relatively high DSH payments.[40] We examined two possible distribution methods, each of which has advantages and disadvantages.

- One possible method is to distribute DSH payments among eligibility groups based on each group's share of spending for relevant services—for example, to distribute inpatient hospital DSH payments based on states' reported spending for services provided in these facilities (hospital inpatient and outpatient services).[41] This method is intended to assign to each eligibility group a share of DSH payments that reflects that group's relative use of services at the types of facilities that are potentially eligible for these payments. However, because states report spending on hospital inpatient and outpatient services only for enrollees who receive care on an FFS basis, this method may disproportionately assign inpatient DSH dollars to eligibility groups that are less likely to be enrolled in comprehensive managed care programs.[42] If, for example, none of a state's disabled and aged enrollees are in comprehensive managed care, while all of the state's child and adult enrollees are, the only FFS claims in MSIS for hospital inpatient and outpatient care would be for disabled and aged enrollees. Accordingly, under this method, all inpatient DSH

[40]On average, DSH payments represented about 4 percent of states' overall spending in fiscal year 2008, but that percentage varied significantly and, in three states (Louisiana, New Hampshire, and New Jersey), these payments represented more than 15 percent of overall spending. See table 3 in appendix IV and table 4 in appendix V for more detailed information about DSH payments in fiscal year 2008.

[41]This is the general approach that the Medicaid and CHIP Payment and Access Commission (MACPAC) used to distribute DSH payments among eligibility groups in its estimates of spending per enrollee. See Medicaid and CHIP Payment and Access Commission, *Report to the Congress on Medicaid and CHIP* (Washington, D.C.: June 2012), p. 138.

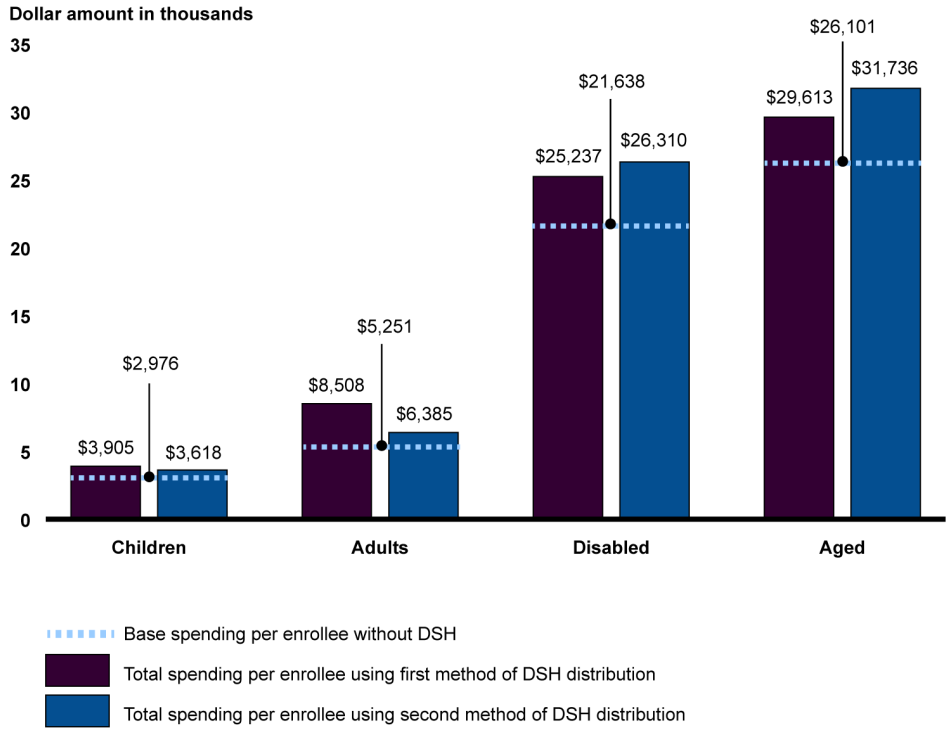
[42]In the CMS-64, spending for enrollees in capitated managed care plans is reported as payments to managed care organizations or prepaid health plans, not as payments for specific types of services.

funds would be assigned to these two eligibility groups, regardless of the amount of hospital inpatient and outpatient services children and adults received that were covered under managed care capitation payments.

- A second possible method is to distribute DSH payments among eligibility groups based on each group's share of total spending, including both FFS claims and capitation payments. This method takes into account spending for enrollees in managed care plans, but assigns DSH dollars to eligibility groups based partly on their spending for services that are not provided in facilities eligible for DSH payments. For example, the share of inpatient hospital DSH payments assigned to the aged eligibility group under this method would be based not only on their spending for inpatient and outpatient hospital services, but also on their spending for institutional long-term care, which constitutes a larger proportion of their overall spending.

For some eligibility groups in some states, the inclusion of DSH payments substantially increases estimates of spending per enrollee for fiscal year 2008. The amount of that increase varies depending on which of the two methods described above is used to distribute DSH payments. In three states, estimates of spending per enrollee for some groups differed by more than $1,000 depending on the distribution method used. For example, in New Hampshire—the state for which the choice of distribution method makes the greatest dollar difference—the difference in Medicaid spending per enrollee for adults in fiscal year 2008 was $2,123—$8,508 using the first method and $6,385 using the second method (see fig. 3, and see table 3 in app. IV for state-by-state estimates).

Figure 3: Estimated Medicaid Spending per Enrollee in New Hampshire Using Two Possible Methods of Distributing Disproportionate Share Hospital (DSH) Payments, Fiscal Year 2008



Source: GAO analysis of Centers for Medicare & Medicaid Services data. | GAO-14-456

Notes: Spending per enrollee includes federal and state spending on regular Medicaid payments to providers and managed care plans for covered services provided to enrollees as well as DSH and non-DSH supplemental payments, but does not include administrative costs. Estimates also do not reflect states' subsequent changes, including adjustments or collections, to the spending originally reported for this year. Enrollment is measured in terms of full-year-equivalent enrollees. Both enrollment and expenditure data include all enrollees regardless of the scope of benefits offered.

The first method distributes DSH payments among eligibility groups based on each group's share of spending for services delivered in the types of facilities that are potentially eligible for DSH payments. The second method distributes DSH payments among eligibility groups based on each group's share of total non-DSH spending.

States Varied Widely on Program Characteristics and Other Factors That Influence Medicaid Per-Enrollee Spending

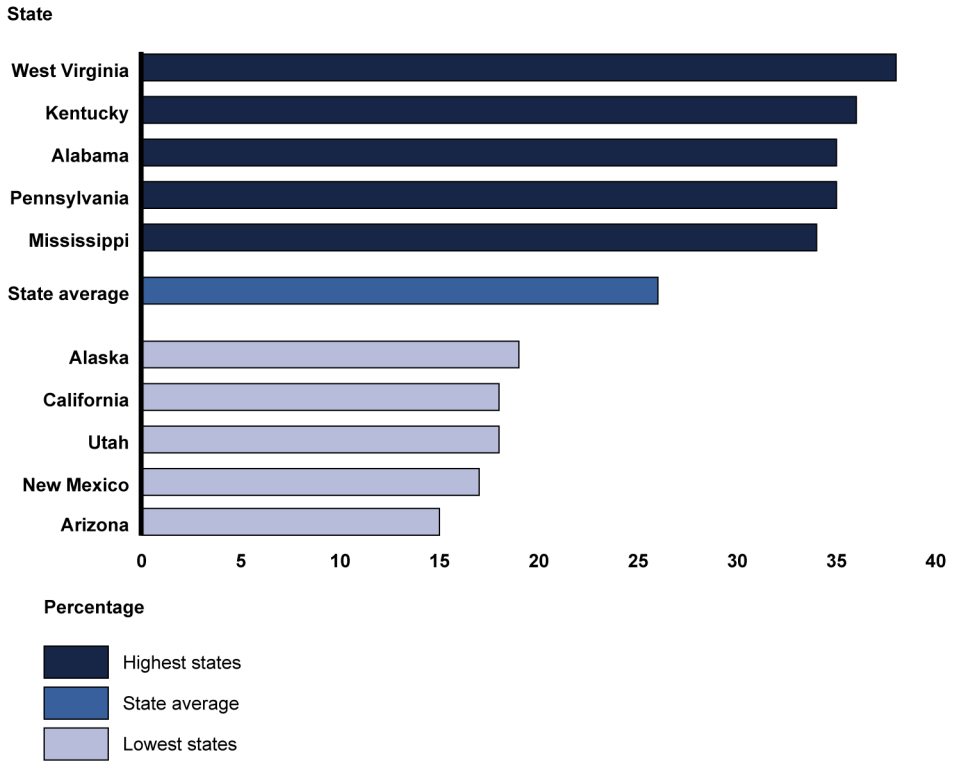
We found that the distribution of enrollees among the four major Medicaid eligibility groups (children, adults, disabled, and aged)—a program characteristic known to influence overall per-enrollee Medicaid spending—varied widely between states. Additionally, states varied on other selected factors that influence Medicaid spending for each of the four eligibility groups, including enrollee health services needs, scope of benefits offered, and the cost of delivering health services.

Distribution of Enrollees across Medicaid Eligibility Groups Varies by State

The distribution of enrollees across the disabled, aged, adult, and child eligibility groups varies widely by state. For example, the percentage of enrollees in the higher-need disabled and aged eligibility groups ranged from about 15 percent in Arizona to 38 percent in West Virginia in calendar year 2008.[43] (See fig. 4, and see table 5 in app. VI for full information on all states.)

[43]See *Medicaid Analytic eXtract* 2008 *Chartbook*, Table 3.2.

Figure 4: Percentage of Medicaid Enrollees Who Were Disabled or Aged, Highest and Lowest Five States, Calendar Year 2008



Source: GAO analysis of Centers for Medicare & Medicaid Services data. | GAO-14-456

Notes: State average represents the sum of state percentages of enrollees who were disabled or aged divided by the number of states. For purposes of this analysis, we include the District of Columbia as a state.

Differences across states in the distribution of Medicaid enrollees across eligibility groups occur due to multiple factors, such as the age distribution and rate of disability within each state's Medicaid-eligible population, as well as Medicaid eligibility rules. State-specific data on the characteristics of the population in poverty—a proxy for the Medicaid-eligible population—illustrate variation in age and disability rates. For example, calendar year 2008 U.S. Census Bureau American Community Survey data show that the percentage of the population in poverty who were aged 75 or older ranged from 1 percent in Alaska to 9 percent in North Dakota, while the percentage of the working-age population in poverty who reported a disability ranged from 17 percent in Utah to 39 percent in Maine. In addition, one state may have a higher percentage of aged or disabled Medicaid enrollees than another due to a variety of

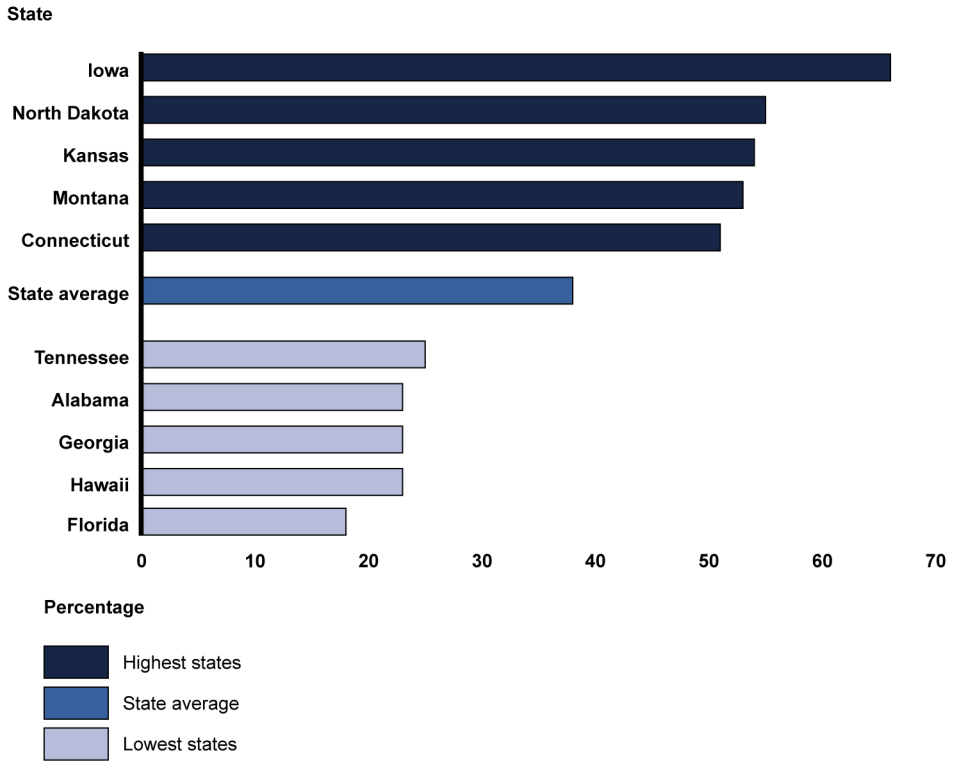
circumstances, such as having a higher income eligibility limit for aged or disabled individuals than another state, or conversely, having lower income eligibility limits for other groups.

Health Service Needs, Benefits, and Cost of Delivering Services Vary by State

Differences between states in the distribution of enrollees among the four major eligibility groups do not fully explain the variation among states in overall per-enrollee Medicaid spending, as states also vary in spending for each of the four eligibility groups. Although the Medicaid eligibility group itself is a key indicator of enrollees' average health service needs, the needs of individual enrollees within each group can differ substantially. As a result, the proportion of each Medicaid eligibility group that requires and uses higher-cost health services can vary by state. For example, the aged eligibility group includes a broad age range of individuals aged 65 and older. The chances of needing long-term care services, some of the most costly services covered by Medicaid, are higher for older enrollees within the aged eligibility group, and some states have a higher percentage of older enrollees than others. The proportion of enrollees in the aged eligibility group who were aged 85 and older ranged from 16.6 percent in Nevada to 38.9 percent in South Dakota in fiscal year 2008, according to our analysis of MSIS data. Across states with available data, the proportion of aged enrollees receiving long-term care services ranged from 18.4 percent in Florida to 65.6 percent in Iowa.[44] (See fig. 5, and see table 6 in app. VII for full information on all states.)

[44]Four states did not have reliable data available on the proportion of aged enrollees receiving long-term care services. Specifically, in Arizona, New Mexico and Wisconsin, more than 2 percent of all enrollees—and therefore likely a higher percentage of aged enrollees—received long-term care services through managed care plans and therefore were not represented in the FFS data used to identify enrollees who received long-term care services during the year. Maine was unable to accurately report its spending by service category. We also excluded a fifth state, Massachusetts, from this analysis because of errors in fiscal year 2008 CMS data.

Figure 5: Percentage of Aged Medicaid Enrollees Receiving Long-Term Care Services, Highest and Lowest Five States, Fiscal Year 2008



Source: GAO analysis of Centers for Medicare & Medicaid Services data. | GAO-14-456

Notes: Four states were excluded because they did not have reliable data available on the proportion of aged enrollees receiving long-term care services. Specifically, in Arizona, New Mexico, and Wisconsin, more than 2 percent of all enrollees—and therefore likely a higher percentage of aged enrollees—received long-term care services through managed care plans and therefore were not represented in the fee-for-service data used to identify enrollees who received long-term care services during the year. Maine was unable to accurately report its spending by service category. A fifth state, Massachusetts, was excluded because of errors in fiscal year 2008 data. State average represents the sum of state percentages of aged enrollees receiving long-term care services divided by the number of states. For purposes of this analysis, we include the District of Columbia as a state.

Furthermore, the proportion of enrollees in specific eligibility groups who received long-term care services in institutional settings, which are typically more costly than home- and community-based services, also

varied among states.[45] Among states with available data, the proportion of aged enrollees who received institutional care ranged from 8.2 percent in Alaska to 46.1 percent in North Dakota.[46] (See table 6 in app. VII for full information on all states.) The setting in which long-term care services are provided may reflect factors other than or in addition to enrollees' health services needs, including state policy choices such as funding for home- and community-based services.

The health service needs of Medicaid enrollees in the child and adult eligibility groups also vary by state. For example, research has documented that foster children have more health problems, especially mental health problems, than the general population or the population of poor children, and thus tend to generate higher health care spending.[47] Across states, the proportion of the child eligibility category that is composed of children enrolled in Medicaid on the basis of being in foster care ranged from about 1 percent in Mississippi to about 11 percent in Nebraska in fiscal year 2008, according to our analysis of MSIS data. Among adults, certain indicators of greater health service needs and costs, such as obesity and tobacco use, also vary by state.[48] Across

[45]Our analysis of MSIS data showed that, on average, states spent $41,752 per enrollee for those receiving long-term care services in institutional settings in fiscal year 2008, compared to an average of $20,736 per enrollee for those receiving long-term care services in home- and community-based settings.

[46]See *Medicaid Analytic eXtract 2008 Chartbook*, Table A3.5. Four states did not have reliable data available on the proportion of enrollees receiving institutional care services. Specifically, in Arizona, New Mexico, and Wisconsin, more than 2 percent of all enrollees—and therefore likely a higher percentage of aged enrollees—received long-term care services through managed care plans and therefore were not represented in the FFS data used to identify enrollees who were ever institutionalized during the year. Maine was unable to accurately report its spending by service category.

[47]Our analysis of MSIS data showed that, for children who received services, states spent an average of about $8,056 per foster care child in fiscal year 2008 compared to an average of about $2,055 per non-foster-care child.

[48]One study found that, across all payers, per capita medical spending was $1,429 (about 42 percent) higher for obese people than for people of normal weight in 2006. The authors noted that costs attributable to obesity are due almost entirely to costs of treating diseases that obesity promotes, such as diabetes. See Eric A. Finkelstein, Justin G. Trogdon, Joel W. Cohen, and William Dietz, "Annual Medical Spending Attributable to Obesity: Payer- and Service-Specific Estimates," *Health Affairs*, 28, no. 5 (2009). The Congressional Budget Office found that annual per capita health care spending for current or former smokers was 11 to 16 percent higher than for people who have never smoked, depending on their ages, in 2008 dollars. See Congressional Budget Office, *Raising the Excise Tax on Cigarettes: Effects on Health and the Federal Budget* (Washington, D.C.: June 2012).

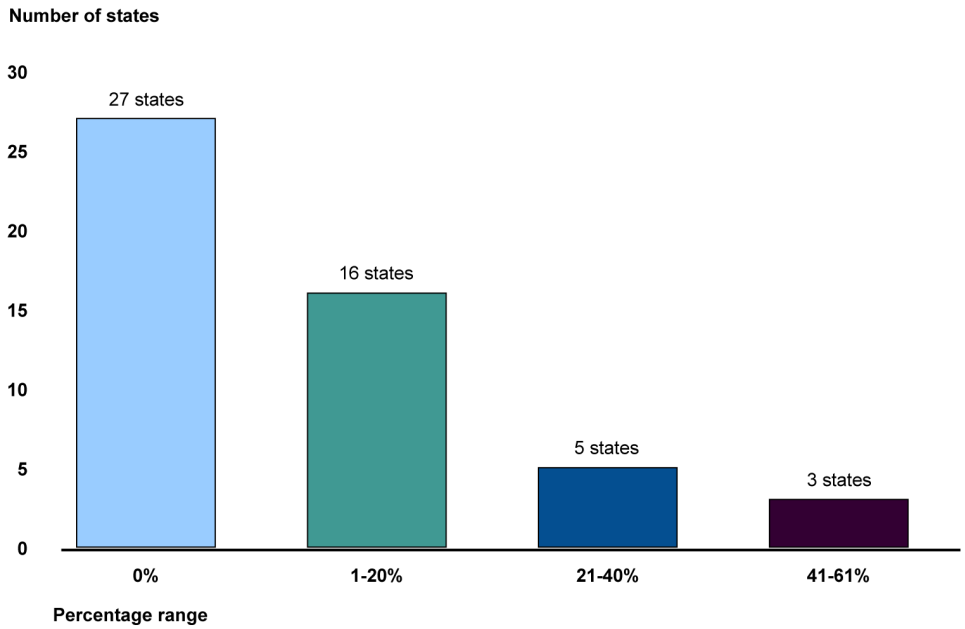
states, calendar year 2008 CDC Behavioral Risk Factor Surveillance System data show that adult obesity rates ranged from 19 percent in Colorado to 33 percent in Mississippi, and tobacco use rates ranged from 10 percent in Utah to 26 percent in Kentucky and West Virginia. (See table 7 in app. VII for full information on all states.)

The scope of benefits offered to enrollees within the same eligibility group is another factor that influences Medicaid spending, and this also varies across states. Expenditures for enrollees with limited benefits are considerably lower than for those enrollees who are entitled to the full range of benefits offered by their state. For example, average per-enrollee spending was $205 for enrollees receiving only family planning services in calendar year 2008, compared with $5,281 for enrollees eligible for the full range of benefits offered in the state.[49] As a result, inclusion of spending data for enrollees with limited benefits, such as those receiving only family planning benefits, lowers a state's estimated average spending for an eligibility group as a whole. The proportion of enrollees with limited benefits can vary widely by state: the percentage of adult enrollees with only family planning benefits varied from 0 percent in 27 states to over 41 percent in 3 states in calendar year 2008.[50] (See fig. 6, and see table 7 in app. VII for full information on all states.)

[49]See *Medicaid Analytic eXtract 2008 Chartbook*, Figure 2.10. These spending figures do not include DSH payments or other supplemental payments.

[50]See *Medicaid Analytic eXtract 2008 Chartbook* , Table A7.2.

Figure 6: Variation across States in the Percentage of Adult Medicaid Enrollees Who Received Only Family Planning Benefits, Calendar Year 2008



Source: GAO analysis of Centers for Medicare & Medicaid Services data. | GAO-14-456

Note: For purposes of this analysis, we include the District of Columbia as a state.

The overall scope of benefits for enrollees receiving full benefits also varies by state. States may vary the amount, duration, or scope of benefits they are required to offer. States may also choose which, if any, optional benefits to offer. For example, dental services are an optional benefit for adults. State dental coverage for adults ranges from no coverage to full coverage. Dental services add to total per-enrollee spending for the adult eligibility group in states that cover such services for adults.

Another factor that influences state Medicaid spending per enrollee and varies across states is the cost of delivering health services to enrollees. The cost to states of delivering health services includes not only medical equipment and supplies, but also costs that vary considerably by location due to different labor market and real estate market factors. Of these, personnel costs represent the greatest proportion of total health service costs. In a previous report, we calculated the average 2009 through 2011

wages, by state, for health care workers, and used the differences between states in average wages to estimate how the costs of providing health care services varied by state.[51] The most conservatively calculated estimates showed an 18 percentage point difference between states in the cost of delivering health services.[52]

States Account for a Range of Demographic and Health Factors When Setting Medicaid Managed Care Rates

States consider a range of factors when setting Medicaid managed care capitation rates to account for differences among plans in expected spending per enrollee. The number and complexity of factors considered varies based, in part, on the populations and benefits covered through managed care, as well as on state experience with managed care. States' considerations offer insight into the range of factors that influence per-enrollee spending at the state level and that contribute to the variation among states in such spending.

Officials from two consulting firms told us that some states are able to set sufficiently accurate rates—particularly for children and adults—by dividing enrollees into categories, known as rate cells. States pay distinct rates for enrollees in each cell based on the historical average spending for enrollees in the rate cell. The goal is for each rate cell to contain enrollees expected to generate relatively similar expenses; thus, states divide enrollees into rate cells based on eligibility and demographic data associated with health service needs and costs of delivering services, such as Medicaid eligibility group, age, gender, and geographic area. For example, states may divide children into multiple age group cells, and each of these rate cells may further differ depending on geographic area. The number of rate cells can vary widely across states. Officials from one

[51]We did not assess differences among states in actual Medicaid FFS provider payment rates for specific services. To the extent that payment rates are driven by the costs of delivering health care services, differences across states in average wages for health care workers would translate into corresponding differences in payment rates. For more information on state Medicaid provider payment rates, see GAO, *Medicaid: Use of Claims Data for Analysis of Provider Payment Rates*, GAO-14-56R. (Washington, D.C.: Jan. 6, 2014.)

[52]See GAO-13-434, pp. 24-27. The most conservatively calculated health services cost index assumed that personnel accounted for 50 percent of the total cost to provide health services—the minimum proportion of costs attributed to personnel in Medicare's prospective payment systems for a variety of services. The differences among states were greater based on an index that assumed that personnel account for a higher percentage of total costs.

consulting firm noted that states may use as few as 10 or more than 50 rate cells depending on their analysis of prior costs for enrollees in each cell.

Beyond demographic information, some states consider additional factors in establishing rate cells, such as receipt of high-cost services or the scope of benefits to which enrollees are entitled. For example, some state and consulting firm officials noted that states may establish separate rate cells for those with certain high-cost health needs, such as enrollees who are in neonatal intensive care, living with the human immunodeficiency virus or acquired immunodeficiency syndrome, dependent on ventilators, or in long-term care. Some states establish separate rate cells for children who are eligible for Medicaid on the basis of foster care, due to the greater health needs of foster children compared to other children.[53] In addition, states that offer different benefit packages to enrollees in specific eligibility groups may further divide such enrollees into distinct rate cells.

In addition to establishing rate cells, states that cover aged and disabled enrollees under managed care generally use risk adjustment to set rates based on detailed encounter data that provide information on enrollee health status, such as medical diagnoses or pharmacy prescriptions.[54] The risk adjustment process generally uses health status information, along with demographic factors, to predict the extent to which a particular enrollee is expected to require higher or lower spending than an average enrollee in the same rate cell. This information is used to proportionally adjust payments to managed care plans upward or downward. Specifically, plans enrolling a greater than average proportion of individuals who are expected to have costly health service needs receive proportionally higher payments, while plans enrolling a lower proportion of such individuals receive proportionally lower payments, and the state's overall payment remains unchanged. The types of health status data that

[53]Children in foster care, most of whom are eligible for Medicaid, are an especially vulnerable population because often they have been subjected to traumatic experiences involving abuse or neglect and they may suffer from multiple, serious mental health conditions. See GAO, *Children's Mental Health: Concerns Remain About Appropriate Services for Children in Medicaid and Foster Care*, GAO-13-15 (Washington, D.C.: Dec. 10, 2013).

[54]For example, encounter data may specify an enrollee's diagnosed health conditions or prescribed medications that may be used to infer such conditions.

can be incorporated in the risk adjustment process include diagnosed medical conditions, such as hypertension or asthma, along with other factors, such as age or gender. Some states also consider other types of health data in the risk adjustment process. For example, officials from one consulting firm told us that, for long-term care enrollees, some states are developing methods to incorporate assessments of frailty or ability to perform activities of daily living, such as the ability to walk or dress without assistance. Officials from two consulting firms told us that risk adjustment is particularly important for enrollees with the most variation in health service needs, such as disabled or aged enrollees, for whom age or other demographic factors are poor predictors of service use.

According to state and consulting firm officials, states that use risk adjustment tend to be those with more managed care experience, because these states (1) tend to use managed care to cover the disabled and aged eligibility groups whose health service needs vary more and for whom risk adjustment therefore is most important; and (2) are more likely to have made the data improvements necessary to use risk adjustment.[55] Risk adjustment requires detailed encounter data to measure health status;[56] however, some states do not have reliable and accurate encounter data.[57] Some of these officials said it has generally taken states about 3 to 4 years to transition to risk adjustment from rate setting based solely on rate cells, due to the need to educate providers and plans

[55]One consulting firm official told us that states with small populations in managed care may decide that the data and other challenges and costs involved with implementing risk adjustment outweigh the benefits.

[56]States initially base managed care rates on FFS data, but need to transition to encounter data after enrollees have been in managed care for several years because the FFS data become outdated.

[57]Some of the state and consulting firm officials told us that some managed care plans do not provide states with the complete or accurate encounter data that states are required to submit to CMS in MSIS. Some consulting firm officials suggested that states build incentives into their plan contracts to encourage plans to report accurate data. In addition, PPACA gives the Secretary of Health and Human Services the authority to withhold a state's federal Medicaid matching funds if the state does not report enrollee encounter data to MSIS, as required by HHS. 42 U.S.C. § 1396b(i)(25). A CMS official recently indicated that CMS has prioritized obtaining and validating states' encounter data in MSIS. In a prior report, we found that CMS planned to emphasize the need for more complete encounter data because the agency has determined that states' encounter data that do not include pricing information are not sufficient for setting rates. See GAO, *Medicaid Managed Care: CMS's Oversight of States' Rate Setting Needs Improvement*, GAO-10-810 (Washington, D.C.: Aug. 4, 2010).

about appropriately reporting encounter data and due to other considerations, such as changes to information technology systems and the potential need to phase in rate changes.[58]

Despite states' use of multiple factors to predict health service needs for rate setting purposes, the need for certain services remains difficult to predict, and many states find it necessary to exclude such services from capitation rates—instead they may provide one-time payments for such services or exclude them from the package of services that managed care plans provide. For example, officials from several states and consulting firms mentioned that some states pay plans an additional fixed amount per enrollee to cover maternity-related services. Officials from two consulting firms also noted that some states use additional payments for enrollees who need certain high-cost services, such as organ transplants or neonatal intensive care. Alternately, states may exclude or "carve out" certain services or specific enrollee populations from coverage, rather than accounting for these costs in capitation rates. Officials from several states and consulting firms noted examples of services that some states exclude, such as maternity care or mental health, or enrollee populations that some states exclude, such as those receiving substance abuse treatment or children with special needs. States may use FFS or specific benefit plans, such as mental health or pharmacy plans, to cover these services or enrollees.

In the event that rates significantly differ from the actual average per-enrollee spending of managed care plans, states have also adopted various risk mitigation strategies to minimize the losses or gains that may be incurred by either the state or managed care plans. These strategies include

- *reinsurance*—requiring managed care plans to obtain private or state-financed insurance against unexpected expenses that may be significantly higher than the capitation rate payments they receive from the state, and
- *risk corridors*—limiting the losses or gains that states or managed care plans can incur, such as limiting the profits that a managed care

[58]State officials told us that since the state transitions to risk adjustment may have resulted in plans receiving higher or lower payments, they have phased in risk-adjusted rate changes over several years to allow plans to adapt to potential payment changes.

plan could receive if capitation payments were significantly higher than plan spending.

Without these strategies, states risk paying more than necessary if capitation rates are too high, and managed care plans may not be willing to participate in a state's Medicaid program if rates are too low. Officials from one firm told us that rates based on poor data have resulted in states paying plans too much, or conversely, plans losing money on state Medicaid contracts.

Officials from one state and one consulting firm told us that states' reliance on risk mitigation strategies generally decreases as their managed care programs mature and the accuracy of their capitation rates increases. However, such strategies can continue to play an important role in the event of changes in circumstances, such as changes in the enrollee population due to economic conditions. For example, officials from one state with a long history of managed care experience told us that the state had considered dropping its risk corridors, but decided they still were necessary to limit managed care plan profits because the current adult Medicaid population—which increased during the recent recession—was healthier on average than the prior population on which rates were based.[59]

Concluding Observations

Understanding the variation among states in Medicaid spending is important for program oversight and for informing potential financing reform strategies. While the variation in overall spending among states is driven in large part by each state's Medicaid enrollment, it is also due to differences in spending per enrollee. The reasons for spending differences are not well understood, and some reasons for the differences may be within states' control—such as the extent to which states offer optional or limited benefits to enrollees. However, spending variation may also be due to different circumstances faced by states, such as geographic cost differences or the extent of enrollee health service needs, which are largely outside of states' control. The variety of

[59]For more information on how economic changes may affect Medicaid enrollment, see GAO, *Medicaid: Prototype Formula Would Provide Automatic, Targeted Assistance to States during Economic Downturns*. GAO-12-38, (Washington, D.C.: Nov. 10, 2011); and *Medicaid: Improving Responsiveness of Federal Assistance to States during Economic Downturns*. GAO-11-395 (Washington, D.C.: Mar. 31, 2011).

demographic and health status indicators that states use to predict spending per enrollee when setting Medicaid managed care rates illustrates the complex array of factors potentially at play.

The ability to reliably calculate each state's per-enrollee Medicaid spending is a prerequisite for understanding the extent of and reasons for variation among states in such spending. Better information about Medicaid expenditures is needed in order to do so. GAO has previously recommended that CMS take steps to improve states' reporting of supplemental payments, among other steps to improve accountability and transparency for supplemental payments, and that Congress consider requiring CMS to take such steps. CMS has taken some steps to improve state reporting of these payments and is in the process of implementing a project to improve and expand MSIS. Until better information about Medicaid spending per enrollee is available, it will not be possible to quantify the effects of particular drivers of spending growth, to identify spending that is unnecessary for covering the health service needs of Medicaid enrollees, or to evaluate the effectiveness of potential approaches to curtailing Medicaid spending and how such approaches may affect program objectives.

Agency Comments

We provided the Secretary of Health and Human Services with a draft of this report. The Department of Health and Human Services provided technical comments, which we incorporated as appropriate.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies to the Administrator of CMS and other interested parties. In addition, the report will be available at no charge on the GAO website at http://www.gao.gov.

If you or your staffs have any questions about this report, please contact me at (202) 512-7114 or yocomc@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made major contributions to this report are listed in appendix VIII.

Carolyn L. Yocom
Director, Health Care

Appendix I: Data and Methodology for Estimates of Medicaid Spending per Enrollee

This appendix describes the methodology we used to examine what Centers for Medicare & Medicaid Services (CMS) data show about variation among states in Medicaid spending per enrollee. We developed state-specific estimates of Medicaid spending per enrollee for fiscal year 2008 using Medicaid enrollment data and combined federal and state expenditure data provided by the CMS Office of the Actuary (OACT). Specifically, we obtained from OACT (1) enrollment data showing the number of full-year-equivalent enrollees, by state and eligibility group, which OACT calculates using data in the Medicaid Statistical Information System (MSIS); and (2) expenditure data broken out by state, eligibility group, and service category. Both enrollment and expenditure data include all enrollees, regardless of the scope of benefits offered.

OACT develops its expenditure estimates using data from two sources—the CMS-64 data system and MSIS—in order to exploit the different strengths of these two sources. CMS-64 data are regarded as the most accurate and comprehensive source of information on state Medicaid expenditures, in part because these data are reviewed by CMS and used to reimburse states for their federal shares of Medicaid expenditures. The CMS-64 data system provides expenditure data at the aggregate level, such as a state's total expenditures for such categories of services as inpatient hospital services and prescription drugs, as well as data on expenditures that are not linked to specific enrollees, such as Disproportionate Share Hospital (DSH) payments and other supplemental payments, which we refer to as non-DSH supplemental payments.[1] However, the CMS-64 data system provides no information on the amount of spending attributable to specific enrollees or eligibility groups. In contrast, MSIS provides detailed, individual-level enrollment and claims data, including data on expenditures for specific services provided to

[1]State Medicaid agencies are required to submit these aggregate expenditure data 30 days after a quarter has ended by means of the Quarterly Medicaid Statement of Expenditures for the Medical Assistance Program—also known as the form CMS-64—within the Medicaid Budget and Expenditure System. CMS uses the data to compute the federal financial participation for each state's Medicaid program costs. Federal Medicaid law requires states to make DSH payments to qualifying hospitals that serve large numbers of Medicaid and uninsured low-income patients. States also make other supplemental payments to hospitals and other providers that, for example, serve high-cost Medicaid enrollees.

specific enrollees.[2] However, MSIS expenditure data are not considered as reliable as CMS-64 data, because they are not reviewed for use in determining the federal share of Medicaid expenditures. MSIS data are also less complete than CMS-64 data, in that they lack information on expenditures that are not linked to specific enrollees. These expenditures include drug rebates, which effectively reduce states' expenditures for drugs, as well as DSH and non-DSH supplemental payments.

OACT's expenditure estimates reflect the total spending reported in the CMS-64 data system, distributed across eligibility groups and service categories, as reported in MSIS. To develop these estimates, OACT obtains from the CMS-64 data system an annual summary report called the Base Financial Management Report, which shows expenditures for the year by category of service and also includes information on any changes states made to their quarterly expenditure reports for prior periods, such as adjustments and collections.[3] From MSIS, OACT obtains tabulations of expenditures by service category and eligibility group. To combine the data from these two sources, OACT crosswalks the service categories in the CMS-64 annual summary report to the more detailed service categories in the MSIS data, and then distributes the spending reported in the CMS-64 annual summary report across eligibility groups accordingly. For example, if disabled enrollees accounted for 50 percent of the inpatient care expenditures reported in MSIS by a given state, OACT would assign to these enrollees 50 percent of the inpatient care expenditures reported in that state's CMS-64 Base Financial Management Report. These expenditure estimates do not include states' administrative costs. DSH payments, adjustments, and collections are all reported as separate line items.

To estimate overall Medicaid spending per enrollee by state for the four major eligibility groups—children, adults, disabled, and aged—we

[2]State Medicaid agencies are required to provide CMS, through MSIS, with quarterly electronic files approximately 45 days after a quarter has ended that contain data on the persons covered by Medicaid and on claims for medical services reimbursed by the Medicaid program.

[3]Adjustments are made to correct overpayments, underpayments, or reporting errors that relate to spending reported in prior quarterly reports. Collections include reimbursement from private or public insurance plans or other third parties that are liable for some portion of enrollees' health care costs, as well as recoveries made through efforts to reduce waste, fraud, and abuse.

collapsed some of the eligibility groups by which the OACT enrollment and expenditure data were broken out and then totaled the expenditures attributed to each of the four groups in each state.[4] To each group's total, we then added a share of state DSH payments. Although these payments do not represent expenditures on individual enrollees, we included them in estimates of spending per enrollee, in order to avoid skewing comparisons among states by excluding one type of supplemental payment while including another. In fiscal year 2008, states were required to separately report DSH payments in their CMS-64 quarterly reports, but lines to separately report non-DSH supplemental payments were not added to the CMS-64 until fiscal year 2010.[5] In fiscal year 2008, these payments were folded into the spending reported for related services. (For example, some non-DSH supplemental payments to hospitals could be folded into spending for inpatient or outpatient care.) Because it was therefore not possible to exclude non-DSH supplemental payments and because some states appear to use these payments more than DSH payments, while others appear to do the reverse, we included both types of supplemental payments in our estimates.

We distributed DSH payments among eligibility groups based on each group's share of state spending for relevant services. Specifically, we distributed inpatient DSH payments based on spending for services provided in these facilities (hospital inpatient and outpatient services), and mental health facility DSH payments based on spending for mental health facilities, nursing facilities, and public and private intermediate care facilities for individuals with intellectual disability.[6] For example, if children accounted for 30 percent of total spending for hospital inpatient and outpatient services in a state, we assigned 30 percent of the state's

[4]Specifically, we collapsed three eligibility groups (adults, unemployed adults, and enrollees who qualify for Medicaid under provisions of the Breast and Cervical Cancer Act) into the adult eligibility group, and three other eligibility groups (children, children of unemployed adults, and foster care children) into the children eligibility group.

[5]States were not required to separately report non-DSH supplemental payments until fiscal year 2010, and have not done so consistently since then. See GAO, *Medicaid: More Transparency and Accountability for Supplemental Payments Are Needed*, GAO-13-48 (Washington, D.C., Nov. 26, 2012).

[6]This is the general approach that the Medicaid and CHIP Payment and Access Commission (MACPAC) uses to distribute DSH payments among eligibility groups in its estimates of spending per enrollee. See Medicaid and CHIP Payment and Access Commission, *Report to the Congress on Medicaid and CHIP* (Washington, D.C.: June 2012), pp. 138-141.

inpatient DSH payments to that eligibility group. We did not distribute adjustments or collections among eligibility groups or include them in our estimates of overall spending per enrollee because these amounts could apply to spending from prior years. Instead, we report the total adjustments and collections for each state as a separate dollar amount and as a percentage of the state's total expenditures for the year.

To assess the reliability of the data, we reviewed documentation for the OACT estimates and for MSIS and CMS-64 data, interviewed CMS officials knowledgeable about these data sources, and compared our estimates to those from other data sources. On the basis of this assessment, we excluded two states from certain analyses because of significant errors or omissions in the data they reported to CMS for fiscal year 2008. We excluded Massachusetts from all analyses of state Medicaid spending because, according to CMS officials, fiscal year 2008 enrollment data for the state mistakenly included information on many individuals who were not eligible for Medicaid and were instead covered with state funds. We excluded Maine from analyses of state Medicaid spending at the eligibility-group level, because the state was unable to report spending by service category, which OACT uses to estimate state spending by eligibility group. We determined that for the rest of the states the data were sufficiently reliable for our purposes.

Appendix II: Estimated Medicaid Spending per Enrollee by State

Table 1 illustrates state variation in estimated Medicaid spending per enrollee—for enrollees overall, and for the four major Medicaid eligibility groups—children, adults, disabled, and aged. Our analysis of expenditure data from CMS-64 annual summary reports and enrollment and expenditure data from the Medicaid Statistical Information System suggests wide variation across states in Medicaid spending per enrollee—estimated overall spending per enrollee ranged from about $3,800 in California to about $11,700 in Rhode Island in fiscal year 2008.

Table 1: Estimated Medicaid Spending per Enrollee for All Enrollees and for Each Eligibility Group, by State, Fiscal Year 2008

	Estimated Medicaid spending per enrollee				
State	**All enrollees**	**Children**	**Adults**	**Disabled**	**Aged**
Alabama	$5,410	$2,890	$3,556	$8,870	$9,882
Alaska	11,111	4,298	7,920	31,835	25,780
Arizona	6,331	3,344	6,086	17,080	11,064
Arkansas	5,913	2,606	2,031	12,721	15,205
California	3,838	1,702	1,480	13,089	9,938
Colorado	7,827	2,802	6,132	20,776	18,022
Connecticut	9,659	3,226	3,765	30,396	26,067
Delaware	7,333	2,937	5,989	18,902	17,364
District of Columbia	10,510	4,119	6,006	23,220	27,322
Florida	6,577	2,288	5,314	14,510	11,345
Georgia	6,062	2,562	8,115	11,844	12,117
Hawaii	6,756	2,306	4,971	20,802	14,000
Idaho	7,561	2,474	8,540	19,337	14,029
Illinois	5,799	2,227	3,935	18,910	11,261
Indiana	8,052	2,521	4,995	23,213	21,757
Iowa	7,608	2,535	3,490	20,017	19,828
Kansas	8,702	2,644	5,966	20,217	18,870
Kentucky	7,003	2,924	6,736	11,082	13,450
Louisiana	6,593	2,123	5,471	16,911	11,533
Maine[a]	7,452	—	—	—	—
Maryland	9,548	3,630	5,871	22,795	20,950
Massachusetts[b]	—	—	—	—	—
Michigan	6,209	2,075	5,672	14,388	19,632
Minnesota	11,308	4,157	5,229	31,570	24,505
Mississippi	5,827	2,444	3,983	10,441	12,140
Missouri	8,695	3,815	5,227	20,959	17,162

State	Estimated Medicaid spending per enrollee				
	All enrollees	Children	Adults	Disabled	Aged
Montana	9,613	3,112	7,031	20,682	28,564
Nebraska	8,742	3,394	4,717	21,654	21,179
Nevada	7,026	3,006	5,029	17,876	12,729
New Hampshire	10,854	3,905	8,508	25,237	29,613
New Jersey	11,612	2,758	7,908	28,393	22,817
New Mexico	7,133	3,603	5,251	22,658	12,314
New York	11,310	2,873	5,635	32,185	29,734
North Carolina	7,462	2,755	5,938	17,401	13,449
North Dakota	10,535	2,902	5,087	25,087	25,213
Ohio	7,510	2,105	4,432	17,421	21,800
Oklahoma	6,376	2,614	5,119	16,081	13,375
Oregon	8,191	2,704	6,760	16,947	19,463
Pennsylvania	9,030	3,026	5,019	14,175	27,207
Rhode Island	11,680	5,107	5,982	22,972	21,574
South Carolina	6,401	2,818	4,941	13,247	13,704
South Dakota	7,064	2,146	6,031	19,587	15,559
Tennessee	5,827	2,644	5,338	10,262	12,694
Texas	6,540	3,345	7,131	15,680	10,495
Utah	7,882	3,723	4,857	23,896	14,468
Vermont	7,706	5,877	5,708	13,984	10,981
Virginia	7,554	2,622	5,494	17,251	14,693
Washington	6,785	2,376	5,107	17,432	19,207
West Virginia	7,037	2,467	5,759	11,584	15,863
Wisconsin	6,432	1,902	3,329	17,389	11,262
Wyoming	8,358	3,250	6,756	24,644	21,662
State average	**$7,847**	**$2,973**	**$5,497**	**$19,135**	**$17,609**

Source: GAO analysis of Centers for Medicare & Medicaid Services data. | GAO-14-456

Notes: Estimates of spending per enrollee include federal and state spending on regular Medicaid payments to providers and managed care plans for covered services provided to enrollees as well as Disproportionate Share Hospital (DSH) and non-DSH supplemental payments, but do not include administrative costs. Estimates also do not reflect states' subsequent changes, including adjustments or collections, to the spending originally reported for this year. Enrollment is measured in terms of full-year-equivalent enrollees. Both enrollment and expenditure data include all enrollees, regardless of the scope of benefits offered. State average spending per enrollee represents the sum of each state's estimated spending per enrollee divided by the number of states. For purposes of this table we refer to the District of Columbia as a state.

[a]We excluded Maine from eligibility-group level estimates because the state was unable to report spending by service category for fiscal year 2008.

[b]We excluded Massachusetts from the estimates because of errors in fiscal year 2008 CMS data for this state.

Appendix III: Total Medicaid Spending and Adjustments and Collections by State

States are required to report to CMS each quarter any collections or adjustments to the Medicaid spending they previously reported. In one of the annual summary reports available from the CMS-64 data system, the adjustments and collections reported by a state that year are summed by type—for example, adjustments increasing claims—and reported as line items separate from other reported spending amounts.[1] The reported sums may include adjustments and collections applicable to spending for the current year as well as prior years.[2] For six states, the adjustments and collections reported in fiscal year 2008—an unknown amount of which was applicable to that year's spending—represented 5 percent or more of the total spending reported for that year. Table 2 shows the total spending states reported for fiscal year 2008, as well as the total adjustments and collections they reported that year, and the percentage of total spending that adjustments and collections represented.

[1]In the other annual summary report, collections are reported as a separate line item, but adjustments are folded into the current year's spending, by type of service, and program.

[2]These sums may also include adjustments to spending for Medicaid expansion programs under the State Children's Health Insurance Program as well as for the traditional Medicaid program.

Table 2: Total Medicaid Spending and Adjustments and Collections Reported in Fiscal Year 2008

State	Total spending	Adjustments and collections	Adjustments and collections as a percentage of total spending
Alabama	$4,065,658,513	($3,403,747)	-0.1
Alaska	962,595,105	(72,726,013)	-7.6
Arizona	7,285,798,764	217,986,033	3.0
Arkansas	3,328,009,018	(95,445,204)	-2.9
California	31,039,145,327	7,546,974,470	24.3
Colorado	3,186,825,239	(34,849,295)	-1.1
Connecticut	4,515,843,293	(98,177,252)	-2.2
Delaware	1,103,519,563	(1,363,880)	-0.1
District of Columbia	1,459,889,715	(31,962,688)	-2.2
Florida	14,674,721,802	(73,161,543)	-0.5
Georgia	7,654,184,658	(390,248,341)	-5.1
Hawaii	1,222,550,545	(20,392,992)	-1.7
Idaho	1,220,236,237	(32,553,305)	-2.7
Illinois	11,730,832,868	(263,433,221)	-2.2
Indiana	6,679,844,413	(565,918,130)	-8.5
Iowa	2,834,135,869	(56,770,325)	-2.0
Kansas	2,338,692,399	(114,140,708)	-4.9
Kentucky	4,781,853,623	(90,229,659)	-1.9
Louisiana	6,065,775,886	(234,590,878)	-3.9
Maine	2,186,642,908	47,453,663	2.2
Maryland	5,789,864,630	(151,620,736)	-2.6
Massachusetts[a]	—	—	—
Michigan	9,763,205,475	31,721,058	0.3
Minnesota	6,963,611,523	(79,838,444)	-1.1
Mississippi	3,534,943,883	258,504,898	7.3
Missouri	7,065,432,032	(78,221,022)	-1.1
Montana	780,125,095	(10,369,615)	-1.3
Nebraska	1,585,314,119	(32,318,151)	-2.0
Nevada	1,308,662,237	3,712,625	0.3
New Hampshire	1,256,516,384	(16,206,643)	-1.3
New Jersey	9,390,013,827	(36,195,450)	-0.4
New Mexico	3,051,859,421	(27,864,999)	-0.9

State	Total spending	Adjustments and collections	Adjustments and collections as a percentage of total spending
New York	46,004,929,844	258,553,798	0.6
North Carolina	9,984,558,550	(370,706,876)	-3.7
North Dakota	555,283,315	(26,625,586)	-4.8
Ohio	12,208,921,164	(16,039,100)	-0.1
Oklahoma	3,525,551,862	(105,739,641)	-3.0
Oregon	3,188,916,042	(11,560,143)	-0.4
Pennsylvania	16,137,965,265	48,605,230	0.3
Rhode Island	1,846,481,589	(43,086,140)	-2.3
South Carolina	4,435,472,577	(209,104,361)	-4.7
South Dakota	672,641,093	(20,933,097)	-3.1
Tennessee	7,296,597,016	(162,724,231)	-2.2
Texas	20,942,941,607	154,234,451	0.7
Utah	1,570,682,903	(81,216,971)	-5.2
Vermont	1,034,050,857	45,268,884	4.4
Virginia	5,361,612,424	(33,874,206)	-0.6
Washington	6,381,271,503	(139,384,829)	-2.2
West Virginia	2,279,677,025	(16,083,970)	-0.7
Wisconsin	5,103,833,259	(182,497,433)	-3.6
Wyoming	485,726,260	(1,714,150)	-0.4
State Average	**$6,356,868,371**	**$91,594,443**	**-1.1%**

Source: GAO analysis of Centers for Medicare & Medicaid Services data. | GAO-14-456

Notes: Total spending includes federal and state spending on regular Medicaid payments to providers and managed care plans for covered services provided to enrollees as well as Disproportionate Share Hospital (DSH) and non-DSH supplemental payments and does not include adjustments, collections, or administrative costs. For purposes of this table we refer to the District of Columbia as a state.

[a]We excluded Massachusetts from the estimates because of errors in fiscal year 2008 CMS data for this state.

Appendix IV: Estimated Medicaid Spending per Enrollee, by State, Using Two Possible Methods to Distribute DSH Payments

Federal Medicaid law requires states to make DSH payments to qualifying hospitals that serve large numbers of Medicaid and uninsured low-income patients. States are required to report to CMS separate data on the two types of DSH payments: payments to inpatient hospitals and payments to inpatient mental health facilities.[1] We included DSH payments in our estimates of spending per enrollee, and compared two possible methods of distributing these payments among eligibility groups. For the first method—the one used in our estimates of spending per enrollee—we distributed DSH payments among eligibility groups based on each group's share of state spending for services delivered in the types of facilities that are potentially eligible for DSH payments. Specifically, we distributed inpatient DSH payments based on spending for services provided in these facilities (hospital inpatient and outpatient services), and mental health facility DSH payments based on spending for mental health facilities, nursing facilities, and public and private intermediate care facilities for individuals with intellectual disability. For the second method, we distributed DSH payments among eligibility groups based on each group's share of total spending. We found that for some eligibility groups in some states, the method used to distribute DSH payments significantly affected estimates of spending per enrollee. Table 3 shows estimated Medicaid spending per enrollee by state and by eligibility group, for fiscal year 2008, using these two different methods to distribute DSH payments.

[1]Under federal law, states may only claim federal matching funds for DSH payments made to qualifying hospitals up to the states' DSH allotments, which are based on a statutory formula and vary across the states. Individual hospitals may only receive DSH payments up to their hospital-specific limit. States also make DSH payments out of their allotment to institutions for mental disease and other mental health facilities that provide inpatient services. However, federal law limits the total amount of federal matching funds that states may claim for DSH payments made to these mental health facilities. 42 U.S.C. § 1396r-4.

Table 3: Estimated Medicaid Spending per Enrollee Using Two Possible Methods to Distribute Disproportionate Share Hospital (DSH) Payments, by Eligibility Group and State, Fiscal Year 2008

	With DSH payments distributed across groups based on share of spending for relevant services[a]				With DSH payments distributed across groups based on share of total spending[b]			
State	**Children**	**Adults**	**Disabled**	**Aged**	**Children**	**Adults**	**Disabled**	**Aged**
Alabama	$2,890	$3,556	$8,870	$9,882	$2,995	$2,533	$8,972	$10,450
Alaska	4,298	7,920	31,835	25,780	4,318	7,983	31,844	25,447
Arizona	3,344	6,086	17,080	11,064	3,351	6,091	17,103	10,936
Arkansas	2,606	2,031	12,721	15,205	2,603	2,024	12,722	15,227
California	1,702	1,480	13,089	9,938	1,711	1,383	13,088	10,329
Colorado	2,802	6,132	20,776	18,022	2,737	5,660	20,970	18,772
Connecticut	3,226	3,765	30,396	26,067	3,263	3,797	30,194	26,064
Delaware	2,937	5,989	18,902	17,364	2,951	6,018	18,914	17,134
District of Columbia	4,119	6,006	23,220	27,322	4,202	6,132	22,721	28,169
Florida	2,288	5,314	14,510	11,345	2,287	5,273	14,550	11,329
Georgia	2,562	8,115	11,844	12,117	2,589	8,062	11,548	12,660
Hawaii	2,306	4,971	20,802	14,000	2,334	4,943	20,300	14,558
Idaho	2,474	8,540	19,337	14,029	2,451	8,327	19,418	14,231
Illinois	2,227	3,935	18,910	11,261	2,230	3,940	18,906	11,236
Indiana	2,521	4,995	23,213	21,757	2,574	5,127	22,775	22,016
Iowa	2,535	3,490	20,017	19,828	2,525	3,462	20,037	19,913
Kansas	2,644	5,966	20,217	18,870	2,677	6,023	20,259	18,558
Kentucky	2,924	6,736	11,082	13,450	2,945	6,593	11,073	13,572
Louisiana	2,123	5,471	16,911	11,533	2,037	4,825	16,920	12,868
Maine[c]	—	—	—	—	—	—	—	—
Maryland	3,630	5,871	22,795	20,950	3,643	5,907	22,841	20,665
Massachusetts[d]	—	—	—	—	—	—	—	—
Michigan	2,075	5,672	14,388	19,632	2,073	5,687	14,465	19,418
Minnesota	4,157	5,229	31,570	24,505	4,155	5,190	31,400	24,864
Mississippi	2,444	3,983	10,441	12,140	2,396	3,794	10,416	12,664
Missouri	3,815	5,227	20,959	17,162	3,892	5,335	20,821	16,824
Montana	3,112	7,031	20,682	28,564	3,076	6,894	20,663	29,065
Nebraska	3,394	4,717	21,654	21,179	3,374	4,630	21,658	21,398
Nevada	3,006	5,029	17,876	12,729	3,041	4,884	17,506	13,376
New Hampshire	3,905	8,508	25,237	29,613	3,618	6,385	26,310	31,736
New Jersey	2,758	7,908	28,393	22,817	2,835	8,005	28,203	22,740
New Mexico	3,603	5,251	22,658	12,314	3,597	5,228	22,693	12,372

New York	2,873	5,635	32,185	29,734	2,809	5,447	32,225	30,606
North Carolina	2,755	5,938	17,401	13,449	2,770	5,824	17,453	13,442
North Dakota	2,902	5,087	25,087	25,213	2,904	5,091	25,099	25,186
Ohio	2,105	4,432	17,421	21,800	2,105	4,432	17,421	21,800
Oklahoma	2,614	5,119	16,081	13,375	2,602	5,060	16,103	13,489
Oregon	2,704	6,760	16,947	19,463	2,699	6,734	16,991	19,456
Pennsylvania	3,026	5,019	14,175	27,207	3,053	4,929	14,266	27,010
Rhode Island	5,107	5,982	22,972	21,574	5,263	6,217	22,111	22,530
South Carolina	2,818	4,941	13,247	13,704	2,813	4,702	13,223	14,304
South Dakota	2,146	6,031	19,587	15,559	2,147	6,032	19,599	15,531
Tennessee	2,644	5,338	10,262	12,694	2,644	5,326	10,253	12,766
Texas	3,345	7,131	15,680	10,495	3,369	6,936	15,531	10,723
Utah	3,723	4,857	23,896	14,468	3,706	4,806	23,989	14,578
Vermont	5,877	5,708	13,984	10,981	5,955	5,532	13,924	11,272
Virginia	2,622	5,494	17,251	14,693	2,617	5,411	17,194	14,908
Washington	2,376	5,107	17,432	19,207	2,463	5,214	17,112	19,027
West Virginia	2,467	5,759	11,584	15,863	2,507	5,762	11,505	15,919
Wisconsin	1,902	3,329	17,389	11,262	1,895	3,325	17,297	11,398
Wyoming	3,250	6,756	24,644	21,662	3,249	6,755	24,645	21,665
State average	**$2,973**	**$5,497**	**$19,135**	**$17,609**	**$2,981**	**$5,381**	**$19,086**	**$17,841**

Source: GAO analysis of Centers for Medicare & Medicaid Services data. | GAO-14-456

Notes: Estimates of spending per enrollee include federal and state spending on regular Medicaid payments to providers and managed care plans for covered services provided to enrollees, as well DSH and non-DSH supplemental payments, but do not include administrative costs. Estimates also do not reflect states' subsequent changes, including adjustments or collections, to the spending originally reported for this year. Enrollment is measured in terms of full-year-equivalent enrollees. Both enrollment and expenditure data include all enrollees, regardless of the scope of benefits offered. State average spending per enrollee represents the sum of each state's estimated spending per enrollee divided by the number of states. For purposes of this table we refer to the District of Columbia as a state.

[a]For this method, we distributed DSH payments among eligibility groups based on each group's share of state spending for relevant services. Specifically, we distributed inpatient DSH payments based on spending for hospital inpatient and outpatient services and mental health facility DSH payments based on spending for mental health facilities, nursing facilities, and public and private intermediate care facilities for individuals with intellectual disability.

[b]For this method, we distributed DSH payments among eligibility groups based on each group's share of total spending.

[c]We excluded Maine from eligibility-group level estimates because the state was unable to report spending by service category for fiscal year 2008.

[d]We excluded Massachusetts from the estimates because of errors in fiscal year 2008 CMS data for this state.

Appendix V: State DSH Payments as a Percentage of Total State Medicaid Spending and Effect on Overall Spending per Enrollee

Federal Medicaid law requires states to make DSH payments to qualifying hospitals that serve large numbers of Medicaid and uninsured low-income patients. DSH payments represent varying proportions of states' total Medicaid spending, ranging from 0 to 18 percent. Thus the effect of including these payments in estimates of state spending per enrollee also varies. Table 4 presents DSH payments as a percentage of each state's total Medicaid spending for fiscal year 2008, as well as overall state spending per enrollee excluding and including DSH payments.

Table 4: Disproportionate Share Hospital (DSH) Payments as a Percentage of Total State Medicaid Spending and Overall Spending per Enrollee Excluding and Including DSH Payments, Fiscal Year 2008

		Overall spending per enrollee	
State	DSH payments as percentage of total state Medicaid spending	Excluding DSH payments	Including DSH payments
Alabama	10.5%	$4,840	$5,410
Alaska	1.6	10,931	11,111
Arizona	1.6	6,231	6,331
Arkansas	0.3	5,898	5,913
California	6.1	3,604	3,838
Colorado	5.2	7,420	7,827
Connecticut	5.9	9,091	9,659
Delaware	0.5	7,296	7,333
District of Columbia	4.8	10,009	10,510
Florida	2.3	6,429	6,577
Georgia	5.2	5,744	6,062
Hawaii	2.5	6,585	6,756
Idaho	1.8	7,424	7,561
Illinois	1.7	5,703	5,799
Indiana	7.0	7,492	8,052
Iowa	0.6	7,566	7,608
Kansas	3.5	8,402	8,702
Kentucky	4.1	6,716	7,003
Louisiana	16.6	5,498	6,593
Maine	2.3	7,281	7,452
Maryland	1.9	9,365	9,548
Massachusetts[a]	—	—	—

State	DSH payments as percentage of total state Medicaid spending	Overall spending per enrollee	
		Excluding DSH payments	Including DSH payments
Michigan	4.5	5,927	6,209
Minnesota	1.7	11,120	11,308
Mississippi	5.1	5,532	5,827
Missouri	9.9	7,831	8,695
Montana	2.0	9,422	9,613
Nebraska	1.7	8,595	8,742
Nevada	6.3	6,582	7,026
New Hampshire	17.8	8,926	10,854
New Jersey	16.3	9,721	11,612
New Mexico	0.9	7,072	7,133
New York	4.8	10,764	11,310
North Carolina	4.3	7,144	7,462
North Dakota	0.2	10,511	10,535
Ohio	0.0	7,510	7,510
Oklahoma	1.4	6,285	6,376
Oregon	1.9	8,036	8,191
Pennsylvania	4.6	8,615	9,030
Rhode Island	6.4	10,938	11,680
South Carolina	10.0	5,763	6,401
South Dakota	0.2	7,050	7,064
Tennessee	0.6	5,792	5,827
Texas	6.5	6,117	6,540
Utah	1.3	7,780	7,882
Vermont	3.5	7,439	7,706
Virginia	3.4	7,294	7,554
Washington	5.1	6,437	6,785
West Virginia	3.2	6,812	7,037
Wisconsin	1.7	6,320	6,432
Wyoming	0.0	8,356	8,358
State average	**4.2%**	**$7,504**	**$7,847**

Source: GAO analysis of Centers for Medicare & Medicaid Services data. | GAO-14-456

Notes: Total state spending and spending per enrollee include federal and state spending on regular Medicaid payments to providers and managed care plans for covered services provided to enrollees as well as DSH and non-DSH supplemental payments. Estimates do not reflect states' subsequent changes, including adjustments or collections, to the spending originally reported for this year and do not include administrative costs. Enrollment is measured in terms of full-year-equivalent enrollees. Both enrollment and expenditure data include all enrollees, regardless of the scope of benefits

offered. The state averages represent the sum of state percentages or state spending per enrollee divided by the number of states. For the purposes of this table, we refer to the District of Columbia as a state.

[a]We excluded Massachusetts because of errors in fiscal year 2008 CMS data for this state.

Appendix VI: Distribution of State Medicaid Enrollees by Eligibility Group

Table 5 illustrates that the distribution of Medicaid enrollees in each of the four major Medicaid eligibility groups (children, adults, disabled, and aged)—a program characteristic known to influence overall per-enrollee Medicaid spending—varied widely by state in calendar year 2008.

Table 5: Distribution of Medicaid Enrollees by Eligibility Group and State, Calendar Year 2008

	Percentage of Medicaid Enrollees[a]			
State	**Children**	**Adults**	**Disabled**	**Aged**
Alabama	49.5%	15.0%	24.3%	11.1%
Alaska	60.0	21.3	12.9	5.7
Arizona	45.2	40.0	9.2	5.5
Arkansas	57.3	16.1	17.5	9.1
California	40.0	41.8	10.8	7.4
Colorado	58.4	16.8	15.3	9.4
Connecticut	51.9	23.9	12.3	11.9
Delaware	42.7	38.5	11.8	7.0
District of Columbia	47.3	23.3	22.7	6.7
Florida	50.3	19.3	18.1	12.3
Georgia	57.4	16.6	17.9	8.1
Hawaii	46.3	33.6	10.7	9.4
Idaho	63.4	12.6	16.7	7.3
Illinois	55.9	25.1	13.4	5.6
Indiana	58.0	20.6	14.0	7.5
Iowa	48.4	28.1	15.0	8.5
Kansas	55.8	14.6	19.6	10.0
Kentucky	49.1	15.3	25.1	10.6
Louisiana	58.2	15.8	16.9	9.1
Maine	37.1	29.5	17.2	16.2
Maryland	56.2	21.0	16.2	6.6
Massachusetts	33.0	40.3	16.2	10.5
Michigan	53.8	23.8	15.6	6.7
Minnesota	48.4	25.5	14.7	11.5
Mississippi	49.6	16.7	23.4	10.3
Missouri	55.7	17.2	18.2	8.9
Montana	54.4	18.5	18.4	8.7
Nebraska	61.2	16.1	13.7	8.9
Nevada	56.1	19.9	15.0	8.9

State	Percentage of Medicaid Enrollees[a]			
	Children	Adults	Disabled	Aged
New Hampshire	59.7	13.6	16.7	10.0
New Jersey	51.4	20.5	16.9	11.1
New Mexico	57.5	25.5	12.3	4.7
New York	38.9	36.8	15.0	9.3
North Carolina	53.2	19.3	17.2	10.2
North Dakota	51.4	21.2	15.0	12.4
Ohio	53.1	21.5	17.3	8.1
Oklahoma	60.7	16.7	14.5	8.1
Oregon	50.1	23.5	16.5	9.9
Pennsylvania	45.1	19.8	24.5	10.6
Rhode Island	45.1	24.6	20.9	9.5
South Carolina	52.2	21.9	17.4	8.5
South Dakota	62.2	15.4	14.5	7.9
Tennessee	49.7	20.2	23.2	6.9
Texas	62.2	14.1	13.6	10.1
Utah	55.2	26.8	13.2	4.8
Vermont	38.2	37.1	14.0	10.7
Virginia	56.1	15.4	18.0	10.5
Washington	54.9	21.9	15.7	7.6
West Virginia	47.4	14.6	28.7	9.3
Wisconsin	43.9	29.4	14.5	12.2
Wyoming	65.3	14.3	13.3	7.1
State average	**52.0%**	**22.4%**	**16.6%**	**9.0%**

Source: GAO analysis of Centers for Medicare & Medicaid Services (CMS) data. | GAO-14-456

Notes: State average represents the sum of the state percentages divided by the number of states. For purposes of this table, we refer to the District of Columbia as a state.

[a]Based on CMS *Medicaid Analytic eXtract 2008 Chartbook* data for calendar year 2008.

Appendix VII: Selected Factors That Are Known to Influence Health Care Spending, by State

Tables 6 and 7 illustrate state variation on selected factors that are known to influence health care spending, such as indicators of enrollee health services needs and scope of benefits received.

Table 6: State Variation on Selected Factors That Can Influence Health Care Spending for Aged Medicaid Enrollees, Fiscal or Calendar Year 2008

State	Percentage of aged Medicaid enrollees who were 85 and older[a]	Percentage of aged Medicaid enrollees receiving long-term care services[a]	Percentage of aged Medicaid enrollees ever institutionalized during the year[b,c]
Alabama	23.7	23.5	17.8
Alaska	16.8	39.7	8.2
Arizona[d]	17.9	—	—
Arkansas	23.1	34.6	21.9
California	18.3	30.3	10.2
Colorado	22.2	45.0	21.9
Connecticut	30.7	51.1	35.7
Delaware	23.7	26.6	21.8
District of Columbia	21.2	27.7	20.4
Florida	21.1	18.4	14.2
Georgia	22.4	23.4	20.4
Hawaii	22.2	23.3	15.9
Idaho	22.6	47.4	22.2
Illinois	27.0	33.4	28.2
Indiana	24.4	37.9	36.3
Iowa	30.2	65.6	37.2
Kansas	28.8	54.2	35.0
Kentucky	22.7	32.1	21.4
Louisiana	19.1	25.2	20.3
Maine[e]	21.9	—	—
Maryland	24.8	32.0	28.9
Massachusetts[f]	—	—	23.6
Michigan	22.7	40.9	26.3
Minnesota	33.4	36.0	23.9
Mississippi	23.3	27.3	21.1
Missouri	24.5	48.4	30.8
Montana	31.3	52.9	42.5
Nebraska	29.7	48.4	37.3
Nevada	16.6	28.2	13.7

State	Percentage of aged Medicaid enrollees who were 85 and older[a]	Percentage of aged Medicaid enrollees receiving long-term care services[a]	Percentage of aged Medicaid enrollees ever institutionalized during the year[b,c]
New Hampshire	30.9	51.0	41.0
New Jersey	29.9	38.3	26.0
New Mexico[d]	22.4	—	—
New York	26.3	38.0	22.0
North Carolina	22.7	40.5	18.9
North Dakota	36.8	54.9	46.1
Ohio	23.7	47.4	34.9
Oklahoma	20.1	44.4	25.5
Oregon	21.3	44.9	13.9
Pennsylvania	24.5	32.5	29.6
Rhode Island	33.0	38.2	35.8
South Carolina	23.6	29.1	18.7
South Dakota	38.9	49.6	42.5
Tennessee	24.8	24.7	23.4
Texas	19.1	35.9	17.0
Utah	19.4	28.7	23.3
Vermont	26.3	27.3	16.4
Virginia	21.9	31.4	21.2
Washington	20.8	45.8	16.1
West Virginia	18.1	29.3	24.3
Wisconsin[d]	33.2	—	—
Wyoming	26.4	48.7	35.7
State average	**24.6**	**37.7**	**24.5**

Source: GAO analysis of Centers for Medicare & Medicaid Services (CMS) data. | GAO-14-456

Notes: State average represents the sum of state percentages, divided by the number of states. For purposes of this table, we refer to the District of Columbia as a state.

[a]Based on CMS Medicaid Statistical Information System (MSIS) data for fiscal year 2008.

[b]Based on CMS *Medicaid Analytic eXtract 2008 Chartbook* data for calendar year 2008.

[c]Institutionalized enrollees include those receiving Medicaid-covered services in nursing homes, intermediate care facilities for individuals with intellectual disability, mental hospitals for the aged, or inpatient psychiatric facilities for those under age 21 at any time in 2008.

[d]Excluded from long-term care service use and ever-institutionalized data because more than 2 percent of all enrollees in the state—and therefore likely a higher percentage of aged enrollees—received long-term care services through managed care plans and therefore were not represented in the fee-for-service data used to identify enrollees who received long-term care services during the year.

[e]Excluded from long-term care service use and ever-institutionalized data because of the state's inability to accurately report data related to service use in 2008.

[f]Excluded from percentage of aged who were 85 years or older and long-term care service use data because of errors in fiscal year 2008 CMS MSIS data.

Table 7: State Variation on Selected Factors That Can Influence Health Care Spending for Children and Adults, Fiscal or Calendar Year 2008

State	Percentage of child Medicaid enrollees in foster care[a]	Percentage of adult Medicaid enrollees receiving only family planning benefits[b]	Percentage of adult state residents who reported being obese[c]	Percentage of adult state residents who reported smoking tobacco[c]
Alabama	2%	53%	32%	22%
Alaska	5	0	27	21
Arizona	2	1	26	17
Arkansas	2	61	30	22
California	4	55	24	14
Colorado	6	0	19	18
Connecticut	2	0	21	16
Delaware	3	4	28	18
District of Columbia	6	0	22	16
Florida	3	7	25	18
Georgia	4	0	28	19
Hawaii	7	0	23	16
Idaho	3	0	25	17
Illinois	5	5	27	20
Indiana	3	0	27	24
Iowa	5	20	27	19
Kansas	8	0	28	18
Kentucky	4	0	30	26
Louisiana	2	24	29	22
Maine	4	0	26	19
Maryland	5	15	27	16
Massachusetts[d]	—	0	22	16
Michigan	4	10	30	20
Minnesota	3	15	25	17
Mississippi	1	30	33	23
Missouri	6	7	29	24
Montana	7	0	24	18
Nebraska	11	0	27	18
Nevada	7	0	26	22

State	Percentage of child Medicaid enrollees in foster care[a]	Percentage of adult Medicaid enrollees receiving only family planning benefits[b]	Percentage of adult state residents who reported being obese[c]	Percentage of adult state residents who reported smoking tobacco[c]
New Hampshire	3	0	25	17
New Jersey	6	0	24	16
New Mexico	2	17	26	19
New York	3	3	25	18
North Carolina	3	12	30	21
North Dakota	5	0	28	19
Ohio	6	0	29	21
Oklahoma	3	19	31	25
Oregon	7	0	25	17
Pennsylvania	6	11	28	21
Rhode Island	7	1	22	17
South Carolina	3	27	31	21
South Dakota	8	0	28	18
Tennessee	3	0	31	23
Texas	2	0	29	19
Utah	6	0	23	10
Vermont	4	0	23	17
Virginia	3	6	26	18
Washington	3	31	26	16
West Virginia	4	0	32	26
Wisconsin	5	22	26	19
Wyoming	7	0	25	21
State average	**4%**	**9%**	**27%**	**19%**

Source: GAO analysis of Centers for Medicare & Medicaid Services (CMS) and Centers for Disease Control and Prevention (CDC) data. | GAO-14-456

Notes: State average represents the sum of state percentages, divided by the number of states. For purposes of this table, we refer to the District of Columbia as a state.

[a]Based on CMS Medicaid Statistical Information System (MSIS) fiscal year 2008 data.

[b]Based on CMS *Medicaid Analytic eXtract 2008 Chartbook* data for calendar year 2008.

[c]Based on CDC's Behavioral Risk Factor Surveillance Survey data for calendar year 2008.

[d]Excluded from foster care data because of errors in fiscal year 2008 CMS MSIS data.

Appendix VIII: GAO Contacts and Staff Acknowledgments

GAO Contact

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Staff Acknowledgments

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