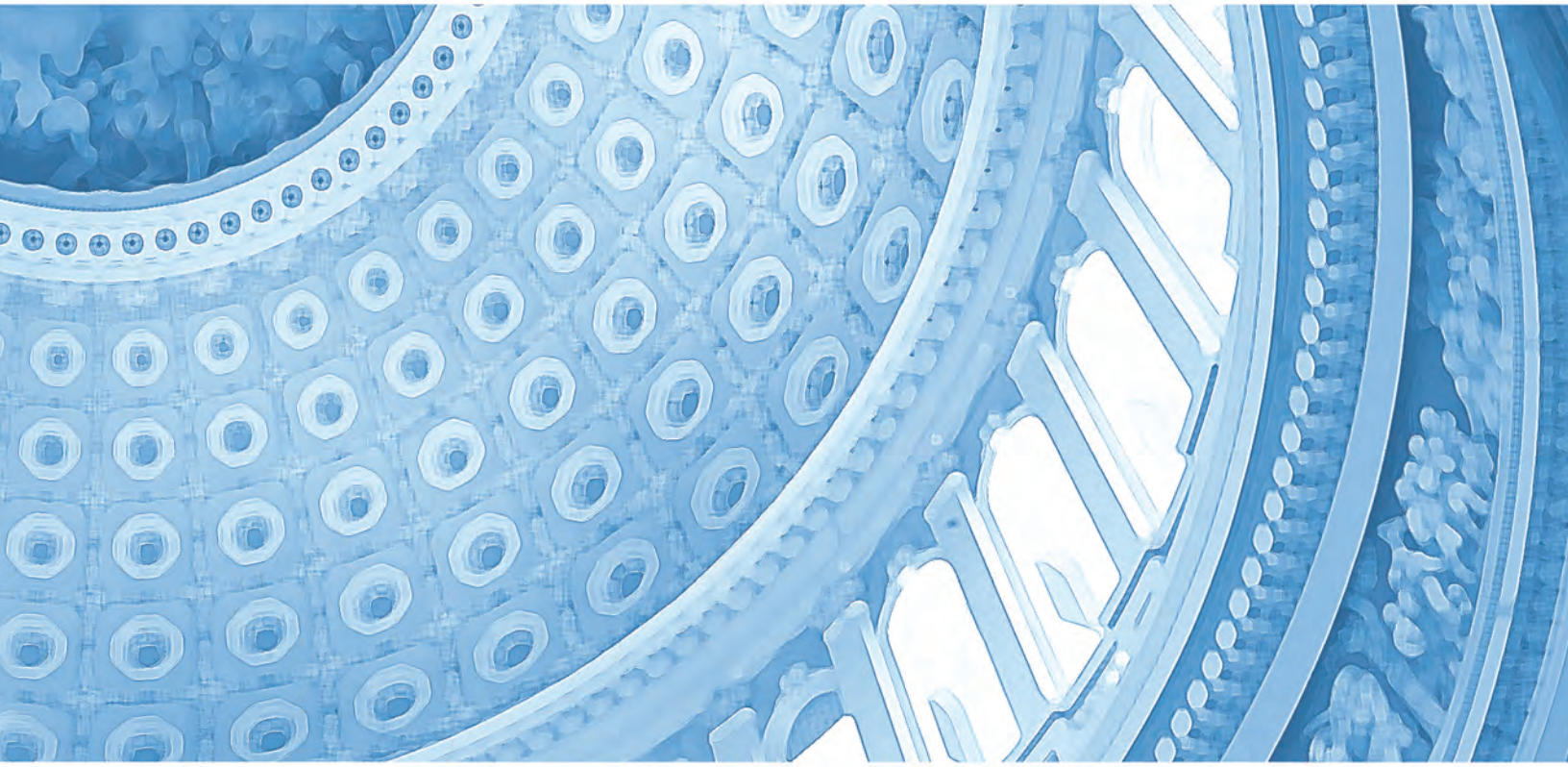
MACPAC

Medicaid and CHIP Payment and Access Commission



Report to the Congress on Medicaid and CHIP

June 2012

MACPAC

Medicaid and CHIP Payment and Access Commission

The Medicaid and CHIP Payment and Access Commission (MACPAC) was established in the Children's Health Insurance Program Reauthorization Act of 2009, and its charge was later revised in the Patient Protection and Affordable Care Act of 2010. Appointed by the U.S. Comptroller General, the 17 Commissioners have diverse backgrounds, offer broad perspectives on Medicaid and CHIP, and represent different regions across the United States.

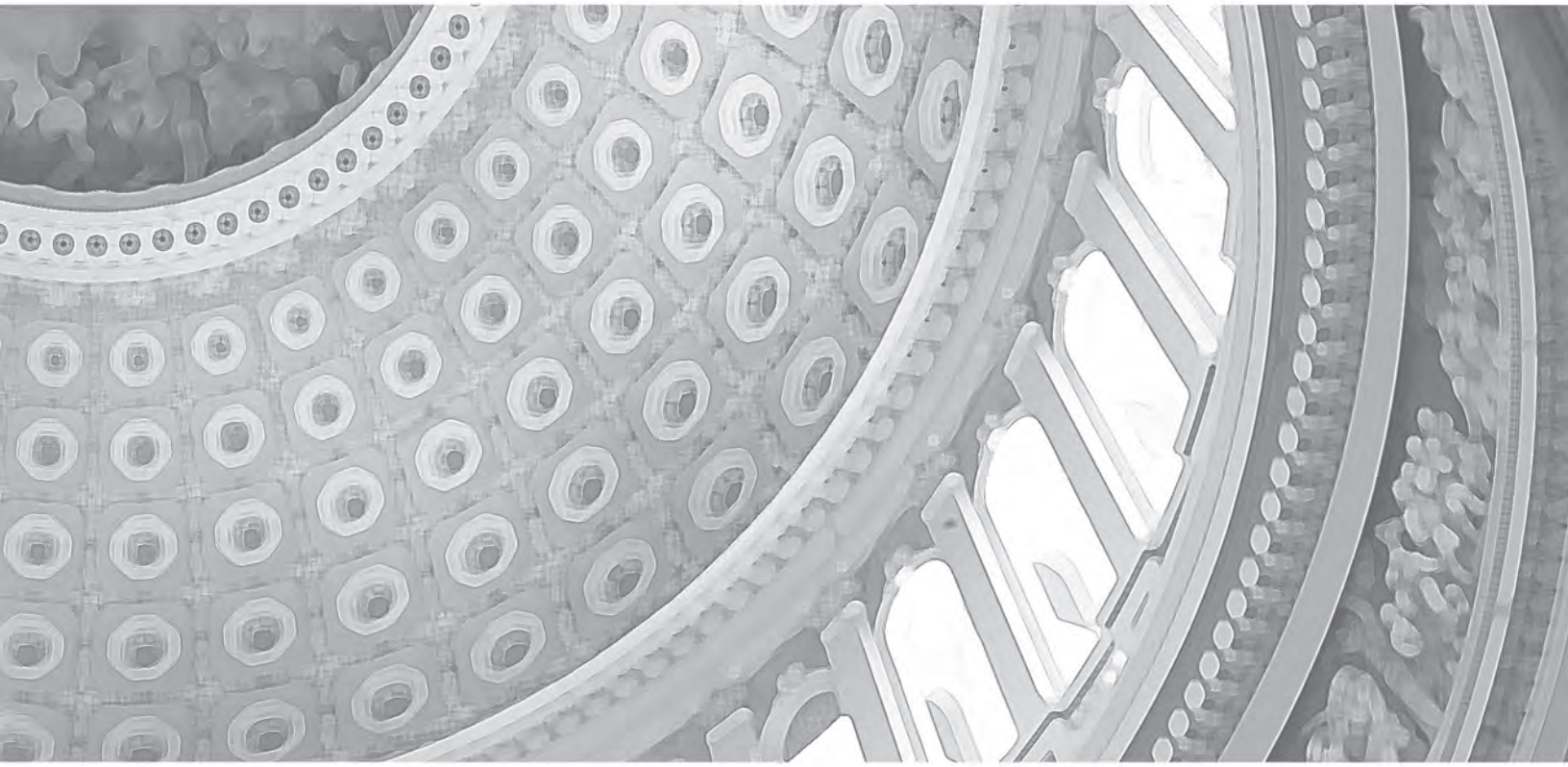
The Commission is a non-partisan, federal, analytic resource for the Congress on Medicaid and CHIP. MACPAC is the first federal agency charged with providing policy and data analysis to the Congress on Medicaid and CHIP, and for making recommendations to the Congress and the Secretary of the U.S. Department of Health and Human Services on a wide range of issues affecting these programs. The Commission conducts independent policy analysis and health services research on key Medicaid and CHIP topics, including but not limited to:

- Eligibility, enrollment, and benefits;
- Payment;
- Access to care;
- Quality of care;
- Interactions between Medicaid and Medicare; and
- Data development to support policy analysis and program accountability.

As required in its statutory charge, the Commission will submit reports to the Congress on March 15 and June 15 of each year. As applicable, each member of the Commission will vote on recommendations contained in the reports. The Commission's reports provide the Congress with a better understanding of the Medicaid and CHIP programs, their roles in the U.S. health care system, and the key policy and data issues outlined in the Commission's statutory charge.

MACPAC

Medicaid and CHIP Payment and Access Commission



Report to the Congress on Medicaid and CHIP

June 2012

MACPAC

Medicaid and CHIP Payment and Access Commission

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June 15, 2012

The Honorable Joseph R. Biden
President of the Senate
U.S. Capitol
Washington, DC 20510

The Honorable John A. Boehner
Speaker of the House
U.S. House of Representatives
U.S. Capitol
H-232
Washington, DC 20515

Dear Mr. Vice President and Mr. Speaker:

On behalf of the Medicaid and CHIP Payment and Access Commission (MACPAC), I am pleased to submit our June 2012 *Report to the Congress on Medicaid and CHIP*. As outlined in our authorizing statute, MACPAC is a non-partisan Congressional Commission established to conduct objective policy and data analysis to assist the Congress in overseeing the Medicaid program and the State Children's Health Insurance Program (CHIP).

This June 2012 Report continues the Commission's analysis of the role of Medicaid and CHIP in the context of the overall health system. In FY 2011, Medicaid financed care for an estimated 70 million people at a cost of $432 billion and CHIP served 8 million children at a cost of $12 billion. Medicaid and CHIP, therefore, are significant purchasers of health care in the nation and an integral part of the U.S. health care financing system. Their role helps to provide care to millions of low-income people who would otherwise remain uninsured or underinsured, improve population health, and support other payers by covering some of the nation's highest-need and highest-cost patients.

This Report focuses on the role of these programs as purchasers of care and on the link between ensuring access to care for beneficiaries and value-based purchasing of health services from providers and plans. Understanding whether access to necessary care needs to be improved – by how much, for which populations, for what services, in which delivery arrangements and under what payment approaches – helps to shape purchasing strategies and underlies performance improvement. The introductory section lays out key areas to pursue in examining Medicaid and CHIP as purchasers in the health care market.

Data and information on the availability and use of services are critical to an assessment of access to care for a given population. In the first section of this Report, we identify available data for measuring access in the short and long terms, highlight considerations for using various data sources, and review key issues for measuring access to care at the national and state levels.

In this Report, we also continue our assessment of access to care for Medicaid beneficiaries compared to those with employer-sponsored insurance and those who are uninsured. This Report's analysis focuses on adults age 19 to 64 and complements the analysis of access to care for children in our March 2012 Report. After using statistical techniques to control for

factors such as income, health status and other socio-economic characteristics, the Commission's analysis finds that non-elderly adults enrolled in Medicaid report substantially better access to care than do uninsured adults and similar but more mixed results when compared to access among adults with employer-sponsored insurance.

As in each of our reports, the June 2012 Report includes the Medicaid and CHIP Program Statistics (MACStats) supplement, which provides national and state-level data on enrollment, spending, health and other characteristics of Medicaid and CHIP populations, and Medicaid managed care. Going forward, we intend to examine additional survey and administrative data sources, as well as additional data on persons dually eligible for Medicare and Medicaid.

We hope that this Report and the ongoing analytic work of the Commission will serve to inform and assist the Congress in its deliberations to identify ways to improve access, quality, payment, and program accountability in Medicaid and CHIP.

Sincerely,

Diane Rowland, ScD
Chair

Enclosure

Acknowledgements

The Commission would like to thank the many people who provided valuable insight to the June 2012 *Report to the Congress on Medicaid and CHIP*.

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Report Summary

Medicaid is among the nation's largest purchasers of health services, spending $432 billion in fiscal year (FY) 2011 on health care and long-term services and supports (LTSS) for 70 million enrollees. In the same year, the State Children's Health Insurance Program (CHIP) made expenditures of nearly $12 billion on behalf of 8 million children. Medicaid enrollees are an especially diverse group—including low-income children and adults, pregnant women, persons with life-long disabilities, and seniors—some of whom are relatively healthy and others who are high users of acute care and LTSS. Medicaid plays a critical role for its enrollees, and it also plays a significant role in the health care system, helping to provide access for millions of people who would otherwise remain uninsured or underinsured, improving population health, and shoring up other payers by covering some of the nation's highest-need and highest-cost patients.

As part of its statutory charge, each June the Medicaid and CHIP Payment and Access Commission (the Commission) reports on its review of the Medicaid and CHIP programs within the context of the health care system. This Report to the Congress focuses on issues that are central to the goals of the Medicaid program, including obtaining value as a purchaser of health care services, monitoring enrollees' access to services, and evaluating access to care for non-elderly adults. In support of Medicaid and CHIP policy analysis, the Report also includes Medicaid and CHIP Program Statistics (MACStats), which provides statistics on program enrollees and spending. MACStats is based on both federal administrative data and survey data, providing a detailed profile of the Medicaid and CHIP programs in a single source.

The Report is divided into several sections and a statistical supplement.

- **Access and Value: Issues for Medicaid and CHIP as Purchasers** focuses on the role of Medicaid and CHIP as significant purchasers of health care and on the goal of achieving value within the programs.
  - **Section A: Data Sources for Monitoring Access to Care in Medicaid and CHIP** identifies principles for developing a monitoring approach focused on both immediate and ongoing access issues.
  - **Section B: Access to Care for Non-elderly Adults** presents new analysis evaluating access to care, by comparing non-elderly adults enrolled in Medicaid with those having employer-sponsored insurance and those who are uninsured.
- **MACStats** presents updated data on the Medicaid and CHIP populations, Medicaid enrollment and benefit spending, and Medicaid managed care. MACStats sections include:

- Trends in Medicaid Enrollment and Spending;
- Health and Other Characteristics of Medicaid/CHIP Populations;
- Medicaid Enrollment and Benefit Spending;
- Medicaid Managed Care; and
- Technical Guide to the June 2012 MACStats.

Access and Value: Issues for Medicaid and CHIP as Purchasers

This section describes the role of Medicaid and CHIP as purchasers of health care and highlights the importance of evaluating access as a tool for monitoring and improving program performance. Financed by both the federal and state governments, Medicaid and CHIP must continually strive to improve their performance in providing access to appropriate services while assuring quality, economy, and efficiency.

Like all purchasers of health services, Medicaid and CHIP seek to determine whether the basic requirement of providing sufficient access to necessary, efficient, and effective services is being met, with enrollees receiving appropriate care at the right time in the right setting. Achieving this goal may help improve quality and lower costs, thus achieving better health outcomes and better value.

Medicaid and CHIP as purchasers. Medicaid and CHIP are especially important payers for specific services—notably, pediatrics, obstetrics, behavioral health, and LTSS. In 2011, for example, Medicaid and CHIP provided coverage, at some time during the year, to 40 million children, roughly half the U.S. child population. In 2009, Medicaid financed 48 percent of the nation's spending on LTSS.

Getting to a health care system that delivers higher value health care may take concerted action on a number of fronts. At a minimum, more coordinated delivery systems are needed and payments need to be aligned with value. Increasingly, payers, including Medicaid and CHIP, are assigning accountability for outcomes and rewarding efficiency and quality.

States have sought to refocus service delivery on improved coordination, more timely access to primary and preventive care, and better home and community-based supports for people with disabilities and the frail elderly. Some states are also reorganizing the delivery of primary and chronic disease services with an emphasis on improving coordination and outcomes.

These innovations are paired with efforts to collect better information—on the characteristics of patients and on the quality, cost, and outcomes of their care—to better evaluate how care teams, delivery systems, and payment incentives are working to enhance quality, lower costs, and improve program accountability.

Improving program performance and accountability. As purchasers, state Medicaid and CHIP programs are fundamentally concerned with assuring access to care—that is, with assuring that the supply of participating providers is sufficient to provide enrollees with needed services in a timely fashion. The goal of any purchasing strategy, however, is not to facilitate any and all access, but rather to provide efficient and effective access that assures that enrollees get the right care at the right time in the right setting.

Complete and timely assessments of enrollees' access to appropriate care—across the spectrum of services, delivery models, and geographic areas, and for distinct enrollee populations—are needed to assess the impact of service and payment innovations and, ultimately, to judge the

success of the programs' purchasing strategies. Any meaningful effort to assess access in today's environment, however, also needs to take into account concerns about cost, value, and strengthening program accountability and integrity.

Section A: Data Sources for Monitoring Access to Care in Medicaid and CHIP

With such substantial investments and the need for prudent government purchasing, it is important for both federal and state governments to have mechanisms in place to measure and monitor access to high-quality and appropriate services for Medicaid and CHIP enrollees.

Section A examines:

- the Commission's conceptual framework for monitoring access to care for Medicaid and CHIP enrollees;
- principles for selecting data sources for monitoring access for use by policymakers at the federal and state levels;
- approaches for the expedient identification of emerging or potential access issues; and
- existing federal and state data sources for monitoring trends and variations in access to care over a longer time frame.

Principles for guiding the development of an access monitoring approach. The Commission has defined a number of principles that may be helpful for developing an effective and efficient access monitoring system at either the state or federal level that:

- reflects the unique characteristics of the Medicaid and CHIP programs and their enrollees;
- complements and leverages existing efforts to monitor access;
- allows for timely proactive and reactive monitoring;
- considers the broader environmental context of the Medicaid and CHIP populations;
- uses data sources that reflect multiple settings;
- links access monitoring to quality and health outcomes; and
- provides a mechanism for feedback and information sharing.

Monitoring immediate changes and ongoing trends. Effective access monitoring efforts are ongoing and focused on both the immediate and the long term. Ultimately, the goal should be not only to detect existing problems, but also to identify emerging and potential access issues. The rapid identification of access issues can help mitigate their effects, while more in-depth work to assess trends in access can provide essential information on the effectiveness of payment and other program policies.

Section B: Access to Care for Non-elderly Adults

Drawing on the Commission's access framework presented in the March 2011 Report to the Congress and building on the Commission's March 2012 analysis of access to care for children, Section B presents an overview of how access to care and service use are affected by the health insurance status of non-elderly adults. The analysis of data from the National Health Interview Survey and the Medical Expenditure Panel Survey assesses differences in access to care attributable to the specific source of coverage. Because the characteristics of Medicaid enrollees differ significantly from adults with employer-sponsored insurance (ESI) and the uninsured, this study

attempts to control for their differing health, demographic, and socioeconomic characteristics.

These findings provide a broad, national snapshot of how access to care for non-elderly adults enrolled in Medicaid differs from access to care for similarly situated adults who have ESI or no insurance. The study does not compare Medicaid subpopulations. Also, while household surveys provide detailed information that may not be available from other sources, they rely on self-reported information.

A complete assessment of access should include findings from multiple sources. However, this analysis provides information from the perspective of enrollees regarding the effect of Medicaid coverage on access, an important piece of the overall picture.

Non-elderly adults enrolled in Medicaid compared to uninsured individuals. Survey results show that, in comparison with similarly situated uninsured non-elderly adults, those enrolled in Medicaid reported substantially better access to care for almost every measure analyzed. Compared to uninsured non-elderly adults, those enrolled in Medicaid reported they were:

- more likely to have a usual source of care;
- more likely to have had a visit to a general doctor in the past year;
- more likely to have had a specialist visit in the past year; and
- less likely to have delayed medical care in the past year.

Non-elderly adults enrolled in Medicaid compared to those with ESI. Comparisons between non-elderly adults with Medicaid and similarly situated non-elderly adults with ESI yield a more complex picture. Their health care access and use are comparable for many of the survey measures, such as having a usual source of care and having a visit in an outpatient setting. Adults with Medicaid reported better results on some measures, such as lower levels of delaying medical care because of costs. However, relative to similarly situated adults with ESI, adults with Medicaid reported higher levels of delayed care for other reasons (e.g., lack of transportation) and higher emergency department utilization.

The findings presented in Section B show that adults enrolled in Medicaid reported that they have substantially better access to care than similarly situated uninsured adults and, in most cases, experience comparable access as similarly situated adults with ESI. Still, because Medicaid serves a disproportionate share of adults from certain racial and ethnic minority groups with lower incomes and worse health status, the program has an important but challenging role to ensure timely access to appropriate care.

MACStats: Medicaid and CHIP Program Statistics

MACStats is a standing section in all Commission Reports to the Congress. In this Report, MACStats includes trends in Medicaid spending and enrollment, health and other characteristics of the Medicaid and CHIP populations, state-specific information about program enrollment and spending, and data regarding Medicaid managed care. Key points from MACStats include:

Section 1: Trends in Medicaid Enrollment and Spending

- Trends in Medicaid spending and enrollment reflect shifts in federal and state Medicaid policy—such as expansions of eligibility to new groups of individuals—in addition to changing economic conditions. For example, recent recessions spurred enrollment growth in both the early and late 2000s.

- Although enrollment growth has generally shown greater annual fluctuations among non-disabled children and adults under age 65, enrollment among individuals qualifying for Medicaid on the basis of a disability has experienced the largest annual growth and accounted for half of real Medicaid spending growth between FY 1975 and FY 2009.

Section 2: Health and Other Characteristics of Medicaid/CHIP Populations

- Medicaid/CHIP enrollees generally report being in poorer health and using more health services than individuals who have other health insurance or who are uninsured.
- Even within the same age group, Medicaid/CHIP enrollees are a diverse population. For example, nearly 60 percent of Medicaid enrollees with disabilities age 19 to 64 reported being in fair or poor health, compared to 20 percent of the other Medicaid enrollees in that age group.

Section 3: Medicaid Enrollment and Benefit Spending

- Enrollees eligible on the basis of a disability and those who are age 65 and older account for 25 percent of total enrollees, but 67 percent of the program's spending on benefits.
- Enrollees eligible on the basis of a disability and those who are age 65 and older have average per person Medicaid benefit spending that is three to five times that of other enrollees.
- LTSS users account for only about 7 percent of Medicaid enrollees, but nearly half of all Medicaid spending. LTSS users have average per person Medicaid benefit spending that is more than 10 times that of non-LTSS users.

Section 4: Medicaid Managed Care

- All but two states report using some combination of managed care that involves comprehensive risk-based plans, limited-benefit plans, and primary care case management (PCCM) programs.
- The national percentage of Medicaid enrollees in any form of managed care is more than 70 percent (including limited-benefit plans and PCCM programs), and nearly half of enrollees are enrolled in comprehensive risk-based plans.
- The share of enrollees in comprehensive risk-based plans in FY 2009 ranged from 61 percent among non-disabled child enrollees to 12 percent among enrollees age 65 and older.
- Among individuals dually enrolled in Medicaid and Medicare, 38 percent were enrolled in some form of Medicaid managed care in FY 2009, but only about 10 percent were in Medicaid comprehensive risk-based plans.

Section 5: Technical Guide to the June 2012 MACStats

- Enrollment and spending numbers can vary depending on the source of data, time period examined, and other factors. For example, administrative data indicate that nearly half of all children living in the United States were *ever* enrolled in Medicaid or CHIP sometime during FY 2009 (48 percent). However, the number of children enrolled at a particular *point in time* is much smaller (37 percent).
- The FY 2009 Medicaid benefit spending amounts shown in the June 2012 MACStats were calculated based on Medicaid Statistical Information System data that have been adjusted to match spending reported by states in CMS-64 data. These adjustments are made in an effort to reflect more complete totals of Medicaid benefit spending across states and by eligibility group and other enrollee characteristics.

Access and Value: Issues for Medicaid and CHIP as Purchasers

Access and Value: Issues for Medicaid and CHIP as Purchasers

This introduction describes the role of Medicaid and the State Children's Health Insurance Program (CHIP) as purchasers and highlights the importance of access measures as a tool for monitoring and improving program performance. Medicaid is among the nation's largest purchasers of health care, spending $432 billion in fiscal year 2011 on health care and long-term services and supports (LTSS) for 70 million enrollees. In the same year, CHIP made expenditures of nearly $12 billion on behalf of 8 million children. Medicaid accounted for roughly 16 percent of the nation's health care spending in 2010, making the program an important purchaser and positioning Medicaid to be an important contributor to ongoing efforts to improve the quality of health care service delivery, access to care and outcomes of care, and approaches to paying for health care. The opportunities for Medicaid are perhaps greatest where the program is a major purchaser, including, for example, LTSS, behavioral health care, and pediatric and obstetric care.

Medicaid enrollees are an especially diverse group—including low-income children and adults, pregnant women, persons with life-long disabilities, and seniors—some who are relatively healthy and others who have a high need for acute care and LTSS. Medicaid plays a critical role for its enrollees, helping to assure access to health care for millions of people who would otherwise remain uninsured or underinsured. It also plays a significant role in the health care system, improving population health and shoring up providers and other payers by covering some of the nation's highest-need and highest-cost individuals.

As large purchasers—accountable for the efficient use of public resources and facing resource constraints—Medicaid and CHIP should seek to improve program performance in order to achieve better care and better outcomes, while at the same time promoting economy and efficiency. Like all purchasers, Medicaid and CHIP seek to determine whether the basic requirement of providing access to necessary, efficient, and effective services is being met, and work to ensure that enrollees are receiving appropriate services at the right time and in the right setting. Meeting these goals for Medicaid may help improve quality, lower costs, and achieve better value—the objective of any purchasing strategy.

The sections that follow this introduction present information on data for monitoring access (Section A), and report findings on access to care for adults in Medicaid (Section B). These sections begin to identify data sources and monitoring approaches that can be used to examine the implications of changes in health care delivery and in

the market for health care services on Medicaid and CHIP—a core part of the Commission's statutory charge.

Medicaid and CHIP as Purchasers

Medicaid is a major purchaser of health services, and may be an especially important payer in given markets—notably pediatric services, obstetric services, behavioral health care, and LTSS. In 2011, for example, Medicaid and CHIP provided coverage, at some time during the year, to 40 million children—roughly half of the U.S. child population (MACPAC 2012). In 2009, Medicaid financed 48 percent of the nation's spending on LTSS (MACPAC 2011). Medicaid's role as a key health care purchaser will be enhanced over the coming years as current law provisions take effect.

Many state Medicaid and CHIP programs have joined other purchasers in working toward a health care system that delivers higher-value health care. This may include creating more integrated delivery systems and payments aligned with value so that purchasers use their leverage in the market to acquire timely, effective, appropriate, and high-quality services that result in the best outcomes possible.

Innovations in Purchasing

State Medicaid and CHIP agencies, other purchasers, and providers are working to design service delivery and payment innovations that support the goals of purchasing cost-effective, quality care (Wilensky 2011). To achieve their goals, payers are increasingly assigning accountability for outcomes to defined parties and seeking ways to reward those parties for efficiency and quality.

Payment approaches that seek to reward quality are one tool that Medicaid agencies use in their purchasing strategies. States have a long history of undertaking efforts to improve service delivery systems to achieve better access to care, better quality of care, better outcomes of care for people enrolled in Medicaid, and better public health. Some of these efforts are also designed to lower program spending or slow the rate of growth of program spending. States have sought to reorient service delivery to focus on improved coordination of services, more timely access to primary and preventive care, and better home- and community-based supports for people with disabilities and the frail elderly.

States have considerable flexibility within Medicaid to pursue these goals, including flexibility in payment approaches and benefit design. In addition, states have some other unique tools at their disposal, such as scope-of-practice laws and certificate-of-need programs.

Purchasers and providers are also reorganizing primary care and chronic disease care with an emphasis on coordination and outcomes. Their hope is to achieve patient-centered care that integrates the full range of acute and supportive services while also lowering costs. In some cases, state Medicaid and CHIP programs have been at the forefront of such innovations, including:

- **comprehensive, risk-based managed care** that seeks to improve access and quality while moderating costs;
- **patient-centered medical homes** that seek to redesign care delivery with a focus on continuity of care, prompt access, and care delivered and coordinated by teams;
- **primary care case management programs** that actively promote the coordination of services over time and across settings;
- **innovative payment approaches** that reward providers who reduce costs while meeting quality standards;

- **bundled payments for episodes of care** that seek to reduce cost shifting and improve the integration and coordination of care; and
- **global payments to accountable care organizations** to increase care coordination and program availability (Bacharach 2010a, 2010b).

All of these approaches share the common objective of paying for access, efficiency, quality, and outcomes. These innovations are paired with efforts to collect better information—on the characteristics of patients and on the quality, cost, and outcomes of their care—to better evaluate how care teams, delivery systems, and payment incentives are working to improve care and lower costs.

States have opportunities to develop innovative payment and delivery models, especially where Medicaid is an important payer. In other areas, where program payments account for a smaller share of total expenditures, such as inpatient hospital services, Medicaid may need to be aligned with other private and public payers to test approaches that may improve quality and lower costs. New models are testing the feasibility of implementing these cross-payer initiatives (Cavanaugh 2012).

Improving Program Performance and Accountability

In Medicaid, determining whether access to care needs to be improved—and how much, for which populations, for what services, in what delivery systems, and under what payment approaches—will help shape performance improvement. To monitor and improve the performance of Medicaid, however, access must be considered in the context of cost, quality, and value.

Access

As purchasers, state Medicaid programs are fundamentally concerned with access to care—and, more precisely, with assuring that the supply of high-quality providers is sufficient for enrollees to receive needed services in a timely fashion. The goal of any purchasing strategy, however, is not to facilitate any and all access, but rather to provide efficient and effective access that assures that patients get the right care at the right time in the right setting.

The Commission has developed a framework for assessing access to care that defines access in terms of enrollee characteristics, provider availability, service utilization, the appropriateness and efficiency of care, and ultimately the outcomes of health care service use (MACPAC 2011). The framework acknowledges that access to care for Medicaid enrollees depends on many factors, including both policy choices in Medicaid (such as payment policies, provider enrollment practices, and education and outreach strategies) and factors that may not be easily influenced by Medicaid alone (such as provider supply and the structure of local health care delivery systems).

Data Sources for Monitoring Access to Care in Medicaid and CHIP. Section A of this Report explores some of the data and information that can be used to monitor access. The Commission has defined a number of principles for developing an effective and efficient access monitoring system that, for example, allows for timely proactive and reactive monitoring and provides a meaningful mechanism for beneficiary feedback and information sharing. An access monitoring system should reliably detect emerging issues in the short term and over a longer time horizon. It should draw on a wide variety of data sources and approaches and should inform program improvement on an ongoing basis.

States have developed data-collection and monitoring efforts to detect access problems as part of their performance-monitoring and improvement efforts. A recent proposed federal rule provides additional guidance and options for states to improve access-monitoring approaches, including beneficiary feedback mechanisms (CMS 2011). These state and federal initiatives are based on an understanding that complete and timely assessments of enrollees' access to appropriate care—across types of services, delivery models, and geographic areas, and for distinct enrollee populations—are needed to evaluate the impact of service and payment innovations and, ultimately, to judge the success of Medicaid's purchasing strategies.

Approaches to evaluating access to care in Medicaid need to consider the health needs and characteristics of the people served by the program, the service delivery models within which they receive care (fee-for-service, risk-based managed care, or other models), and the characteristics of local health care markets, among other factors. Health care service utilization and access can be expected to vary, for example, by age, health status, number and severity of chronic conditions, race and ethnicity, the presence of functional limitations, and other beneficiary characteristics.

The Commission's work to date has examined access for children (MACPAC 2012) and non-elderly adults in Medicaid (this Report). In addition, the Commission's March 2012 Report to the Congress highlighted the critical role that Medicaid plays for 9.1 million non-elderly persons with disabilities—the fastest growing eligibility group in Medicaid over the past three decades. This same Report recommended the development of innovative service delivery models, such as efforts to improve the coordination of Medicaid-financed services, that may improve the quality and lower the cost of care for persons with disabilities who have Medicaid as their only source of coverage. The Commission also noted the challenges of measuring the quality of care provided to persons with disabilities and described evolving approaches to quality measurement. The Commission made recommendations for more specific, robust, and relevant measures for this population.

Future MACPAC analyses will examine access to care and quality of care for people with disabilities and other important high-need, high-cost subpopulations such as: people who need LTSS, including older, frail adults and younger persons with physical or cognitive disabilities; women with high-risk pregnancies and births; and premature or otherwise at-risk infants and children with special needs.

Access to Care for Non-elderly Adults. Section B of this Report examines access to care for non-elderly adults in Medicaid. The analyses in Section B show that, on average across the nation, access to care for non-elderly adults in Medicaid—measured by certain key indicators such as having a usual source of care or having had a primary or specialist office visit in the past year—is comparable to that of adults with employer-sponsored insurance (ESI) and far better than that of uninsured adults.

Similarly, although non-elderly adults in Medicaid are, on average, more likely than adults with ESI to be in poor health and to have one or more chronic health conditions—factors that are likely to increase their use of health care services—our analyses show that when these health and demographic differences are taken into account adults in Medicaid use services at rates that are comparable to adults with ESI.

Other Measures of Performance: Quality, Cost, and Value

Any meaningful effort to assess access in today's environment needs to take into account concerns about cost and value. It is possible for Medicaid to assure access to care, but at costs that may be too high and with outcomes that may be too low. A complete evaluation of Medicaid's performance may take all of these factors—access, quality, cost, and value—into consideration.

There are growing opportunities for Medicaid to pursue innovations that improve access and quality and have the potential to lower program expenditures. For relatively low-cost populations in Medicaid, there is an opportunity to demonstrate that delivering high-value services—like timely access to preventive services or services delivered at an earlier stage of illness—can improve outcomes and satisfaction with care.

For high-need, high-cost groups, it may be possible to achieve better outcomes at lower total cost by increasing spending on certain services—for example, by providing more supportive services for people with functional limitations and serious chronic conditions to offset the use and costs of acute care services. There are meaningful opportunities for Medicaid to undertake innovations to improve care for people with disabilities who are covered by Medicaid only, for example, and to improve care and lower costs for people who are dually eligible for Medicare and Medicaid.

For LTSS, states have significant opportunities to improve service delivery to achieve better outcomes and reduce costs. Indeed, many states have made progress toward reorienting delivery systems to provide a broader range of home- and community-based services.

For all of Medicaid's populations and across the range of services Medicaid provides—LTSS, acute care, behavioral health care, and primary and preventive care—program administrators and policymakers will need much better measures to assess whether Medicaid is purchasing higher-value care. Better measures of the outcomes of care (that is, the impact of the full range of services provided to a patient over time on a patient's health and function) and the total costs of care for patients over time will be needed (Porter 2010). This kind of comprehensive outcome and cost measurement is not yet in place, but may be useful to support changes in delivery and payment, to achieve higher-value care for Medicaid, and to strengthen program accountability and integrity. The Commission's March 2012 Report to the Congress made recommendations that would enhance Medicaid program integrity by promoting those efforts that are most effective and eliminating programs that are redundant, outdated or not cost-effective.

Looking Forward

One of the key tests of the effectiveness of a health coverage program is whether it provides appropriate and timely access to services, and whether those services lead to the best outcomes for patients—improvement in health, maintenance of function, and, for patients who are in declining health, appropriate and effective care and supportive services that improve quality of life.

Medicaid and CHIP can contribute to improving delivery systems in order to provide better primary and preventive care, more effective supportive services, and better service coordination to improve outcomes and lower costs. Using payment policies as a lever for promoting high-quality care, Medicaid can seek to increase accountability among plans and providers and align financial incentives with desired quality and cost outcomes.

Evaluating access to care in Medicaid and CHIP, and monitoring and improving the programs' performance, requires answers to key questions, including:

- Can bundled payments and new service delivery models lower costs while improving access to services and treatments that benefit patients?
- What features of new delivery and payment models result in more effective service delivery, improved access, lower costs, and better outcomes of care?
- How do service delivery models, payment approaches, and monitoring efforts need to be tailored to meet the needs of diverse Medicaid populations?
- What Medicaid program features (such as optional simplified eligibility redetermination processes or 12-month continuous eligibility provisions, which some states have adopted for children in Medicaid) may be needed to improve the continuity and quality of care, and increase value?
- What data and monitoring approaches are needed to evaluate the success of purchasing strategies and assure program accountability?

These are some of the key questions that underlie purchasing strategies in Medicaid and CHIP and that will help guide MACPAC's future analyses.

The analysis and information presented in the sections that follow begin to: (A) describe the data and information available to answer questions about access, and (B) assess access to care for adults in Medicaid using key indicators. These sections begin to deepen the analysis of access monitoring as a tool for both evaluating and improving Medicaid and CHIP's performance and program accountability and understanding the implications of changes in health care delivery for these programs.

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Data Sources for Monitoring Access to Care in Medicaid and CHIP

As major purchasers in the health care market, Medicaid and the State Children's Health Insurance Program (CHIP) help ensure that health care services available to their enrollees provide what the programs intend to pay for: necessary access to quality health care. In fiscal year (FY) 2011, Medicaid financed care for an estimated 70 million people, over a fifth of the U.S. population, at a cost of $432 billion.[1] CHIP served 8 million children in FY 2011 at a cost of $12 billion. With such substantial investments and the need for prudent government purchasing, it is crucial for both federal and state governments to have systems in place to monitor access to care for Medicaid and CHIP enrollees.

The Congress gave the Commission two explicit mandates with respect to Medicaid and CHIP enrollees' access to care. The Commission's authorizing legislation (42 U.S.C. 1396) charges MACPAC with reviewing and assessing the effect of payment and other Medicaid and CHIP policies on access to covered items and services. The same legislation also directs MACPAC "to identify provider shortage areas, as well as other factors that adversely affect, or have the potential to adversely affect, access to care by, or the health care status of, Medicaid and CHIP beneficiaries."

The Commission views these mandates as complementary and mutually reinforcing. Medicaid and CHIP policies, including payment policies, are part of a broad spectrum of factors that influence access to care for their enrollees. Monitoring access helps policymakers determine when changes in policy—either within Medicaid and CHIP or more broadly—will help these programs more effectively provide health care services to their enrollees. Monitoring access also provides policymakers with important information on whether programs are purchasing health services that are timely, efficient, and effective. Access is more than linking providers to Medicaid and CHIP enrollees; it is ensuring that enrollees obtain appropriate health services that are of high quality and that result in better health outcomes.

Monitoring efforts should be able to detect access issues for the Medicaid and CHIP populations as a whole, as well as for particular subgroups of enrollees. Experiences of different subgroups in gaining access to care may vary and be completely different from service to service.

Furthermore, potential access issues need to be identified not only at the national level, but also at the state and community levels. Factors affecting access to care may be based in state policy (e.g., payment rates) or local factors (e.g., difficulty recruiting providers to rural areas). State and local analysis could help tease out the most effective solutions to address access issues as they are detected.

Effective efforts for monitoring access are ongoing, and focused on both the immediate and the long term. Ultimately, monitoring may detect existing problems, but also to identify emerging and potential access issues for Medicaid and CHIP enrollees. The rapid identification of emerging access issues can help mitigate their effects on enrollee access, while more in-depth work to assess trends in access can provide essential information to state and federal policymakers. Combining the use of activities that identify issues as they emerge with longer-term ongoing monitoring activities is particularly important during a time of potentially significant changes in the Medicaid and CHIP programs.

Section A is a first step toward developing and implementing a strategy for the Commission's work on access in Medicaid and CHIP. The Commission begins with an assessment of available data and other information for measuring access to care at the federal, state, and local levels. In measuring access for the Medicaid and CHIP populations, it is important to understand what data and other sources exist, their strengths and limitations, and which are suitable for creating state- and local-level assessments of access. In addition, it is important to determine whether other data sources are useful for monitoring access in Medicaid and CHIP and if they could help paint a more complete picture of access within the community being analyzed.[2]

Section A examines:

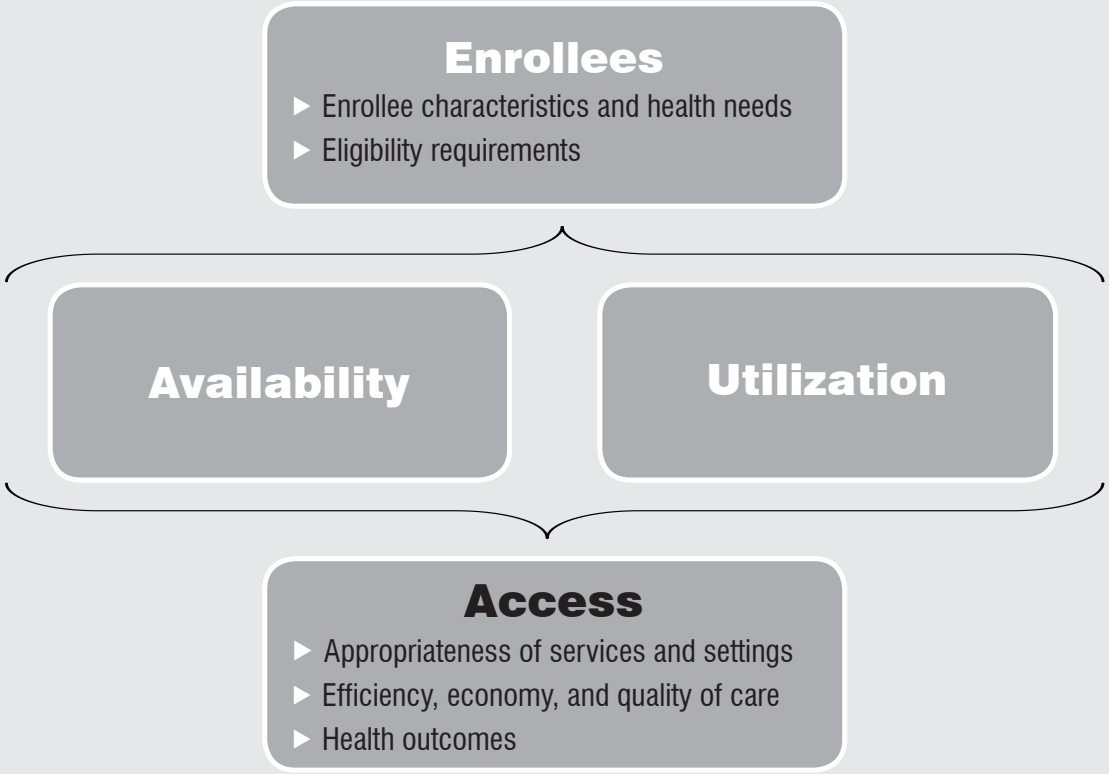
- the Commission's conceptual framework for monitoring access to care for Medicaid and CHIP enrollees;
- principles for selecting data sources for assessing access for use by policymakers at the federal and state levels;
- approaches for the expedient identification of emerging or potential access issues; and
- existing federal and state data sources for monitoring trends and variations in access to care over a longer time frame.

The Commission's Access Framework

In its March 2011 Report to the Congress, the Commission presented its initial framework for examining access (MACPAC 2011a). As shown in Figure a-1, the framework is tailored to address the characteristics of both Medicaid and CHIP programs and their enrollees. Consideration of how particular measures fit within each of the framework's three major components—enrollees, availability, and utilization—could help guide the selection of key measures for measuring and monitoring access in Medicaid and CHIP.

- **Enrollees** and their unique characteristics are central to access measurement for Medicaid and CHIP, given the broad range of enrollees and the services required to meet their health needs. Potential enrollee-related indicators should reflect the clinical diversity and complex health issues of subpopulations

FIGURE a-1. The Commission's Access Framework



within Medicaid and CHIP as well as program variation across states.

- **Availability of providers** to Medicaid and CHIP enrollees is dependent on the overall provider supply in an area and on providers' willingness to participate in Medicaid and CHIP. Measures in this area must be able to detect changes in a state's delivery system landscape and to identify primary and specialty care provider shortages.
- **Utilization** of health care focuses on the use and affordability of available services[3] and on experiences navigating the health care system; low utilization of appropriate services could indicate problems with access to care. Potential utilization-focused measures should reflect the types of services used by Medicaid and CHIP populations and allow for the identification of the potential under- or overuse of services.

These three elements serve as the basis for the Commission's evaluation of access and whether Medicaid and CHIP enrollees have adequate access to health care services that are cost-effective and produce positive outcomes. This Section focuses on monitoring enrollees' access to providers and services. Future Commission analytic efforts will concentrate on assessing the appropriateness, quality, and effectiveness of the health services received and the settings where care is provided.

Principles Guiding the Development of an Access Monitoring Approach

Monitoring access to services in a robust manner involves the examination of several factors such as level of effort, administrative burden, and the potential costs of gathering and tracking

information. The unique needs and characteristics of states and what is most feasible in terms of introducing a simple, effective approach that allows for meaningful benchmark comparisons must also be examined in depth.

The Commission has defined a number of principles that may be helpful in the creation and implementation of effective and efficient access monitoring systems. Effective monitoring efforts:

- **Reflect unique characteristics of the Medicaid and CHIP programs and their enrollees.** The system should use a framework, such as MACPAC's access framework, which emphasizes the unique characteristics and needs of the Medicaid and CHIP programs and their enrollees.
- **Complement existing efforts and avoid duplication.** Any new monitoring activities should complement and leverage, rather than duplicate or compound, existing efforts by state and federal program administrators to monitor access.
- **Are both proactive and reactive.** Monitoring should be timely enough to detect problems as they emerge, and should provide information needed for state and federal policymakers, local health care organizations, and providers to intervene appropriately.
- **Consider the broader environmental context.** Analysis of access monitoring data should consider the broader environment surrounding enrollees' access, including economic, demographic, and social factors that help frame the delivery of care and federal and state health policies.
- **Reflect multiple settings.** Data sources should be able to measure enrollees' access in both fee-for-service and managed care arrangements as well as in rural and urban areas and should include services provided through programs administered to Medicaid and CHIP populations outside of the two programs, such as school-based clinics.
- **Integrate access and quality performance monitoring.** When possible, access measures should be linked to measures that assess health outcomes and quality.
- **Create feedback loops.** A robust monitoring system should provide a mechanism for gathering feedback, and the system should report the results of that feedback to ensure accountability and information sharing among states, providers, and the federal government.

Monitoring Immediate Changes and Ongoing Trends

Measures for monitoring access to health services are best selected so that, when compiled as a set, they present an accurate picture of access for the program, enrollee group, or geographic area being assessed in a manner that is useful to policymakers. A monitoring system for Medicaid and CHIP should not rely on just one approach. Rather, it should pull selectively from a variety of efforts. When selecting data measures, feasibility, effectiveness, and cost of each type of approach as well as the reliability and validity of data sources are important considerations for policymakers. The wide variation across states with regard to their Medicaid and CHIP programs, health delivery systems, and enrollee populations should also be considered. Monitoring access within states should be tailored to best fit the characteristics, needs, and capacities of each individual state.

Federal, state, and local entities conduct a variety of access monitoring activities and gather a range of data that could be used to identify important trends in both the short and long term. To gain an understanding of state monitoring activities, the Commission contacted all Medicaid directors in late 2010 about their current activities for

monitoring and identifying potential problems with access and provider capacity in their Medicaid programs (MACPAC 2011b). States identified a number of approaches they are using for monitoring access for Medicaid enrollees over time as well as ways of identifying immediate access issues. Box a-1 provides an example of one state's approach to monitoring access for its Medicaid enrollees. The Commission also explored efforts underway at a number of federal agencies such as the Centers for Medicare & Medicaid Services (CMS), the Assistant Secretary for Planning and Evaluation (ASPE), and the Health Resources and Services Administration (HRSA). The following sections highlight many of the approaches currently being used by state and federal governments.

Potential sources of information for identifying immediate access to care issues

One of the purposes of a monitoring approach is to detect access issues as they emerge. The relatively quick and immediate identification of possible access problems requires data and analytic tools that can be used to draw rapid, meaningful conclusions about changes in access to services for enrollees. Measures that detect localized and incipient problems in enrollee access require frequent monitoring and must be obtainable in a timely fashion.

Activities that could signal existing or potential access issues in a timely manner generally focus on communications with and outreach to enrollees,

BOX a-1. California's Plan for Monitoring Health Care Access for Medi-Cal Enrollees

California submitted its plan for measuring and monitoring access for its enrollees to CMS in conjunction with a proposed State Plan Amendment to modify Medi-Cal provider payments. The state selected 23 measures in three areas—Medi-Cal beneficiaries, provider availability, and service utilization and outcomes—which will be continuously tracked and reported. In selecting measures, the state considered the availability of the data, the ability to make comparisons geographically by county, and the comparability of measures to national surveys or nationally recognized clinical best practices.

A subset of measures will be used as an "early warning" mechanism to alert the program of potential problems. They include:

- changes in Medi-Cal enrollment;
- provider participation rates;
- service rates per 1,000 member months; and
- helpline calls that are categorized by reason for call and geographic location.

California's health care access monitoring plan details a process for the collection and analysis of data and the interpretation of trends. When variations are identified, an investigation into the problem will be conducted in order to understand the significance of the problem and provide data necessary for policymakers to identify appropriate solutions.

Source: California DHCS 2011

providers, and other stakeholders. It is important to consider that these types of activities are not necessarily reflective of the entire population and may not give an accurate sense of the magnitude of the problem. Instead, they may be used to trigger further investigation to determine whether an issue is real, how large it is, and whether corrective action is needed.

Collecting and analyzing enrollee and provider grievances and complaints. Enrollee and provider complaints and grievances can provide almost instantaneous feedback on potential problems. In the Commission's discussions with Medicaid directors, all indicated that they have procedures in place to capture and track complaints and grievances of Medicaid enrollees—often through the use of enrollee or provider hotlines. It is important to note that some enrollees may experience access issues, but may not file a complaint or grievance with their state, designated provider, or managed care plan. However, an increase in the number of complaints might be a sign that a problem exists or is developing.

Communicating with consumers and providers. Consumer outreach is an important mechanism for use in gathering quick and immediate feedback from Medicaid and CHIP enrollees. States, as well as CMS and other payers and purchasers of health services, can use a number of mechanisms for obtaining first-hand feedback. Routine calls to select consumers or holding focus groups with consumers can provide information on access to providers or particular challenges experienced when seeking services. Including consumer representatives on state agency committees is another mechanism for obtaining ongoing feedback about access.

Similarly, states may actively seek out information they can obtain directly from providers. These methods may include:

- secret shopper calls to providers to gather information on appointment wait times, wait lists, and participation in Medicaid and CHIP;
- calls to safety-net providers, local health departments, and other local government agencies to determine potential problems with obtaining specialty referrals;
- outreach to providers regarding the provider enrollment and claims submission processes and documentation requirements in order to identify barriers to participation; and
- regular communication with a network of health care system stakeholders, who raise warnings on behalf of an individual or community regarding access issues.

Developing a system of sentinel reporting. U.S. public health surveillance systems use several approaches for detecting and tracking disease, injury, and health behavior patterns. These activities include passive surveillance that relies on individual providers, institutions, or laboratories to file reports; active surveillance that includes disease registries; reporting by sentinel providers selected as a representative sample of a delivery site; repeated surveys; and internet monitoring (Bindman 2010).

Sentinel surveillance systems are promising and cost-effective approaches for access monitoring. These systems conduct surveillance at representative health care delivery sites. For example, sentinel surveillance for influenza-like illnesses conducted at select outpatient facilities helps to determine when influenza enters a community. These systems are less expensive to operate than surveillance systems that aim to capture all cases within a population.

The use of emergency departments (EDs) and safety-net providers as sentinel providers could serve as a resource for detecting changes in patterns of care for Medicaid and CHIP enrollees

in a given community. However, as with many other measures, changes detected in such a system would require further investigation to determine whether they were indicative of an access problem. The increased use of EDs for non-urgent care may be, in part, reflective of the availability of primary care within a community but could also be reflective of other factors, such as a disease outbreak or the closing of another facility. While safety-net clinics are often the primary care provider of choice for Medicaid enrollees, an increased use of these clinics may indicate that individuals are facing barriers to obtaining services in private physician offices, but it could also mean an expansion in services being offered by the safety-net provider. These sentinel providers could be responsible for ongoing collection of detailed health information within their community and could also be readily tapped to provide a qualitative understanding of the current landscape underlying a particular problem.

Using information from school health records and clinics. Most U.S. schools provide basic health services to students, and some provide other preventive care or specialty care. Services available in schools vary between states, but generally include:

- state-mandated services, including health screenings, documentation of immunization status, and infectious disease reporting;
- care to students with disabilities or other special health care needs;
- medication administration; and
- assessment and care for minor health complaints or emergency health situations if they arise.

School health records may be a source of data to monitor students' access to and use of health care. According to a national study in 2006 conducted by the Centers for Disease Control and Prevention, at least half of states required information to be obtained and kept in student records on physical health history, authorization for emergency treatment, immunization status, medication needs, and other screening activities (e.g., vision or hearing) (Brener 2007).

In addition, many states operate school-based health centers (SBHCs), which were developed with a mix of federal and state funds to improve children's access to care for under- or uninsured, low-income children. More than 85 percent of states had at least one SBHC in 2006, and in almost 75 percent of those states, SBHCs were Medicaid providers (Brener 2007). SBHCs may provide additional services beyond primary care, including oral health, behavioral health care, and treatment of sexually transmitted diseases. Previous research has demonstrated that SBHCs improve access to and quality of care for underserved adolescents compared with traditional outpatient care sites, resulting in decreased ED visits and increased number of preventive visits and screening for high-risk behaviors (Allison 2007).

Both school records and SBHCs might be a potential source of information about children's access to medical care. For example, an increase in the number of children requiring emergency treatment for asthma during the school day might reflect a lack of access to providers that could help children and their families better manage the disease.

Long-term and ongoing approaches for monitoring access to care

There are many sources of information that could serve as platforms for building a long-term tracking approach to monitor access in Medicaid and CHIP. An array of administrative data and national household and provider surveys could be leveraged for developing measures that capture long-term trends in access for Medicaid and CHIP enrollees. In addition, federal designations of medically underserved areas and provider shortages may potentially benefit Medicaid and CHIP access monitoring by identifying local areas that could warrant closer access monitoring.

Administrative data sources

Administrative data may serve as a source for access measures for Medicaid and CHIP enrollees. Using information from these sources is potentially inexpensive, efficient, and effective. However, when considering whether to use administrative data for access monitoring, it is important to evaluate the validity, reliability, and timeliness of the underlying data, which vary across states and sources. All states maintain administrative data on their Medicaid and CHIP enrollees and providers, including data collected within states' Medicaid management information systems, such as eligibility status, periods of enrollment, and health care utilization. Potential sources of Medicaid and CHIP data that could be used to gauge access and provider supply include claims data, encounter data, managed care plan reporting, quality assessment information, and other data obtained from hospitals and safety net providers.

Fee-for-service claims data. Providers generally submit claims for every service rendered in fee-for-service Medicaid. Claims data could help provide insight into the types of covered services used by enrollees and the providers serving those enrollees (e.g., an increase in the use of emergency departments for Medicaid and CHIP enrollees, the percent of enrollees who have received a particular service such as a well-child visit).

Several states have developed all-payer claims databases, into which the state's various insurers submit their claims.[4] These data may provide information on utilization, highlight important differences across payers, and serve as early indicators of potential problems (e.g., increases in ED use by Medicaid enrollees not mirrored by increases in use by commercially insured populations).

There are a number of limitations when using claims data:

- There is a significant lag time between when a service is provided and when the provider submits a claim to Medicaid (often up to a year after the date of service).
- Claims data can confirm which providers are serving at least some Medicaid enrollees, but they do not indicate whether those providers are accepting new Medicaid enrollees as patients.
- Claims data can only provide information for participating fee-for-service providers. Forty-eight percent of Medicaid and CHIP enrollees in 2010 were enrolled in comprehensive risk-based managed care plans (MACStats Table 9); therefore, detailed information on all providers may or may not be available through encounter data.
- It is difficult to capture illness burden and functional limitations in claims data, making it hard to interpret whether differences in utilization reflect differences in access.

The definition of a participating provider varies by state and must be considered in assessing access. Some states consider participating providers as

having at least one claim during a year, while others use higher thresholds. Access measurement must also recognize different types of providers serving Medicaid enrollees. For example, Alaska uses alternative providers including community health aides, dental health aides, and behavioral health aides in rural and frontier tribal health clinics. Alaska also gains expanded access through the use of telemedicine (Alaska DHSS 2012).

Managed care encounter data. Since managed care plans are paid by the state on a full or partially capitated basis, and providers submit claims directly to the managed care plan, no claims are submitted directly to the state. Instead, states that contract with managed care plans collect separate encounter data from the plans, providing a record of the services furnished to Medicaid enrollees. These data may be used by states for monitoring access and quality.

Although encounter data might help to fill some of the critical gaps in claims data, they also pose challenges. Some states do not report encounter data to the federal government as required for federal monitoring purposes (OIG 2009). Among states that do report these data to the federal government, the quality of the data that are submitted is variable. CMS is analyzing the usability of encounter data and what types of technical assistance may help states improve the quality of the data.

Managed care plan network monitoring and quality assessments. States often use their contracts with managed care plans to define specific provider network requirements. Some states require managed care plans to meet minimum ratios for primary care and specialty care providers to enrollees, including states that require plans to demonstrate provider-to-population ratios equivalent to or greater than those observed in the fee-for-service environment.

Furthermore, states are required under federal law to have a written strategy for assessing and improving quality for their Medicaid managed care programs. Most managed care plans are required to use the Healthcare Effectiveness Data and Information Set (HEDIS) to measure specific quality, access, and effectiveness-of-care measures. HEDIS contains a set of more than 70 performance measures across five domains of care; four categories are useful in monitoring health access: effectiveness of care, access to and availability of care, experience of care, and use of services (NCQA 2012).

In addition, Medicaid agencies use Consumer Assessment of Healthcare Providers and Systems (CAHPS) measures in their data collection efforts. CAHPS is a set of beneficiary surveys that covers a range of topics including access to care and use of services, wait times, appointment scheduling, access to specialty care, and satisfaction with providers.[5]

Information regarding how states monitor plan networks and other quality measures could serve as a platform for selecting access indicators. As was discussed in MACPAC's March 2012 Report to the Congress, little is known about whether or not quality measures commonly used for the Medicaid population are sufficient for assessing care provided to specific populations with special needs, such as Medicaid enrollees with disabilities.

State hospital data. All states have some sort of hospital reporting system and most participate in the Healthcare Cost and Utilization Project (HCUP). Sponsored by the Agency for Healthcare Research and Quality (AHRQ), HCUP is the largest collection of hospital data in the United States. Based on a federal-state-industry partnership, HCUP collects all-payer information from participating states on hospital inpatient care, outpatient emergency department care, and some ambulatory surgery care.

For example, the 2010 HCUP Nationwide Inpatient Sample (NIS) contains all discharge data from 1,051 hospitals, approximating a 20-percent stratified sample of U.S. community hospitals. While the number of states included in the NIS varies by year, the number has grown from 8 states in 1988 to 45 states in 2010. The 2009 Nationwide Emergency Department Sample includes almost 29 million ED visits from 964 hospital-based EDs in 29 states. Twenty-seven states now participate in the State Emergency Department Databases (AHRQ 2011).

HCUP national databases provide a tool to identify, track, analyze, and compare hospital statistics at the national, regional, and state levels. For access monitoring, these data can be used to investigate state-specific and multistate trends in health care utilization, access, costs and charges, quality, and outcomes.

Community health center reports. All community health centers and other HRSA primary care program grantees must submit Uniform Data System (UDS) measures annually to the federal government, making this another potential data source for monitoring primary care access. These data include aggregated information on patient demographics, utilization rates, clinical indicators, and costs. Reported at the grantee, state, and national levels, UDS data are used to track trends over time and to monitor improvements in overall health center performance, including the identification of specific services and interventions that may improve the health status of particular vulnerable communities or populations (HRSA 2011).

National health surveys

There are several national surveys that may be useful for monitoring trends in health outcomes, access, and utilization over time and that provide a baseline understanding of access at the national level. Some examples include the National Health Interview Survey (NHIS), the National Ambulatory Medical Care Survey (NAMCS), the National Hospital Ambulatory Medical Care Survey, the Medical Expenditure Panel Survey (MEPS), and the Behavioral Risk Factor Surveillance System (BRFSS). One strength of most of these surveys is that they allow national-level comparisons of populations with different sources of coverage. In Section B of this Report, NHIS and MEPS are used in new analyses of access to care for adults enrolled in Medicaid, compared to uninsured adults and adults with employer-sponsored insurance.

Strengths and weaknesses of these surveys are furthur discussed in Section B. Limitations to their usefulness in access monitoring may include:

- **State variation**. Many of these surveys are limited in their ability to examine state-level variations, and none provide local-level estimates. These surveys would need to be modified in order to have large enough samples to provide for state-level estimates of access for Medicaid and CHIP enrollees. BRFSS is able to provide state-level estimates each year on behavioral and preventive health concerns (e.g., smoking, obesity, seat belt use) but does not monitor health access aside from preventive care and does not distinguish between Medicaid and private health coverage.
- **Lag times.** With some exceptions, surveys also tend to have lag times between data collection and reporting of results. For example, NHIS releases a limited set of measures from each quarter approximately six months after the end of the quarter, but does not distinguish between individuals with Medicaid and other sources of insurance in these results. Final datasets are released six months after a calendar year's data collection is completed (NCHS 2010), making them helpful

for monitoring over the longer term, rather than for detecting immediate access issues.

As part of the Commission's work, access measures available in federal surveys—including surveys administered to households and health care providers—are being reviewed and catalogued for their potential as monitoring tools.

Health Resources and Services Administration (HRSA) provider shortage designations

HRSA uses two provider shortage designations, the Health Professional Shortage Area (HPSA) and the Medically Underserved Area (MUA), to identify counties and subcounties in a state that experience health professional shortages or unmet needs for health care services. More than 30 federal programs use HPSA and MUA designations to determine eligibility for federal aid, assistance, and special policy considerations such as reimbursing physician assistants and nurse practitioners in rural clinics for Medicare and Medicaid services, and providing Medicare physician bonus payments to specific providers (HRSA 2012c).

Much of the country has received some type of HPSA or MUA designation. Both HPSAs and MUAs allow for designations specific to Medicaid-eligible populations. However, relatively few areas have sought this designation. The HPSA Medicaid designation details provider shortages based exclusively on the ratio of providers available to Medicaid enrollees. Such designations have been made across only nine states. As of May 2012, there were 74 primary care, 145 dental, and 27 mental health HPSA Medicaid designations (HRSA 2012a).

The MUA designation methodology can also be applied to a specific underserved population within a geographic area, known as a Medically Underserved Population (MUP), including Medicaid-eligible populations. As of May 2012, MUP designations specifically for the Medicaid population were granted in only four states (HRSA 2012a). It is important to note that the small number of areas designated as Medicaid HPSAs or MUPs does not indicate the number of areas that have the potential to qualify as Medicaid provider shortage or medically underserved areas, but only the number of areas for which a Medicaid-based designation has been sought.

The Annex to Section A provides descriptions of the HPSA and MUA designations and highlights current thresholds used in HPSA designations. While HRSA designations may provide some data to assess provider availability, there are a number of key shortcomings in their applicability to monitoring access in Medicaid and CHIP (Salinsky 2010, GAO 2006, OIG 2005).

- In determining whether an area is a HPSA or MUA, HRSA excludes certain types of providers such as mid-level practitioners, National Health Service Corps personnel, and specialists from the provider-to-population ratio. HRSA designations may not accurately portray the overall availability of services to Medicaid and CHIP populations without including these mid-level providers, who may be particularly important in serving Medicaid and CHIP enrollees.
- The application process can be burdensome, favoring areas with previous application experience.
- Information on shortage designations is outdated: MUAs/MUPs are not required to be renewed, and HPSA designations are renewed every three years.
- The pervasive use of designations limits the usefulness of MUAs and HPSAs as a tool for targeting high-need areas. The majority of the United States has received some sort of HRSA designation.

As part of the Affordable Care Act of 2010, a Negotiated Rulemaking Committee on the Designation of MUPs and HPSAs was established and charged with developing new methodologies for designating medically underserved communities and populations with health professional shortages or significant unmet health needs. After 14 months of deliberation, the 28-member committee submitted its final report, which included recommendations to the Secretary of the U.S. Department of Health and Human Services (the Secretary) on October 31, 2011.[6] As of June 2012, the Secretary has not issued an interim final rule on this issue. The Commission will continue to track changes to HRSA designations methodologies and assess whether the changes make them more reliable and useful for state access monitoring efforts.

Other federal access monitoring efforts

Gaining a better understanding of current Medicaid monitoring activities underway in other federal agencies is important to refining the Commission's work on access.[7] Approaches used in monitoring access to care in the Medicare program can also serve as potential models for monitoring access in Medicaid, despite important differences between the programs' administrative structures and sources of available data. Determining whether and how these efforts could be leveraged in an access monitoring system for Medicaid and CHIP will be part of the Commission's ongoing activities.

The Medicaid Access Project. A joint endeavor between ASPE and CMS, the Medicaid Access Project is a multidimensional effort to obtain a federal view of what access to care looks like for enrollees of state Medicaid programs. With input from states, the project draws on existing data sources that capture three dimensions of access: utilization of services by enrollees, enrollees' perceptions of access and barriers to care, and provider participation in Medicaid. The project, which is in its initial phases, will identify available data sources, gaps in data sources, and analytical options for measuring access to care among Medicaid enrollees at the state level.

Monitoring access to care in the Medicare program. The Medicare Payment Advisory Commission (MedPAC) reports annually on Medicare beneficiary access to health services as part of its work to evaluate the adequacy of Medicare payments. For example, to evaluate beneficiary access to physician services, MedPAC assesses results from an annual telephone survey of beneficiaries and reports on findings from other relevant surveys, including the NAMCS and a survey of physicians. Where possible, MedPAC makes comparisons with privately insured enrollees to provide benchmarks for assessing relative access. MedPAC also reports on rates of provider participation in Medicare and the volume of services provided, which may help to identify changes in access over time (MedPAC 2012).

CMS has undertaken studies designed to uncover geographic "hotspots" of access problems. One example is a 2003 telephone survey fielded in 11 geographic areas that were thought to be most likely to have access problems, which revealed that relatively few Medicare beneficiaries reported having had trouble obtaining access to care (Lake et al. 2004).

Health Systems Measurement Project. The Health Systems Measurement Project, an ASPE initiative, brings together trend data on a limited set of key health system measures from multiple data sources. The project focuses on 10 dimensions of health systems, including access to care, cost and affordability, and quality. It assesses the status of these dimensions by state, over time, and with respect to subgroups of the population, including those with Medicaid coverage. Access

to care measures included in the projects are: usual source of care, people reporting difficulty with seeing specialists, rates of hospitalization for ambulatory-care sensitive conditions for both children and adults, and use of the oral care system in the past 12 months.

Looking Forward

Monitoring and assessing access to appropriate, effective, and efficient care is a priority for MACPAC, given its statutory charge. Through its deliberations and research, the Commission has explored a variety of existing sources that could be used by federal and state policymakers to evaluate access to care in Medicaid and CHIP. The Commission will continue its ongoing efforts to assess the performance of Medicaid and CHIP relative to the fundamental goal of providing access to appropriate and effective services that deliver better outcomes at lower cost. This will require the development of measurement approaches to inform policymakers about whether these programs are meeting each component of this goal. As states develop and implement new delivery system models into their Medicaid and CHIP programs, the Commission will examine their impact on access to care for program enrollees.

Endnotes

1 The federal share of total Medicaid spending nationally is generally 57 percent; the federal share was higher in FY 2011 due to a temporary increase in states' Federal Medical Assistance Percentages (FMAPs) under P.L. 111-5 and P.L. 111-226.

2 Additional information will be provided in a forthcoming MACPAC Contractor Report which was the basis of the information presented in this Section.

3 States can require certain groups of Medicaid enrollees to pay enrollment fees, premiums, deductibles, copayments, or similar cost-sharing amounts. There are specific guidelines regarding who may be charged these fees, the services for which they may be charged, and the amount allowed. Non-financial factors, such as time, transportation, and the need for child care, may also impact utilization. See Table 13 in the Commission's March 2012 Report to the Congress.

4 As of May 21, 2012, nine states (Kansas, Maine, Massachusetts, Maryland, Minnesota, New Hampshire, Tennessee, Utah, and Vermont) were using all-payer claims databases, and five states (Colorado, New York, Oregon, Rhode Island, and West Virginia) were in the process of implementing one (All-Payer Claims Database Council 2012).

5 Many HEDIS measures are only applicable to individuals who have been enrolled in a managed care plan for at least a year. Because Medicaid enrollment is often not continuous, a large percentage of enrollees are excluded. A 2003 Government Accountability Office (GAO) study found that 24 percent to 79 percent of enrolled children were excluded. GAO also found that 10 percent to over 60 percent of children enrolled in Medicaid managed care were excluded from CAHPS because they had not been enrolled long enough (GAO 2003).

6 In voting on recommendations, 90 percent of voting members of the Negotiated Rulemaking Committee endorsed the final report, and individual votes were taken on recommendations for each of the six designation types analyzed by the committee. The final report recommends that the Secretary implement the recommendations that received full consensus from the committee (NRC on MUPs and HPSAs 2011).

7 On May 6, 2011, CMS published the proposed rule, "Medicaid program: Methods for assuring access to covered Medicaid services" consistent with requirements under Section 1902 (a)(30)(A). Public comments were accepted for 60 days after the date of publication. No final rule has been published (CMS 2011).

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Section A Annex

Health Resources and Services Administration Health Professional Shortage Areas and Medically Underserved Areas/Medically Underserved Populations

HRSA has developed special designations to indicate provider shortage areas, including shortages that may affect access to providers for Medicaid and CHIP enrollees. HRSA uses two provider shortage designations—the Health Professional Shortage Area (HPSA) and Medically Underserved Area (MUA)/Medically Underserved Population (MUP)—to identify counties and subcounties in states that experience health professional shortages or unmet needs for health care services.

HPSA Designations. There are HPSA designations for three types of services: primary care, dental, and mental health. Current HPSA criteria are based largely on population-to-provider ratios for primary care physicians, dentists, and mental health providers within a state and can be for the entire population of a geographic area, a specific underserved population within an area, or certain facilities. For each of the three service types, geographic areas, population groups, and facilities able to document population-to-provider ratios exceeding the designated thresholds highlighted in Table a-A1 may be granted HPSA designations.

- **Geographic area designations.** A large portion of primary care and mental health HPSAs are based on shortages experienced by the general population. It is reasonable to assume that the Medicaid and CHIP enrollees residing in these areas also experience a shortage of providers.
- **Population group designations.** HPSA designations exist for specific population groups such as American Indians or Alaskan Natives, and other populations isolated by linguistic, economic, or cultural barriers. In addition, there are population group designations specific to the low-income population, which would include Medicaid and CHIP enrollees, and a Medicaid-specific designation based on the provider supply available to Medicaid enrollees. There are relatively few Medicaid designations in only nine states, as summarized in Table a-A2.
- **Facility designations.** Designations may also be granted to individual health care facilities such as federal or state correctional institutions or public or non-profit medical facilities that provide care to HPSA-designated areas or population groups, if the facility can demonstrate that its capacity is insufficient to serve the designated population adequately.

TABLE a-A1. Current Thresholds Used in HPSA Designations

Service	Geographic HPSAs[1]	Population Group HPSAs	Facility HPSAs[2]
Primary care[3]	≥ 3,500:1	≥ 3,000:1	Federal/state correctional internees per year to primary care physicians serving institution ratio ≥ 1,000:1. Public and/or non-profit medical facilities must demonstrate they provide primary medical care to an area or population with a primary care HPSA designation and have insufficient capacity to meet those needs.
Dental	≥ 5,000:1	≥ 4,000:1	Federal/state correctional internees per year to dentists serving institution ratio ≥ 1,500:1. Public and/or non-profit private dental facilities must provide general dental care services to an area or population designated as dental HPSA and have insufficient capacity to meet those needs.
Mental health[4]	Population-to-provider ratio ≥6,000:1 AND Population-to-psychiatrist ratio ≥20,000:1 OR Population-to-provider ratio ≥9,000:1 OR Population-to-psychiatrist ratio ≥30,000:1	Population-to-provider ratio ≥4,500:1 AND Population-to-psychiatrist ratio ≥15,000:1 OR Population-to-provider ratio ≥6,000:1 OR Population-to-psychiatrist ratio ≥20,000:1	Federal/state correctional internees per year to psychiatrists serving institution ≥ 2,000:1. State and county mental health hospitals'[5] number of workload units[6] per psychiatrist available at the hospital exceeds 300. Community mental health centers and other public and non-profit facilities.[7]

Notes:

1 Population group thresholds may be applied if a geographic area qualifies as "high-need."

2 Federal/state correctional institutions must have at least 250 inmates.

3 Primary care physicians are defined as Medical Doctors and Doctors of Osteopathy practicing in general practice, family practice, general internal medicine, pediatrics, and obstetrics-gynecology.

4 Mental health providers are defined as psychiatrists, clinical psychologists, clinical social workers, psychiatric nurse specialists, and marriage and family therapists.

5 Must have an average daily inpatient amount of at least 100.

6 Calculated using the following formula: total workload units = average daily inpatient census + 2 x (number of inpatient admissions per year) + 0.5 x (number of admissions to day care and outpatient services per year).

7 These facilities must provide or be responsible for providing mental health services to an area or population group designated as having a shortage of mental health professionals and have insufficient capacity to meet the psychiatric needs of the area or population group.

Source: HRSA 2012b

MUA designations. MUA/MUPs are areas or populations designated by HRSA as having: too few primary care providers, high infant mortality, high poverty, and a high proportion of the population that is aged 65 or older. The criteria for MUA/MUP designation is based on the Index of Medical Underservice, which incorporates four variables: (1) ratio of primary care physicians per 1,000 population, (2) percent of population below the federal poverty level, (3) percent of population age 65 and older, and (4) infant mortality rate.

Designations for specific underserved populations within a geographic area are used for populations with economic barriers—such as low-income or Medicaid-eligible populations—or populations facing cultural or linguistic access barriers to primary care services. Populations not meeting the MUA criteria, but experiencing "unusual local conditions which are a barrier to access to or the availability of personal health services," can receive an "exceptional MUP" designation (HRSA 1995). As of May 2012, there were 3,470 MUA designations, 470 MUP designations, and 212 Exceptional MUP designations (HRSA 2012a).

More than 30 federal programs use HPSA and MUA designations to determine the potential for federal aid, assistance, and special policy considerations. Table a-A3 summarizes select federal programs that use the various designations. In addition, a number of health professions training programs in HRSA's Bureau of Health Professionals use HPSA and MUA designations in funding preference criteria, and a variety of state programs use them as well.

TABLE a-A2. HPSA Designations

	Primary Care	Dental	Mental Health
Total HPSA-designated areas	5,899	4,551	3,751
Service area designations	1,434	708	1,043
Population group designations	1,354	1,470	141
Medicaid designations	74	145	27
Facility designations	3,111	2,373	2,567
States with Medicaid designations	NY, MD, IL, IA, KS, AR	NY, MD, IL, MI, IA, KS, NE	MD, NY, OH

Note: Data as of May 28, 2012.
Source: HRSA 2012a

TABLE a–A3. Selected Programs Using HPSA or MUA/MUP Designations

Shortage Designation Option	National Health Service Corps	Federally Qualified Health Center Program	CMS Medicare Incentive Payment	CMS Rural Health Clinic Program	J-1 Visa Waiver
Geographic Health Professional Shortage Area (HPSA)	X		X	X	X
Population HPSA	X			X	X
Facility HPSA	X				X
Medically Underserved Area (MUA)		X		X	X
Medically Underserved Population (MUP)		X			X
Exceptional MUP		X			X
State governor's certified shortage area				X	

Note: For more detailed information on the selected programs, visit the following sites:
National Health Service Corps: http://nhsc.hrsa.gov/
Federally Qualified Health Center Program: http://bphc.hrsa.gov/
CMS Medicare Incentive Payment: http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HPSAPSAPhysicianBonuses
CMS Rural Health Clinic Program: https://www.cms.gov/Center/Provider-Type/Rural-Health-Clinics-Center.html
J-1 Visa Waiver: http://travel.state.gov/visa/temp/info/info_1288.html
Source: Jordan 2012

Access to Care for Non-elderly Adults

Medicaid and the State Children's Health Insurance Program (CHIP) pay for approximately 16 percent of the nation's health care (MACPAC 2012, MACStats Table 16). A key question for these programs—as well as for Medicare, private insurance, and other payers—is whether or not this spending produces the desired outcomes. One dimension for evaluating a health payer's success is whether or not enrollees experience timely access to appropriate health care services.

As described in the Commission's previous work (MACPAC 2011a), measuring access requires taking into account individuals' unique characteristics, assessing the availability of a range of different health care providers, and examining how the combination of these factors affects utilization of health care. To capture all of these elements and to present a more complete picture, multiple measures and sources of data are necessary. Furthermore, some data sources are better suited to assessing access over the long term, while others may be helpful in identifying more immediate access issues.

Surveys of Medicaid and CHIP enrollees can provide useful data for measuring aspects of access from the enrollee perspective. Section B presents findings on access to care for adults age 19 to 64, based on individuals' responses to questions in two national surveys, and will serve as a baseline set of measures for MACPAC's future analyses assessing trends and changes in access. These results compare non-elderly adults enrolled in Medicaid to similarly situated adults who were uninsured or had employer-sponsored insurance (ESI).

Prior research has shown that enrollees' characteristics can affect health care access and use. Because Medicaid enrollees differ significantly from adults with ESI and the uninsured, the comparisons in this Section attempt to control for their differing health, demographic, and socioeconomic characteristics using standard statistical methods. By controlling for these factors, this analysis attempts to isolate the effect of health insurance on access to care. However, it is not possible to perfectly control for every

potential factor that could affect individuals' access to care. Access differences that remain between Medicaid and those with ESI or no coverage may still not be entirely attributable to their health insurance status.

This analysis examines the population of adult Medicaid enrollees overall. Certain subpopulations of Medicaid enrollees—for example, individuals of a particular race or ethnicity or those in a particular geographic location—may report different levels of access and utilization. The analyses in Section B are not intended to evaluate how certain Medicaid subpopulations differ from each other (however some of these findings are included in Tables 3A-5C of this Report's MACStats). Instead, the findings in Section B provide a broad, national snapshot of how access to care for all non-elderly adults enrolled in Medicaid differs from access to care for similarly situated adults who have ESI or no insurance. Updating this particular analysis in the future may signal how access is changing nationally for Medicaid enrollees.

In its March 2012 Report to the Congress, the Commission published an analysis of children's access to and utilization of care, based on national household survey data. The analysis in this Section, focusing on non-elderly adults, uses the same sources of data and analytic approach as those used in the March 2012 report. These findings build on the Commission's prior work and provide a national-level picture of access for non-elderly adults enrolled in Medicaid, based generally on individuals' own responses to survey questions.

The key points include:

Controlling for individuals' health and other characteristics gives a more accurate snapshot of differences due to health insurance status. As shown in previous Commission analyses, adults with Medicaid are, on average, in poorer health and are more likely to report barriers to access than adults with ESI. This analysis compares adults enrolled in Medicaid to adults who were uninsured or covered by ESI, accounting for differences in their health, demographic, and socioeconomic characteristics. By controlling for the effects of these characteristics, to the extent that the data allow, any remaining differences in access may be due to being enrolled in Medicaid and not to these other factors. The term "similarly situated adults" is used when groups are compared after controlling for these characteristics.

Medicaid enrollees experience better access than the uninsured. For almost every measure of access to health care, non-elderly adults enrolled in Medicaid have substantially better access to care than similarly situated uninsured adults, based on adults' survey responses. Compared to uninsured adults, adults enrolled in Medicaid reported they were:

- more likely to have a usual source of care (USC);
- more likely to have had a visit to a general doctor in the past year;
- more likely to have had a specialist visit in the past year; and
- less likely to have delayed medical care in the past year.

Medicaid enrollees' access is comparable to or better than that of enrollees with ESI on some measures, but worse on others. Comparisons between adults with Medicaid and similarly situated adults with ESI yield a complex picture. Their health care access and use are comparable for many of the survey measures, such as having a USC and having a visit in an outpatient setting. On other measures, the results were more mixed. For example, adults with Medicaid report delaying care at rates similar to those among adults with ESI; however, they differed significantly as to *why* they delayed care. While ESI does not necessarily

represent ideal levels of access, it may be the coverage most likely to represent the "general population" to which Medicaid is supposed to provide comparable access (§1902(a)(30)(A) of the Social Security Act).

The next portion of this Section briefly describes the sources of data and methodology used,[1] followed by the specific findings on non-elderly adults' access to care. These findings, as in the March 2012 chapter on children's access, are structured based on the three main elements of the Commission's access framework (Figure 1a-1):

- enrollees and their unique characteristics;
- provider availability; and
- health care utilization.

Methodology Overview

The findings presented in this Section are based on information reported in two national household surveys—the National Health Interview Survey (NHIS) and the Medical Expenditure Panel Survey (MEPS). These are surveys of the civilian, non-institutionalized population; the results exclude individuals residing in nursing homes, assisted-living quarters, and other dormitory-like residences. In this analysis, the term "adults" refers to civilian, non-institutionalized adults age 19 to 64. More detailed descriptions can be found in the Annex to this Section as well as in MACPAC Contractor Report No. 2, upon which these findings are based (Long et al. 2012).

MACPAC analyses of data continue to demonstrate that individuals enrolled in Medicaid or CHIP are substantially different from other populations across numerous characteristics. This is illustrated in Tables 3A–5C of this Report's MACStats. In this Section, Table b-1 as well as Figures b-1 and b-2 also show, for the adults and characteristics analyzed, the numerous ways in which adults enrolled in Medicaid differ from uninsured adults and adults with ESI. When compared to those with ESI or no insurance, adults with Medicaid are more likely to report being in fair or poor health and to have any of several chronic conditions (e.g., asthma, diabetes, emphysema, hypertension).

Health, demographic, and socioeconomic characteristics included in the analysis. As shown in Table b-1, Medicaid[2], ESI[3], and uninsured adults differ in their health, demographic, and socioeconomic status. Therefore, the characteristics controlled for in the analysis are:

- health-related characteristics, such as age, gender, health status, pregnancy, presence of certain chronic conditions (e.g., asthma, diabetes, hypertension), and disability;
- additional demographic characteristics, such as race and ethnicity; and
- socioeconomic characteristics, such as income and education.

The full list of characteristics controlled for in this analysis is shown in Table 2 of the MACPAC Contractor Report's technical appendix (Long et al. 2012). The MACPAC Contractor Report focuses on the unadjusted numbers—that is, where the access-related numbers for adults enrolled in ESI and uninsured adults are not adjusted to control for how these populations differ from Medicaid enrollees.

The goal of controlling for these factors is to determine how access varies for adults with Medicaid, ESI, and no health insurance who are similarly situated in terms of certain health, demographic, and socioeconomic characteristics. Box b-1 provides examples of peer-reviewed research using similar statistical approaches. For any of these analyses, there may be other relevant characteristics that could not be controlled for

TABLE b-1. Selected Health, Demographic, and Socioeconomic Characteristics of Adults (19–64) by Insurance Status, 2009 (Unadjusted)

Measure	Medicaid	ESI	Uninsured
Health-related characteristics			
Female	**68.1%**	**51.1%***	**42.7%***
Pregnant in the last 12 months	**11.8**	**2.7***	**1.1***
Self-reported health status			
Very good/excellent	45.1	71.2*	55.5*
Good	28.6	22.9*	31.4
Fair/poor	26.4	5.9*	13.1*
Disability			
Limited in any way	46.3	26.9*	27.5*
Work limitation	29.0	4.8*	8.1*
Functional limitation	42.1	25.8*	25.3*
Chronic conditions			
Asthma	19.5	12.4*	12.2*
Diabetes	13.2	6.2*	4.8*
Heart disease or condition	11.3	7.7*	5.7*
Hypertension	29.1	22.8*	16.1*
Mental health status			
Depressed or anxious feelings most or all of the time	26.4	8.1*	18.0*
Feelings interfered with life a lot in the past 30 days	8.9	2.1*	4.6*
Demographic and socioeconomic characteristics			
Parent of dependent child	**54.6**	**40.9***	**36.8***
Home owned, not rented	**34.5**	**76.8***	**44.1***
Race/ethnicity			
White, non-Hispanic	44.6	74.5*	47.2
Black, non-Hispanic	24.8	10.0*	13.6*
Hispanic	23.9	9.6*	34.3*
Other non-white, non-Hispanic	6.7	5.9	5.0
Marital status			
Married	42.6	72.1*	53.2*
Widowed, separated, or divorced	20.1	10.7*	15.6*
Never married	37.3	17.2*	31.2*
Highest level of education			
Less than high school	32.1	5.1*	29.3
High school diploma/GED	32.1	22.9*	34.8
Some college	26.3	34.2*	27.1
College or graduate degree	9.5	37.8*	8.8

TABLE b-1, Continued

Measure	Medicaid	ESI	Uninsured
Employment			
Not working	60.9	17.1*	35.9*
Working full-time	24.3	73.6*	48.3*
Working part-time	14.8	9.3*	15.8
Income as a percent of the federal poverty level (FPL)			
Less than 50% FPL	26.0	2.3*	15.2*
50% to 99% FPL	29.8	2.6*	18.0*
100% to 149% FPL	17.6	4.0*	18.9
150% to 199% FPL	9.4	5.4*	15.2*
200% to 249% FPL	5.1	6.8*	11.2*
250% to 299% FPL	3.1	7.6*	6.8*
300% to 399% FPL	3.0	15.7*	7.5*
400% to 499% FPL	2.6	14.4*	3.4
500% FPL or more	3.3	41.3*	3.9
Sample size	**1,828**	**11,671**	**3,565**

Notes: Unadjusted, descriptive statistics for all of the regression variables are shown in Table 2 of the MACPAC Contractor Report's technical appendix (Long et al. 2012). ESI is employer-sponsored insurance. The federal poverty level (FPL) is measured using the 2009 U.S. Department of Health and Human Services' poverty guidelines. GED is General Education Development test.

*Significantly different from Medicaid at the (.05) level, two-tailed test.

Source: Urban Institute analysis for MACPAC of the 2009 National Health Interview Survey (NHIS)

given the available data (e.g., additional chronic conditions, severity of chronic conditions).

It is not possible to perfectly capture every potential factor that could affect individuals' access to care. While the results in this Section are adjusted for differences in individuals' health, demographic, and socioeconomic characteristics, they do not adjust for other factors such as the availability of transportation to health care providers or for whether or not individuals live in medically underserved areas. To the extent that these challenges are more common among Medicaid enrollees, and not addressed by other characteristics included in the analysis, they may affect the results.

It is worth noting that, regardless of whether the unadjusted or regression-adjusted numbers are used, adults with Medicaid report better access to care than do uninsured adults. The regression adjustments tend to lower the magnitude of the differences; part of the lower use of health care by uninsured adults relates to the fact that they are in better health, on average, than adults with Medicaid.

The regression controls tend to have a smaller impact on the differences between Medicaid enrollees and adults with ESI because the two sets of controls used in the analysis tend to move in opposite directions. For example, controlling for health characteristics tends to increase the likelihood of adults with ESI using health

BOX b-1. Selected Studies Comparing Adults' Access in Medicaid to Those with Private or No Insurance, Controlling for Enrollee Characteristics

Following are examples from the peer-reviewed research literature that evaluate adults' access to care in Medicaid, compared to the uninsured or those with private insurance. The results are based on the standard research approach of using regressions to control for differences in the underlying populations' characteristics.

Impact of Insurance Status on Access to Care and Out-of-Pocket Costs for U.S. Individuals with Epilepsy (Halpern et al. 2011). Using MEPS data from 2002–2007, the authors reported that "[w]ith sociodemographic characteristics controlled for, uninsured individuals had significantly fewer outpatient visits, fewer visits with neurologists, and greater antiepileptic drug costs than did those with private insurance. Individuals with Medicaid coverage had similar medical resource utilization rates but lower out-of-pocket costs compared with privately insured individuals."

Medical and Dental Care Utilization and Expenditures under Medicaid and Private Health Insurance (Ku 2009). Using MEPS data from 2005, the author reported that "[a]fter adjustment for health status and other factors, Medicaid adults and children had greater use of prescription drugs than the privately insured, but there were no significant differences in prescription expenditures. Adults on Medicaid had lower utilization of office-based medical and dental care and much lower expenditures than the privately insured. Contrary to stereotypes, there were no significant differences between Medicaid adults and children and the privately insured in emergency, outpatient, or inpatient hospital use, and the former had significantly lower expenditures."

Assessing Access to Care under Medicaid: Evidence for the Nation and Thirteen States (Coughlin et al. 2005). Using 1999 and 2002 data from the National Survey of America's Families, the authors controlled for demographic, social, and health characteristics and found "simple [unadjusted] differences in access to care between Medicaid and the low-income privately insured to be significant across all six measures examined…. After accounting for individual and area differences, we found few access disparities between Medicaid beneficiaries and the low-income privately insured for the country as a whole."

Reconsidering the Effect of Medicaid on Health Care Services Use (Marquis and Long 1996). Using data from the 1987 National Medical Expenditure Survey and the Survey of Income and Program Participation for 1984–1988, the authors reported comparisons "based on multivariate models of health care use that control for demographic and economic characteristics and for health status.… AFDC [Aid to Families with Dependent Children] Medicaid beneficiaries use considerably more ambulatory care and inpatient care than they would if they remained uninsured. Use among the AFDC Medicaid population is about the same as use among otherwise similar, privately insured persons."

care, while controlling for demographic and socioeconomic characteristics often decreases their utilization. Thus, the unadjusted and adjusted comparisons between enrollees with Medicaid and ESI can look fairly similar.

Adults with part-year health insurance coverage excluded from analysis. The survey measures in this analysis focus on individuals' access to and use of health care over the past year. In order to compare access to care for Medicaid adults to adults with ESI and the uninsured, the

BOX b-2. Household Surveys as a Source of Data on Access

Different types of data—for example, household surveys (as used in this Chapter), provider surveys, and administrative data—provide unique insights on an issue and have both strengths and weaknesses as sources of information. For a complete assessment of access to care, the information provided from any single source, such as household survey data, should be considered in the context of findings from other data sources as well.

Strengths of household survey data:

- Information is obtained on numerous relevant characteristics that are generally not available from other sources, such as self-reported health status, income, race, and educational attainment.
- For each of these characteristics, a great amount of detail can be obtained, such as the specific sources and amounts of individuals' income.
- Individuals provide their own perspectives on the questions to which they are responding, such as whether care was delayed due to costs.
- National surveys use consistent methods within a given survey, potentially allowing for direct comparisons across states (sample size permitting).
- Surveys can be structured to explore certain specific issues in depth, such as access to care.

Weaknesses of household survey data:

- Surveys rely on information as reported by respondents, which may not be accurate.
- Respondents may feel pressure to provide certain socially acceptable answers (e.g., indicating they had a mammogram even if they did not).
- Responses are based on subjective perceptions that might not align with objective criteria (e.g., individuals may not be aware that they need a particular type of care and may thus underreport "unmet health care needs").
- Such weaknesses may vary systematically according to individuals' source of health insurance, potentially biasing the comparisons between adults on Medicaid and those with ESI or no insurance.
- Survey data can only answer questions asked in the surveys, which can lack the detail and accuracy available from administrative data on particular issues such as health care spending.

analysis focuses on the subset of adults who were insured or uninsured for the entire year. This ensures that reports about access to care for insured adults, for example, do not actually include parts of the year when they did not have coverage. Similarly, it ensures that reports about access to care for uninsured adults do not include periods when they did have coverage.[4] The movement of individuals in and out of coverage and across sources of coverage has been widely recognized as an important policy issue and will be explored in future MACPAC analyses.

Access to certain services excluded from analysis. The findings in this Section do not include results for certain specific services such as dental care. Dental services are delivered by a unique set of providers and are often financed differently than other types of care. MACPAC plans to produce focused analyses on dental care

and other services in the context of Medicaid and CHIP in the future.

Enrollees and Their Unique Characteristics

Medicaid and CHIP enrollees differ from the general population in terms of their health, demographic, and socioeconomic characteristics. These differences can influence whether, how, and where adults with Medicaid obtain health care services. The findings on access to care presented in this analysis take into account the unique characteristics of enrollees with Medicaid and how they differ from adults with ESI or no insurance.

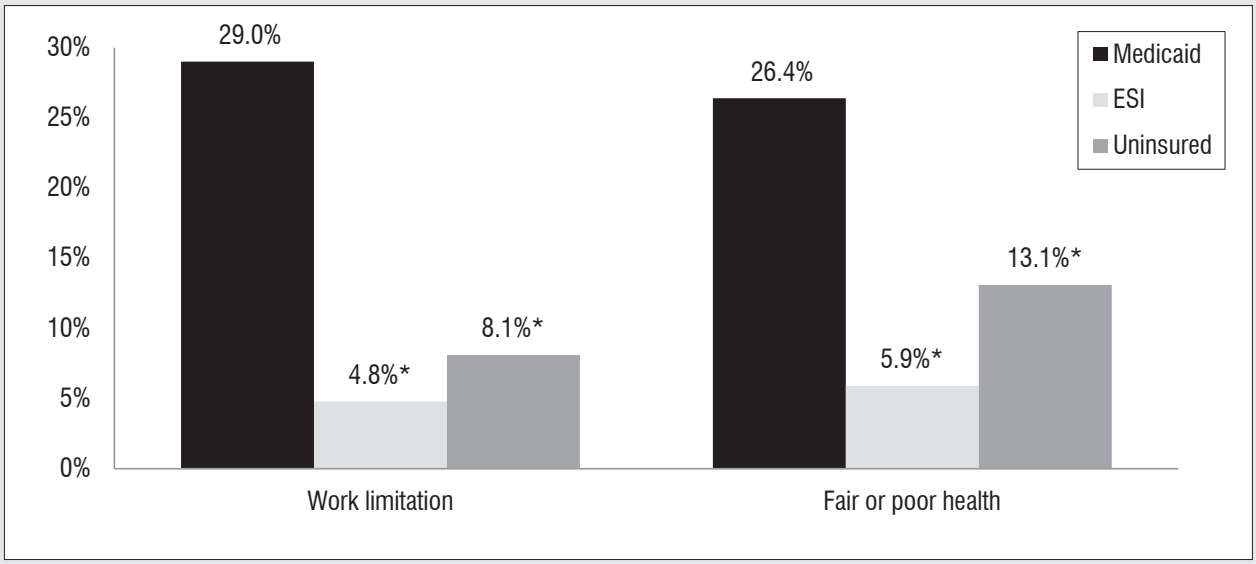
Health characteristics. Compared to those with ESI or no insurance, adults with Medicaid are more likely to report being pregnant, having a number of chronic conditions (e.g., asthma, diabetes, emphysema, hypertension),[5] facing limitations in their ability to work, and being in fair or poor health (Figure b-1).[6] These results reflect the fact that two of the major Medicaid eligibility pathways for non-elderly adults are for persons with disabilities and for pregnant women. The Commission's March 2012 Report to the Congress focused on Medicaid-enrolled persons with disabilities, whose access to and use of care will be assessed by MACPAC on an ongoing basis (MACPAC 2012).[7] In addition, the Commission has work under way pertaining to pregnant women and their coverage, access, and outcomes in Medicaid.

Because adults with Medicaid tend to be in poorer health than individuals with ESI or no insurance, these individuals would be expected to use more health care services. As a result, adults with Medicaid could show higher utilization of health care services, not necessarily because Medicaid provides greater access, but simply because adults with Medicaid are sicker. The findings in this Section attempt to control for health-related characteristics that make adults without insurance and with ESI differ from adults with Medicaid. Again, these controls ensure that the access and utilization differences that remain are more likely to be attributable to the source of coverage rather than individuals' characteristics.[8]

Demographic and socioeconomic characteristics. Adults with Medicaid also differ from other adults in terms of their demographic and socioeconomic characteristics. For example, adults with Medicaid are more likely to have income below the federal poverty level and to be parents of dependent children, compared to adults with ESI and uninsured adults (Figure b-2). This is expected, because having low income is a general prerequisite for Medicaid eligibility and because low-income parents of dependent children comprise another major Medicaid eligibility pathway for non-elderly adults.

As a result of these demographic and socioeconomic differences, adults with Medicaid could show different levels of health care utilization and access to care, not because of their source of coverage, but because of their underlying demographic and socioeconomic characteristics. For example, because adults with Medicaid are significantly more likely to report living below the poverty line than adults with ESI or with no insurance, this analysis attempts to control for income in order to account for differences in levels of access due to income status. Unless noted otherwise, the findings described in the remainder of this Section are based on controlling for health, demographic, and socioeconomic characteristics that make adults with ESI and no insurance differ from adults with Medicaid.[9]

FIGURE b-1. Personal Health Characteristics of Adults (19–64) by Insurance Status, 2009 (Unadjusted)

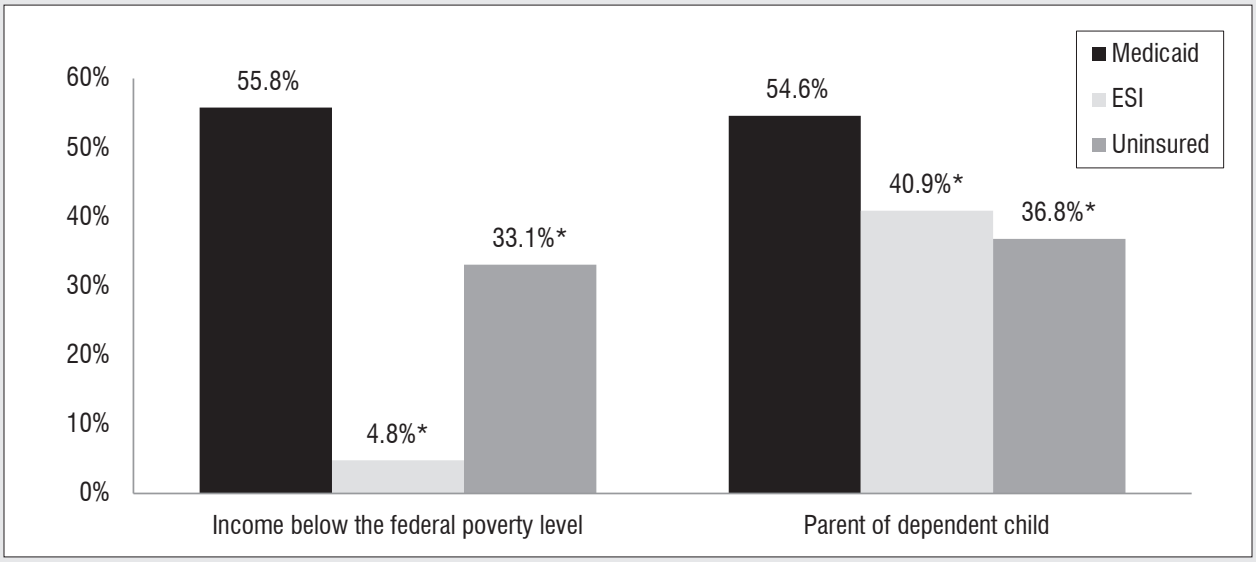


Notes: ESI is employer-sponsored insurance. Work limitation is based on whether individuals report that a physical, mental, or emotional problem limits the kind or amount of work they can do. To show how Medicaid adults differ from adults with ESI or no coverage, these numbers are *not* adjusted as elsewhere for the groups' differing health, demographic, or socioeconomic characteristics.

***** Statistically different from Medicaid at the (.05) level, two-tailed test.

Source: Urban Institute analysis for MACPAC of the 2009 National Health Interview Survey (NHIS)

FIGURE b-2. Demographic and Socioeconomic Characteristics of Adults (19–64) by Insurance Status, 2009 (Unadjusted)



Notes: ESI is employer-sponsored insurance. Income is measured at the health insurance unit. The federal poverty level is measured using the 2009 U.S. Department of Health and Human Services' poverty guidelines. To show how Medicaid adults differ from adults with ESI or no coverage, these numbers are *not* adjusted as elsewhere for the groups' differing health, demographic, or socioeconomic characteristics.

***** Statistically different from Medicaid at the (.05) level, two-tailed test.

Source: Urban Institute analysis for MACPAC of the 2009 National Health Interview Survey (NHIS)

Provider Availability

Availability focuses on whether health care providers are accessible to Medicaid and CHIP enrollees. There are two key factors that influence the availability of providers in a given area:

- provider supply—for example, the ratio of providers to the population; and
- provider participation—for example, the proportion of providers in an area that accepts Medicaid and CHIP.

Studies have shown that physicians and other health care providers are disproportionately located in areas where incomes are high and health care is financed predominantly by private insurance; they are less willing to locate in the more rural or low-income areas where many Medicaid enrollees reside (Ricketts and Randolph 2008, Brasure et al. 1999, Fossett and Perloff 1999). Research has also found that communities with high proportions of black and Hispanic residents were much more likely than others to have a shortage of physicians, regardless of the average income in the community (Komaromy et al. 1996). Although overall provider supply may not be affected by federal or state Medicaid policies, providers' willingness to participate in these programs may be affected by a number of factors under states' control, including payment rates and administrative burden for providers.

Because the data used here are from interviews of users of care, rather than providers, they do not directly measure the extent to which providers are available to Medicaid enrollees. Other sources of data such as provider surveys can produce more information on access as measured by provider availability and are being used in analyses that MACPAC is currently conducting. However, there are several measures available in household survey data that indirectly measure whether providers are available to the individuals being surveyed. For example, whether an enrollee reports having a USC may be the result of multiple influences, but one important factor is whether the enrollee is able to find a provider to serve as a USC.

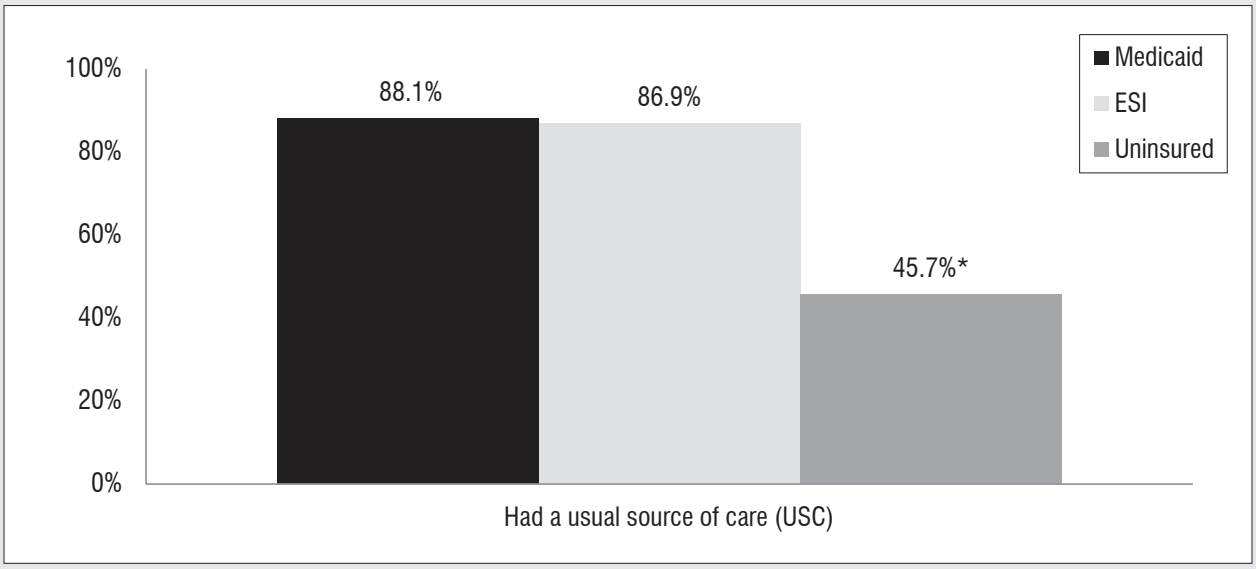
The vast majority of adults with Medicaid have a USC. A USC is defined as the place where a person typically goes when sick or in need of health-related advice. For the analyses in this Section, the emergency department is not considered a USC. Nearly 90 percent of adults with Medicaid (88.1 percent) and similarly situated adults with ESI (86.9 percent) were reported to have had a USC, compared to 45.7 percent of similarly situated uninsured adults (Figure b-3).

Adults with Medicaid differ in their USC. Among adults with a USC, most have a doctor's office as their USC, regardless of whether they are enrolled in Medicaid or ESI. Previous research has found that Medicaid enrollees disproportionately rely on providers at community health centers for primary care services (Hing and Uddin 2008). This is consistent with the findings in Figure b-4, which show that, even after accounting for differences in the health, demographic, and socioeconomic status of adults with a USC, adults with Medicaid are more likely to have a clinic or health center as their USC, compared to adults with ESI.[10] Uninsured adults with a USC are even more likely than adults with Medicaid to rely on clinics and health centers as their USC.

Reasons for delaying needed medical care vary with insurance status. After accounting for differing enrollee characteristics, adults with Medicaid and those with ESI reported similar rates of delayed medical care (Table b-2).

As previously mentioned, the findings in this Section rely on comparisons of adults with Medicaid to similarly situated adults with ESI by controlling for a variety of characteristics that might influence access to care. When comparing

FIGURE b-3. Usual Source of Care among Similarly Situated Adults (19–64) by Insurance Status, 2009

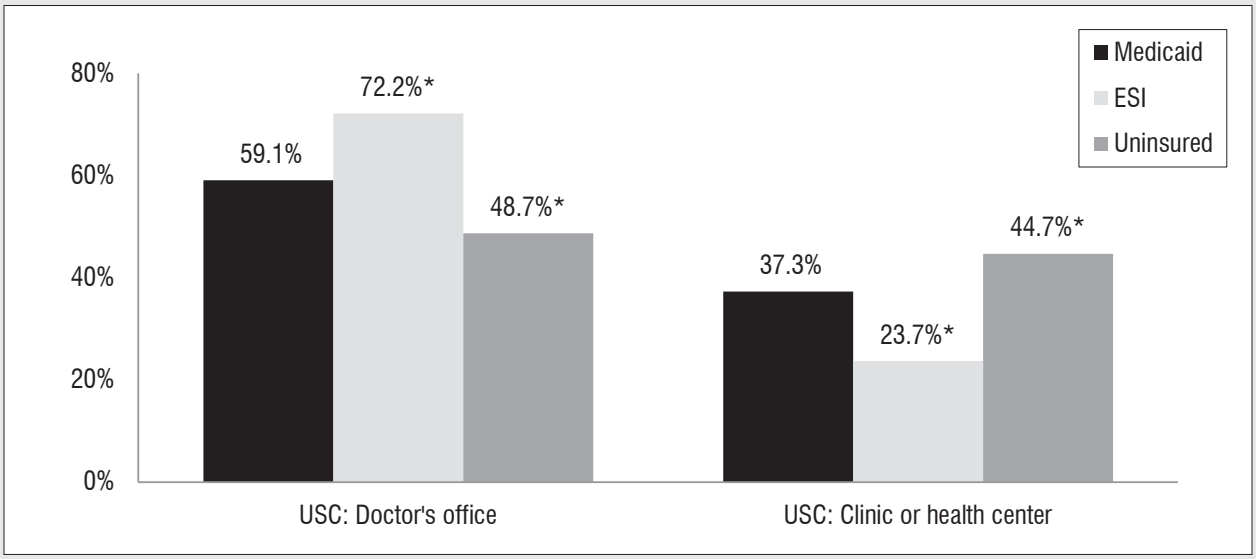


Notes: ESI is employer-sponsored insurance. Usual source of care (USC) is defined as the place that the person usually goes to when sick or in need of health-related advice; the emergency department is not considered a USC. The means reported for adults with ESI coverage and for uninsured adults are regression-adjusted, using the health, demographic, and socioeconomic characteristics of the adults with Medicaid.

***** Statistically different from Medicaid at the (.05) level, two-tailed test.

Source: Urban Institute analysis for MACPAC of the 2009 National Health Interview Survey (NHIS)

FIGURE b-4. Type of Usual Source of Care (USC) among Similarly Situated Adults (19–64) with a USC by Insurance Status, 2009



Notes: ESI is employer-sponsored insurance. Usual source of care (USC) is defined as the place that the person usually goes to when sick or in need of health-related advice; the emergency department is not considered a USC. See Figure b-3 for overall rates of adults having a USC. Doctor's office includes an HMO. Clinic or health center does not include hospital outpatient departments. The means reported for adults with ESI coverage and for uninsured adults are regression-adjusted, using the health, demographic, and socioeconomic characteristics of the adults with Medicaid.

***** Statistically different from Medicaid at the (.05) level, two-tailed test.

Source: Urban Institute analysis for MACPAC of the 2009 National Health Interview Survey (NHIS)

the two groups without controlling for their differing characteristics, adults with ESI were less likely to have delayed care (16.4 percent, as shown in Table 6 of the MACPAC Contractor Report's technical appendix) than adults with Medicaid (24.2 percent)—a difference of 7.8 percentage points. When controlling only for the populations' differing health characteristics, the difference between the two groups reverses; if adults with ESI had as many health needs as adults with Medicaid, 25.6 percent would have delayed care, a higher number (but a statistically insignificant difference) than the 24.2 percent for Medicaid-enrolled adults. In this particular case, also controlling for demographic and socioeconomic characteristics does not change the result; there is still no significant difference in reported delayed medical care between adults with Medicaid and similarly situated adults with ESI. This may indicate that delaying needed medical care reflects challenges faced by adults with more serious, chronic health conditions, regardless of their health insurance status.

Adults with Medicaid are less likely than adults with ESI or the uninsured to report delaying medical care because of worries about out-of-pocket costs. When asked why care was delayed, adults with Medicaid reported lower levels of delaying medical care because of worries about out-of-pocket costs compared to similarly situated adults with ESI and uninsured adults (Table b-2). This is most likely related to the requirement that adults generally face little or no cost sharing in Medicaid (MACPAC 2012, MACStats Table 13). However, worries about cost were more commonly cited for Medicaid-enrolled adults than for children (1.6 percent, MACPAC 2012), since children enrolled in Medicaid are generally exempt from any cost-sharing (42 CFR 447.53(b)(1)).

Adults with Medicaid report challenges with office waiting times and transportation. For adults with Medicaid and with ESI, similar rates were reported for delaying medical care because of difficulty in obtaining an appointment soon

TABLE b-2. Delayed Medical Care among Similarly Situated Adults (19–64) by Insurance Status, 2009

	Medicaid	ESI	Uninsured
Delayed medical care (any reason below)	**24.2%**	**25.6%**	**47.3%***
Because once at the site, wait too long to see the doctor	9.8	7.3*	8.5
Because could not get an appointment soon enough	9.6	7.9	7.1*
Because of out-of-pocket costs	8.3	13.6*	38.7*
Because did not have transportation	8.2	5.1*	5.5*
Because could not get through on the phone	5.4	4.7	4.4
Because could not go when open (office hours)	4.7	4.5	4.3

Notes: ESI is employer-sponsored insurance. The means reported for adults with ESI coverage and for uninsured adults are regression-adjusted, using the health, demographic, and socioeconomic characteristics of the adults with Medicaid.

* Statistically different from Medicaid/CHIP at the (.05) level, two-tailed test.

Source: Urban Institute analysis for MACPAC of the 2009 National Health Interview Survey (NHIS)

enough, getting through on the phone, or going during office hours (Table b-2). Adults enrolled in Medicaid were more likely to have delayed care because the wait for the doctor in the office was too long or because they did not have transportation.

Timeliness and ease of obtaining health care are reported to be comparable by adults with Medicaid and similarly situated adults with ESI, but uninsured adults report worse results. For the following four measures, there were no significant differences between adults with Medicaid and similarly situated adults with ESI; however, the uninsured reported significantly worse results:

- **Timeliness of needed health care.** Among adults who had a condition that needed health care right away, 77.6 percent of these adults with Medicaid were reported to have received care as soon as it was needed, compared to 83.6 percent of similarly situated adults with ESI and 65.4 percent of uninsured adults.
- **Appointments for routine care.** Among adults who had appointments for routine care, an appointment was reported to be available as soon as was needed for 80.1 percent of these adults with Medicaid, compared to 77.6 percent of similarly situated adults with ESI and 69.8 percent of uninsured adults.
- **Ease of obtaining care and tests.** Among adults who needed care, tests, or treatments, it was reported to be easy for 82.2 percent of these adults with Medicaid to get such care, compared to 85.1 percent of similarly situated adults with ESI and 65.6 percent of uninsured adults.
- **Ease of obtaining specialty care.** Among adults who needed to see a specialist, it was reported to be easy for 69.2 percent of adults with Medicaid to see the necessary specialist, compared to 75.7 percent of similarly situated adults with ESI and 56.6 percent of uninsured adults.

For these four measures (and many others), adults were more likely to report issues compared to the results reported for children (MACPAC 2012), regardless of health insurance status.

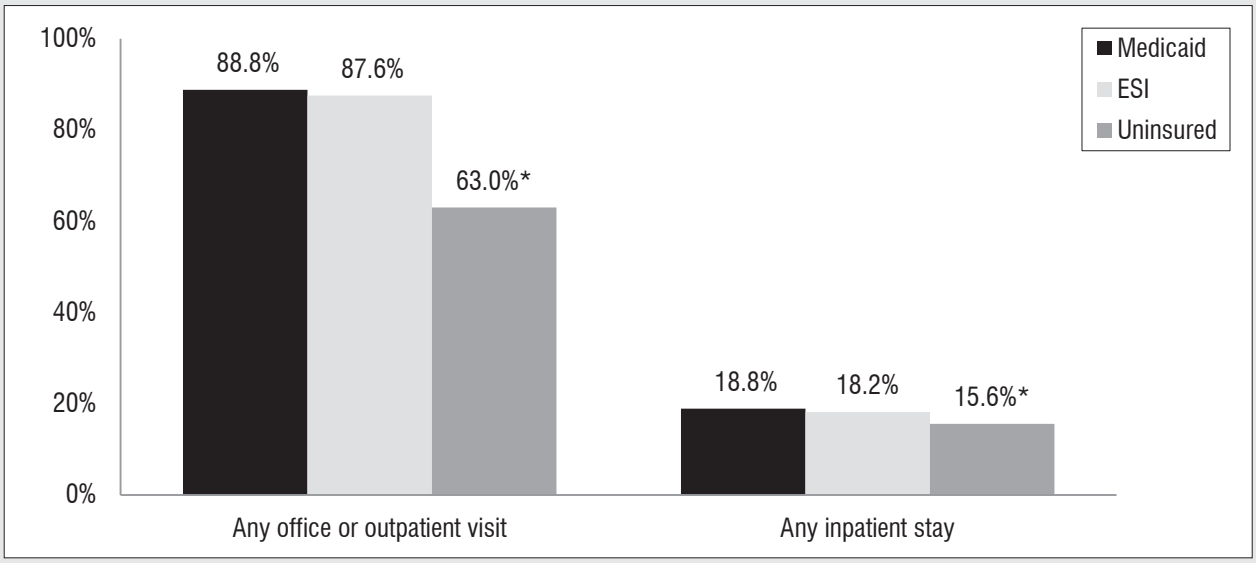
Utilization of Health Care Services

By itself, insurance coverage does not guarantee the receipt of necessary or appropriate services. Thus utilization, the third component of the Commission's framework on access, assesses enrollees' use of services and how they perceive their experiences with obtaining care and interacting with their providers. Utilization is "realized access," or how services are actually used by individuals. Findings on utilization of care by adults enrolled in Medicaid, compared to similarly situated adults with ESI and with no coverage, are shown below.

Adults with Medicaid are as likely to report an office or outpatient visit in the past year as similarly situated adults with ESI and more likely than uninsured adults. As shown in Figure b-5, the likelihood of having any visit in the past year in an office or outpatient setting was comparable for adults with Medicaid and similarly situated adults with ESI. Adults with Medicaid reported significantly more use of ambulatory care than similarly situated uninsured adults across a variety of measures.[11]

Adults with Medicaid are as likely to report an inpatient stay in the past year as similarly situated adults with ESI and more likely than uninsured adults. As shown in Figure b-5, the likelihood of having an inpatient hospital stay in the past year was comparable for adults with Medicaid and similarly situated adults with ESI.

FIGURE b-5. Any Ambulatory and Inpatient Care in the Past 12 Months among Similarly Situated Adults (19–64) by Insurance Status, 2009

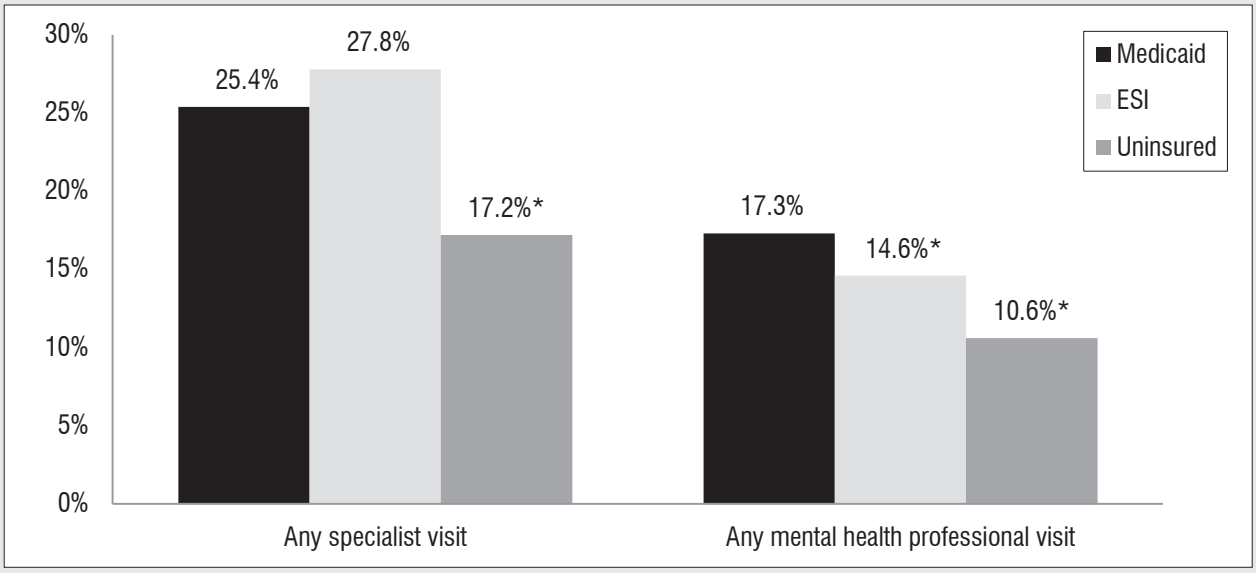


Notes: ESI is employer-sponsored insurance. The means reported for adults with ESI coverage and for uninsured adults are regression-adjusted, using the health, demographic, and socioeconomic characteristics of the adults with Medicaid.

***** Statistically different from Medicaid at the (.05) level, two-tailed test.

Source: Urban Institute analysis for MACPAC of the 2009 National Health Interview Survey (NHIS)

FIGURE b-6. Any Specialist Visit in the Past 12 Months among Similarly Situated Adults (19–64) by Insurance Status, 2009



Notes: ESI is employer-sponsored insurance. Specialists include medical doctors who specialize in a particular medical disease or problem (excluding OB/GYNs, psychiatrists, and ophthalmologists). The means reported for adults with ESI coverage and for uninsured adults are regression-adjusted, using the health, demographic, and socioeconomic characteristics of the adults with Medicaid.

***** Statistically different from Medicaid at the (.05) level, two-tailed test.

Source: Urban Institute analysis for MACPAC of the 2009 National Health Interview Survey (NHIS)

Adults with Medicaid were significantly more likely to have reported an inpatient stay compared to similarly situated uninsured adults.

Adults with Medicaid and similarly situated adults with ESI receive mammograms and flu vaccines at comparable rates, but uninsured adults receive this preventive care less often. Adults with Medicaid reported receiving flu vaccines at rates similar to adults covered by ESI (29.9 percent vs. 33.7 percent) and higher than uninsured adults (20.8 percent). This was also the case with respect to mammograms for females 30 and older (35.8 percent Medicaid, 38.8 percent ESI, 19.2 percent uninsured).

Likelihood of a specialist visit in the past year is comparable among adults with Medicaid and similarly situated adults with ESI, but not for uninsured adults. As shown in Figure b-6, the likelihood of having a visit to a specialist in the past year was comparable for adults with Medicaid and similarly situated adults with ESI. Adults with Medicaid were significantly more likely to have reported a specialist visit than similarly situated uninsured adults.[12]

However, adults with Medicaid were significantly more likely to have reported a visit to a mental health professional than similarly situated adults with ESI (and with no coverage).[13] This may be related to less generous coverage of mental health benefits in ESI, particularly for small employers, compared to Medicaid.

Whether individuals had a specialist visit in the past year provides another example of the effect of controlling for differing enrollee characteristics. When comparing adults with Medicaid to adults with ESI *without* controlling for their differing characteristics, adults with ESI are as likely to have had a specialist visit (26.5 percent, as shown in Table 6 of the MACPAC Contractor Report's technical appendix) as adults with Medicaid (25.4 percent). When controlling *only* for the populations' differing health characteristics, adults with ESI are *more* likely to have had a specialist visit (33.9 percent); if adults with ESI had as many health needs as adults with Medicaid, they would be much more likely to have visited a specialist. However, after controlling for demographic and socioeconomic characteristics, in addition to differing health characteristics, the significant differences disappear with respect to a specialist visit, as shown in Figure b-6. This may indicate that accessing specialty care is a challenge for low-income adults, regardless of their health insurance status.

This measure does not assess the extent to which specialty care was needed, nor whether adults received all necessary specialty care. For example, if individuals enrolled in Medicaid and ESI were equally as likely to have visited a cardiologist, the results cannot be interpreted to indicate whether or not individuals with Medicaid or ESI were more likely to have received a needed procedure, such as a stent. Rather, it is a simple measure of whether a visit to a specialist was reported by the individual. This sole measure cannot be used to indicate whether or not adults with Medicaid face challenges in obtaining access to needed specialty care, but must also be placed in the context of information from other sources, such as provider surveys and claims data. For example, although the results were specific to children, the Government Accountability Office recently conducted a survey in which physicians were more than three times as likely to report difficulty with referrals to specialty care for Medicaid/CHIP children (84 percent) compared to privately insured children (26 percent). For both Medicaid/CHIP and private insurance, physicians reported particular problems for children needing specialty referrals for mental health, dermatology, and neurology (GAO 2011a).

Regardless of patients' source of health insurance, health care providers were reported to listen carefully and spend enough time with their patients. The vast majority of adults who had at least one visit to a health care provider's office or clinic in the past 12 months reported positive interactions with the provider. For similarly situated adults in all three insurance groups, most indicated that the provider usually or always listened carefully, explained things in a way that was easy to understand, showed respect, and spent enough time with them (Figure b-7). Interestingly, these numbers were all lower for adults, compared to the results reported by parents for their children (MACPAC 2012).

As previously noted, these measures are based on the perceptions of respondents who obtained care. The surveys do not identify, for example, the amount of time the provider actually spent with the respondent, only whether respondents considered it to be "enough." Respondents may have different expectations for how much time is "enough" that vary with their type of insurance or other characteristics, which could affect their responses and these results.

Adults with Medicaid have the highest rates of emergency department (ED) visits. Although ED care is necessary for some conditions, utilizing EDs for non-emergent care is generally more costly and provides fewer opportunities for follow up than if the underlying condition were treated by a primary care provider (GAO 2011b). A high rate of ED use may indicate that individuals are not receiving care in the optimal setting.

The survey results show that adults with Medicaid are much more likely than similarly situated uninsured adults and adults with ESI to have had an ED visit and to have had multiple ED visits in the past 12 months (Figure b-8). The greater utilization of EDs among Medicaid enrollees is well documented in the research literature and confirmed in this analysis. This may be due in part to their perceived long wait times in the office to see their providers (Table b-2) and the low Medicaid cost-sharing requirements for ED visits.

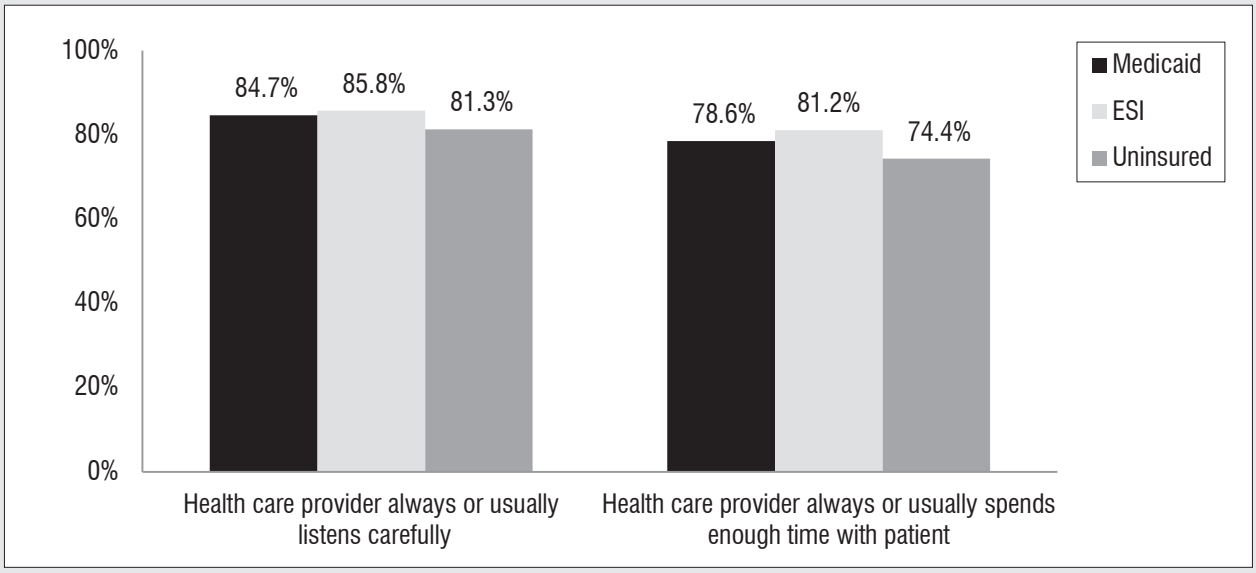
In addition, provisions related to the Emergency Medical Treatment and Active Labor Act (EMTALA) require that Medicare-participating hospitals maintain a list of specialists who are on call to the emergency department.[14] Thus, individuals may go to an ED if they feel it is their only viable option to obtain needed specialty care. While these findings indicate comparable reported levels of delayed care for adults with Medicaid and similarly situated adults with ESI (Table b-2), prior research has found that when individuals with Medicaid and with private insurance experience comparable barriers to care, it is more likely to increase ED utilization for Medicaid enrollees than for those with private coverage (Cheung et al. 2012). Research has also found a correlation between reductions in Medicaid physician fees and increased ED usage (Decker 2009).

More analysis is needed to understand what may be causing higher rates of ED use among Medicaid enrollees, whether or not such ED use is appropriate, and whether or not the higher rates are a reflection of problems with access to primary or specialty care. As part of its research agenda, MACPAC plans more in-depth analyses of Medicaid enrollees' ED usage.

Looking Forward

Prior studies have shown that insurance coverage improves access to care compared to being uninsured, and the findings in this Section are consistent with that earlier research (IOM 2009, Hargraves and Hadley 2003). Other studies have examined the impact of Medicaid and CHIP relative to ESI or private insurance on access to care and had generally similar findings to those

FIGURE b-7. Patient-centered Measures among Similarly Situated Adults (19–64) with a Health Professional Visit in the Past 12 Months by Insurance Status, 2008

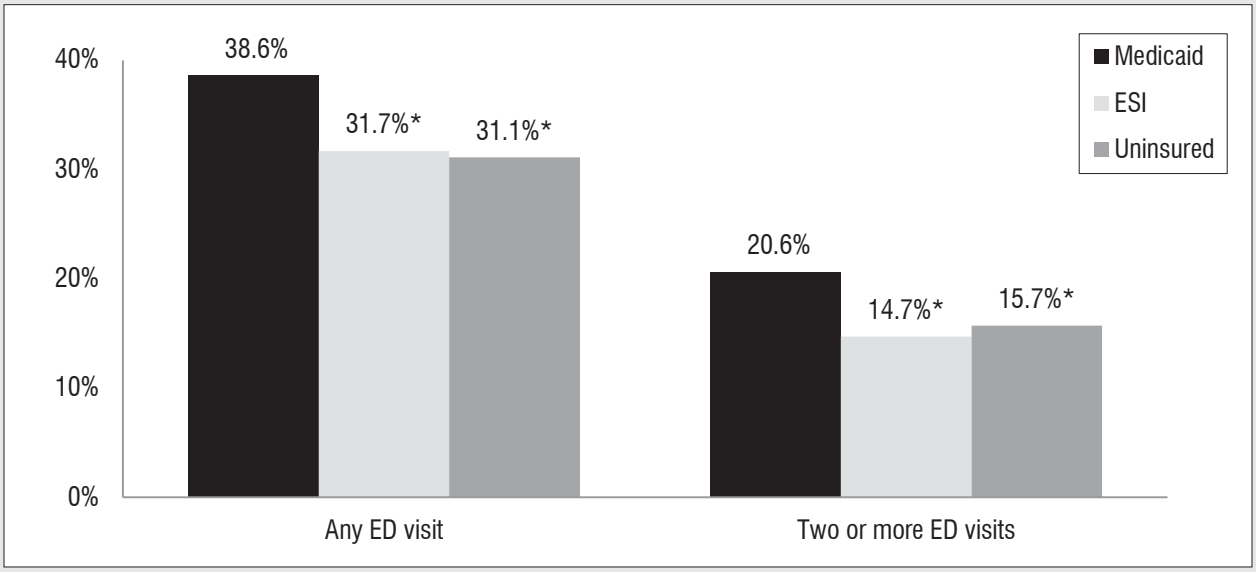


Notes: ESI is employer-sponsored insurance. Questions only asked of adults that had at least one doctor or health care professional visit in the past 12 months. The means reported for adults with ESI coverage and for uninsured adults are regression-adjusted, using the health, demographic, and socioeconomic characteristics of the adults with Medicaid.

***** Statistically different from Medicaid at the (.05) level, two-tailed test.

Source: Urban Institute analysis for MACPAC of the 2008 Medical Expenditure Panel Survey (MEPS)

FIGURE b-8. Emergency Department Visits among Similarly Situated Adults (19–64) by Insurance Status, 2009



Notes: ESI is employer-sponsored insurance. The means reported for adults with ESI coverage and for uninsured adults are regression-adjusted, using the health, demographic, and socioeconomic characteristics of the adults with Medicaid.

***** Statistically different from Medicaid at the (.05) level, two-tailed test.

Source: Urban Institute analysis for MACPAC of the 2009 National Health Interview Survey (NHIS)

shown here (Halpern et al. 2011, Ku 2009, Selden and Hudson 2006, Coughlin et al. 2005, Long et al. 2005, Dubay and Kenney 2001, Marquis and Long 1996).

Using its framework for examining access to care, the Commission will continue to explore access in Medicaid and CHIP. The Commission also plans to explore in greater depth particular issues pertaining to access, including oral health, geographic variation by state and by rural and urban status, individuals' shifts in and out of Medicaid, the relationship between payment policy and access, and trends over time.

Endnotes

1 Additionally, more detailed information is presented in this Section's Annex and in MACPAC Contractor Report No. 2 (Long et al. 2012), which was the basis of the findings presented in this Section. The MACPAC Contractor Report is available at www.macpac.gov/publications.

2 Although CHIP covers adults in a handful of states, the numbers are so small compared to Medicaid that the discussion in this Section uses "Medicaid" to refer to adults enrolled in Medicaid or CHIP.

3 In the NHIS analysis, ESI coverage is defined as coverage through an employer (including self-employed), union, or the military (TRICARE/CHAMPVA). In the MEPS analysis, ESI is defined as private group coverage through an employer or union, self-employed coverage, or the military (TRICARE/CHAMPVA).

4 The coverage categories used in this report are as follows for the NHIS: (1) full-year uninsured, (2) full-year insured with Medicaid at the time of the survey (and not with ESI or Medicare at the time of the survey), and (3) full-year insured with ESI at the time of the survey. While the full-year insurance variables are defined over a 12-month period, some of the adults in the ESI category may have had Medicaid or other types of coverage over the course of the year; likewise, some of those in the Medicaid category may have had ESI coverage over the course of the year. The coverage categories for the MEPS are: (1) full-year uninsured, (2) full-year Medicaid coverage, and (3) full-year ESI coverage.

5 The survey results on chronic conditions are based on whether individuals were ever told by a medical professional that they had the condition. Uninsured individuals may report lower prevalence of chronic conditions because they have undiagnosed health problems related to the fact that they do not see health care providers as regularly.

6 The survey results on work limitations are based on whether individuals report that a physical, mental, or emotional problem limits the kind or amount of work they can do.

7 Building on this work focused on Medicaid-only persons with disabilities, additional analyses were produced for this Section in order to compare Medicaid enrollees with and without a Supplemental Security Income (SSI). These results are described in the MACPAC Contractor Report (Long et al. 2012). Similar to the findings presented in March, the unadjusted results show that adults enrolled in Medicaid and SSI report poorer health status, more health conditions, and greater utilization of health care when compared to non-SSI Medicaid adults.

8 The MACPAC Contractor Report (Long et al. 2012) describes in detail the adjustments used, which are consistent with methods used by the Institute of Medicine in examining differences in access to care among different racial/ethnic population groups (IOM 2002).

9 The MACPAC Contractor Report (Long et al. 2012) also shows the findings without these adjustments.

10 "Clinic or health center" does not include hospital outpatient departments.

11 See Table 8 of the MACPAC Contractor Report's technical appendix for additional measures.

12 These results are based on individuals' response to the following: "During the past 12 months, have you seen or talked to any of the following health care providers about your own health? A medical doctor who specializes in a particular medical disease or problem (other than obstetrician/gynecologist [OB/GYN], psychiatrist, or ophthalmologist)." Additional analyses found that if OB/GYNs were included for specialist visits, the numbers in Figure b-6 for a specialist visit in the past 12 months would be 50.4 percent for Medicaid-enrolled adults, 51.6 percent for adults with ESI (not significantly different from Medicaid), and 35.2 percent of uninsured adults (significantly lower than Medicaid). Additional statistics are shown in Tables 6 and 8 of the MACPAC Contractor Report's technical appendix.

13 These results are based on individuals' responses to the following: "During the past 12 months, have you seen or talked to any of the following health care providers about your own health? A mental health professional such as a psychiatrist, psychologist, psychiatric nurse, or clinical social worker."

14 §1866(a)(1)(I)(iii) of the Social Security Act (the Act), although the primary provisions of Emergency Medical Treatment and Active Labor Act are in §1867 of the Act.

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Section B Annex

Summary of Data Sources and Methods for the Analysis of Adults' Access to Care

This Annex gives a brief overview of the data sources and the analytic approach used to produce the statistical analysis presented in Section B regarding non-institutionalized civilian adults age 19 to 64. The data sources and analytic approach are nearly identical to those used for children in the Commission's March 2012 Report to the Congress (MACPAC 2012). More detailed information is presented in the MACPAC Contractor Report that was the basis of the findings presented here (Long et al. 2012).

Sources of Data

The results presented in this Section are from publicly available data from two national household surveys that are administered annually by the federal government—the National Health Interview Survey (NHIS) and the Medical Expenditure Panel Survey (MEPS). The core survey responses were provided by a knowledgeable adult in the household. Although state-specific estimates may be available for some of the largest states, neither the NHIS nor the MEPS permits state-level estimates for all 50 states. Thus, these estimates do not provide information on state-level differences in access to care or on the factors that drive differences across states.

NHIS. The NHIS (2009) is the primary source of data used in this analysis because it provides great detail on individuals' health while also providing some of the most reliable estimates of individuals' sources of health insurance coverage (Plewes 2010). The NHIS is an annual face-to-face household survey of civilian non-institutionalized individuals and is designed to monitor the health of the U.S. population through the collection of information on a broad range of health topics. Administered by the National Center for Health Statistics within the Centers for Disease Control and Prevention, the NHIS consists of a nationally representative sample from approximately 35,000 households with about 87,500 people (CDC 2010). The NHIS is fielded continuously throughout the year, with data collected through an in-person household interview using computer-assisted personal interviewing technology. The NHIS employs a complex, multistage sample design and includes an oversample of minority populations, including African American, Hispanic, and Asian American respondents.

The NHIS Basic Module remains relatively constant over time and consists of the Family, Sample Adult, and Sample Child Core components. For the Family Core

component, information is collected for each member of the household. One sample child (if any children under age 18 are present) and one sample adult are randomly selected from each household to collect more detailed information for the Sample Child Core and the Sample Adult Core components. Responses to the Sample Adult Core questionnaire are generally provided by the selected adult; however, if the person cannot respond due to a physical or mental condition, a knowledgeable adult residing in the household may provide responses. The Sample Adult and Sample Child questionnaires differ on some items, but both collect basic information on health status and health care service use.

MEPS. The MEPS (specifically, its household component) is used in this Section to provide estimates not available from the NHIS. The sample frame for the MEPS is drawn from a subsample of households participating in the previous year's NHIS. Like the NHIS, the MEPS is a face-to-face household survey of civilian non-institutionalized individuals. Administered by the Agency for Healthcare Research and Quality, the MEPS consists of a nationally representative sample, with about 12,300 households and about 31,000 people in 2008 (AHRQ 2010). The full-year consolidated MEPS datafile for 2008 was used in this Section.

The MEPS collects data through an overlapping panel design. A new panel of sample households is selected each year, and data for each panel are collected for two calendar years. The two years of data for each panel are collected in five rounds of interviews that take place over a two-and-a-half-year period. A single household respondent reports information for the entire household through in-person household interviews using CAPI technology. The survey collects detailed information on health care use, expenditures, sources of payment, and health insurance coverage for all household members. The MEPS also provides estimates of health status, demographic and socioeconomic characteristics, and access to health care.

Analytic Approach

These finding were generated using a standard regression model that controls for factors in addition to health insurance status. In this case, the goal was to determine how reported measures of access to and use of health care differ based on adults' insurance coverage, controlling for numerous other characteristics using regression models. Those characteristics are:

- health-related characteristics, such as age, gender, health status, presence of certain chronic conditions (e.g., asthma, diabetes, hypertension), and disability;
- additional demographic characteristics, such as race and ethnicity; and
- socioeconomic characteristics, such as income, education, and citizenship.

Additional analyses in the MACPAC Contractor Report show unadjusted as well as regression-adjusted differences in access and use among adults with Medicaid, ESI, and no insurance coverage. Two multivariate regression model specifications were used to capture differences related to two types of factors. For the first set of models, based on Institute of Medicine recommendations (IOM 2002), the analyses controlled for differences in health status. For adults, these factors were age, gender, self-reported health and mental health status, chronic conditions, disability status, pregnancy, and body mass index. The second set of factors included additional variables that capture demographic and socioeconomic characteristics. The additional variables were race, ethnicity, citizenship, marital and parental status, educational attainment, employment, family income, homeownership, family size, and the health and

disability status of other family members. These are the results presented in this Section.

Even with these adjustments, the differences in access that persist may not necessarily be wholly attributable to insurance status. There may be other relevant variables that could not be controlled for in this analysis. For example, whether or not a person lived in a Metropolitan Statistical Area is not available on the publicly available NHIS data, even though it is collected through the survey. There may be additional unobserved factors related to health status, health-seeking behavior, and socioeconomic status that influence both insurance status and access to care.

Medicaid and CHIP Program Statistics: June 2012 MACStats

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Overview of MACStats

MACStats is a standing section in all MACPAC reports to the Congress. It was created because data and information on Medicaid and the State Children's Health Insurance Program (CHIP) can often be difficult to find and are spread out across a variety of sources. The June 2012 edition of MACStats is divided into five sections:

- Section 1: Trends in Medicaid Enrollment and Spending
- Section 2: Health and Other Characteristics of Medicaid/CHIP Populations
- Section 3: Medicaid Enrollment and Benefit Spending
- Section 4: Medicaid Managed Care
- Section 5: Technical Guide to the June 2012 MACStats

Key points from each section follow.

Section 1: Trends in Medicaid Enrollment and Spending

- **Federal and state policy choices, as well as economic factors, impact Medicaid and CHIP spending and enrollment.** Trends in Medicaid spending and enrollment reflect shifts in federal and state Medicaid policy—such as expansions of eligibility to new groups of individuals—in addition to changing economic conditions (Figure 1). For example, recent recessions spurred enrollment growth in both the early and late 2000s.
- **Individuals qualifying for Medicaid on the basis of a disability accounted for half of real Medicaid spending growth since fiscal year (FY) 1975.** Of the real (inflation-adjusted) growth in Medicaid spending between FY 1975 and FY 2009, 51.2 percent was attributable to individuals qualifying for Medicaid on the basis of a disability. Nearly three-quarters of the growth for this group was driven by increased enrollment, with the remainder being attributable to growth in per capita spending (Table 2).
- **Compared to the other major eligibility groups, enrollment of individuals qualifying for Medicaid on the basis of a disability experienced the largest annual growth rates.** Children (excluding those eligible on the basis of a disability) experienced the largest enrollment increase in absolute numbers, from 9.6 million in FY 1975 to 28.3 million in FY 2009. However, despite the fact that enrollment growth has generally shown greater annual fluctuations among non-disabled children

and adults under age 65, enrollment among individuals qualifying for Medicaid on the basis of a disability had the largest annual growth rate over this time period (3.9 percent, Table 2).

Section 2: Health and Other Characteristics of Medicaid/CHIP Populations

- **Medicaid/CHIP enrollees generally report being in poorer health and using more services than individuals who have other health insurance or who are uninsured.** Medicaid/CHIP enrollees were more likely to report being in fair or poor health than individuals with any other source of coverage or no insurance, across all age groups analyzed, with the exception of 19- to 64-year olds enrolled in Medicare (Tables 3B, 4B, and 5B).
- **Even within the same age group, Medicaid/CHIP enrollees are a diverse population.** For example, nearly 60 percent of Medicaid enrollees with disabilities[1] age 19 to 64 reported being in fair or poor health, compared to 20 percent of the other Medicaid enrollees in that age group (Table 4B).

Section 3: Medicaid Enrollment and Benefit Spending

- **A small share of enrollees account for a large share of spending.** Enrollees eligible on the basis of a disability and those who are age 65 and older account for 25 percent of the Medicaid population, but 67 percent of the program's spending on benefits (Tables 6 and 7).
- **Benefit spending per enrollee varies widely across populations and states.** For example, enrollees eligible on the basis of a disability and those who are age 65 and older have average per person Medicaid benefit spending that is 3 to 5 times that of other enrollees (Figure 4 and Table 8).
- **Users of long-term services and supports (LTSS) are a small but high-cost population.** LTSS users—primarily enrollees eligible on the basis of a disability and those age 65 and older—account for only about 7 percent of Medicaid enrollees, but nearly half of all Medicaid benefit spending. Acute care represents a minority of Medicaid spending for most LTSS users, and these individuals have average per person Medicaid benefit spending ($45,272 per full-year equivalent (FYE) enrollee in FY 2009) that is more than 10 times that of enrollees who are not using LTSS ($4,193 per FYE, Figures 5, 6, and 7).

Section 4: Medicaid Managed Care

- **Managed care models vary by state and range from comprehensive risk-based plans to those providing only a limited set of benefits.** All but two states report using some form of managed care that includes comprehensive risk-based plans, limited-benefit plans, or primary care case management programs. The national percentage of Medicaid enrollees in any form of managed care is more than 70 percent, and nearly half of enrollees are in comprehensive risk-based plans (Tables 9, 10, and 11).
- **Enrollment in comprehensive risk-based plans is highest among non-disabled children and adults under age 65.** The share of enrollees in comprehensive risk-based plans in FY 2009 ranged from 61 percent among non-disabled child enrollees to 12 percent

among enrollees age 65 and older. Among individuals dually enrolled in Medicaid and Medicare, 38 percent were enrolled in some form of Medicaid managed care in FY 2009, but only about 10 percent were in Medicaid comprehensive risk-based plans (Tables 9 and 11).

Section 5: Technical Guide to the June 2012 MACStats

- **Enrollment and spending numbers can vary depending on the source of data, time period examined, and other factors.** For example, based on administrative data, nearly half of children living in the United States were enrolled in Medicaid or CHIP sometime during FY 2009 (48.4 percent). However, numbers from the same data source illustrate that the number of children enrolled at a particular point in time is much smaller (36.7 percent, Tables 13A–D).
- **A complete picture of Medicaid benefit spending requires multiple sources of information, including Medicaid Statistical Information System (MSIS) and CMS-64 data.** The FY 2009 Medicaid benefit spending amounts shown in the June 2012 MACStats were calculated based on MSIS data that have been adjusted to match total benefit spending reported by states in CMS-64 data. These adjustments are made in an effort to provide more complete estimates of Medicaid benefit spending across states by eligibility group and other enrollee characteristics (Tables 14 and 15).

Endnotes

1 For Tables 4A–C, Medicaid enrollees with disabilities are those who were also enrolled in Medicare (dual eligibles) or who were not dual eligibles but were receiving Supplemental Security Income.

SECTION 1

Trends in Medicaid Enrollment and Spending

Overall Medicaid spending growth is driven by increases in the number of people covered by Medicaid and in program spending per person. Both have grown at different rates over time, as illustrated in Figure 1. At times, this growth (or lack thereof) has been driven by broad economic changes; at other times, trends in Medicaid enrollment and spending have reflected changes in federal and state Medicaid policies.

For example, in the late 1970s and early 1980s, inflation levels were high across the entire economy, causing rapid Medicaid spending growth even during times with little growth in enrollment. From the mid-1980s to the mid-1990s, numerous Medicaid-specific changes occurred, such as eligibility expansions and states' use of supplemental payments and alternative financing mechanisms. In the mid- to late 1990s, program growth was affected by federal Medicaid changes—primarily welfare reform, which delinked Medicaid eligibility for low-income families from the receipt of cash welfare assistance.[1]

During the recession in the early 2000s, enrollment grew substantially, but slowed again in the mid-2000s. Medicaid spending actually declined from fiscal year (FY) 2005 to FY 2006; this was primarily because of the implementation in 2006 of Medicare Part D, which shifted spending on outpatient prescription drugs for individuals dually enrolled in Medicaid and Medicare to the Medicare program.[2] Since then, economic recession has once again spurred increased program enrollment—and thus program spending—while growth in Medicaid per capita spending has been relatively flat for the past several years.[3]

Enrollment and Spending Measures

Total Medicaid spending can be measured in different ways, as can the number of program participants. In turn, these measurement differences can affect the extent to

which spending growth is attributed to the number of people covered versus program spending per person.

Figure 2 illustrates three different ways of expressing Medicaid spending. First, Medicaid spending is shown in nominal, or current, dollars—that is, in the dollar amounts for each respective year. However, more items and services could be purchased for a dollar in 1975 than is the case today. There are two ways to adjust for this effect. One is to convert nominal historical spending to real, inflation-adjusted amounts based on *economy-wide* inflation. This is the approach commonly taken among organizations and researchers whose focus is not limited to health care, such as the Congressional Budget Office.[4] A second alternative, used by the Centers for Medicare & Medicaid Services, is to convert nominal historical Medicaid spending to real dollars using *health care* inflation.[5] Using real dollars adjusted for health care inflation places Medicaid spending in the context of the overall U.S. health care system—recognizing that Medicaid faces the same cost pressures as other health care payers. As shown in Figure 2, real historical Medicaid spending adjusted for health care inflation is higher than when adjusted for economy-wide inflation. This is because health care inflation has exceeded economy-wide inflation in most years.

Inflation increases the dollar amount required to purchase the same amount of goods and services over time. As a result, historical spending in nominal dollars can be difficult to interpret because it is unclear whether increases in spending are due to inflation or due to increases in the amount of goods and services being purchased. Inflation-adjusted numbers are used to address this problem by translating all purchases over a series of years into amounts that more closely reflect what they would cost if they had all been purchased in the same year. To simulate the purchase of goods and services in the health care sector in FY 1975 (or any year between FY 1975 and FY 2009) using FY 2009 dollars, the inflation-adjusted amount must be larger than the original nominal dollar amount to account for health care inflation. Since health care inflation generally exceeded economy-wide inflation over the entire period spanning FY 1975 to FY 2009, an inflation-adjusted amount that accounts only for economy-wide inflation—of which health care is just one component—would not accurately reflect the amount required to simulate a health sector purchase in any given year.

Historical Trends

Table 2 decomposes growth in Medicaid benefit spending[6] from FY 1975 to FY 2009 into two factors: the number of beneficiaries (a term described in Section 5), and per beneficiary spending. According to this MACPAC analysis, growth in the number of beneficiaries is responsible for 68.5 percent of real (i.e., health care inflation-adjusted) Medicaid benefit spending growth from FY 1975 to FY 2009.[7] The remaining 31.5 percent is attributable to per beneficiary spending, which can reflect a number of factors, such as the changing breadth of Medicaid benefit packages; increased health care utilization or intensity of treatment specific to Medicaid; and state and federal policies regarding provider payments, care management, and other issues.[8]

The FY 1975–FY 2009 decomposition of growth by eligibility groups—aged, disabled, children, and adults—reveals that 51.2 percent of overall Medicaid benefit spending growth was attributable to individuals eligible on the basis of a disability. This was driven mostly by enrollment growth for this population, which has outpaced all other groups (Table 2). Children accounted for 19.2 percent of Medicaid spending growth between FY 1975 and FY 2009. Over

that period, the aged and other adults accounted for approximately 16.5 percent and 13.1 percent, respectively, of real Medicaid benefit spending growth.

By FY 2009, the number of beneficiaries eligible on the basis of a disability had risen to 9.1 million, from 2.5 million in FY 1975. Although some of this increase is due to growth in the number of disabled individuals in the general population and the number of individuals receiving Supplemental Security Income benefits, some is due to federal Medicaid expansions since the 1980s that increased the number of persons with disabilities enrolled in the program. These included home- and community-based waivers and the Medicare Savings Programs under which state Medicaid programs pay all or some of low-income Medicare beneficiaries' Medicare premiums and cost sharing.[9]

Despite the fact that enrollment growth has generally shown greater annual fluctuations among non-disabled children and adults under age 65 and that children have experienced the largest enrollment increase in absolute numbers, their annual growth rates have been lower than those for the disabled. In addition, because the per beneficiary spending for children is low, it has a smaller impact on overall growth in Medicaid benefit spending.

Future MACPAC analyses that decompose Medicaid spending growth may look at different eras or subpopulations, such as those dually eligible for Medicaid and Medicare, as well as spending on particular services.

Endnotes

1 For a discussion of growth from the program's beginnings through the late 1990s, see J. Klemm, Medicaid spending: A brief history, *Health Care Financing Review* 22 (Fall 2000), 105–112. https://www.cms.gov/HealthCareFinancingReview/Downloads/00fallpg105.pdf.

2 J. Holahan et al., *Why did Medicaid spending decline in 2006? A detailed look at program spending and enrollment, 2000–2006* (Washington, DC: Kaiser Commission on Medicaid and the Uninsured, Issue Paper #7697, October 2007). http://www.kff.org/medicaid/upload/7697.pdf.

3 J. Holahan and A. Yemane, Enrollment is driving Medicaid costs—but two targets can yield savings, *Health Affairs* 28 (2009): 1453–1465; and R. Garfield et al., *Enrollment-driven expenditure growth: Medicaid spending during the economic downturn, FFY2007–2010* (Washington, DC: Kaiser Commission on Medicaid and the Uninsured, Issue Paper #8309, May 2012). http://www.kff.org/medicaid/upload/8309.pdf.

4 For example, see: Congressional Budget Office (CBO), *The 2012 long-term budget outlook* (Washington, DC: CBO, 2012). http://www.cbo.gov/publication/43288; and CBO, Table 2 in *Medicaid spending growth and options for controlling costs* (Washington, DC: CBO, 2006). http://www.cbo.gov/ftpdocs/73xx/doc7387/07-13-Medicaid.pdf.

5 See, for example, Table 13.10 in Centers for Medicare & Medicaid Services (CMS), *Health care financing review 2010 statistical supplement*, (Baltimore, MD: CMS, 2010). https://www.cms.gov/MedicareMedicaidStatSupp/09_2010.asp.

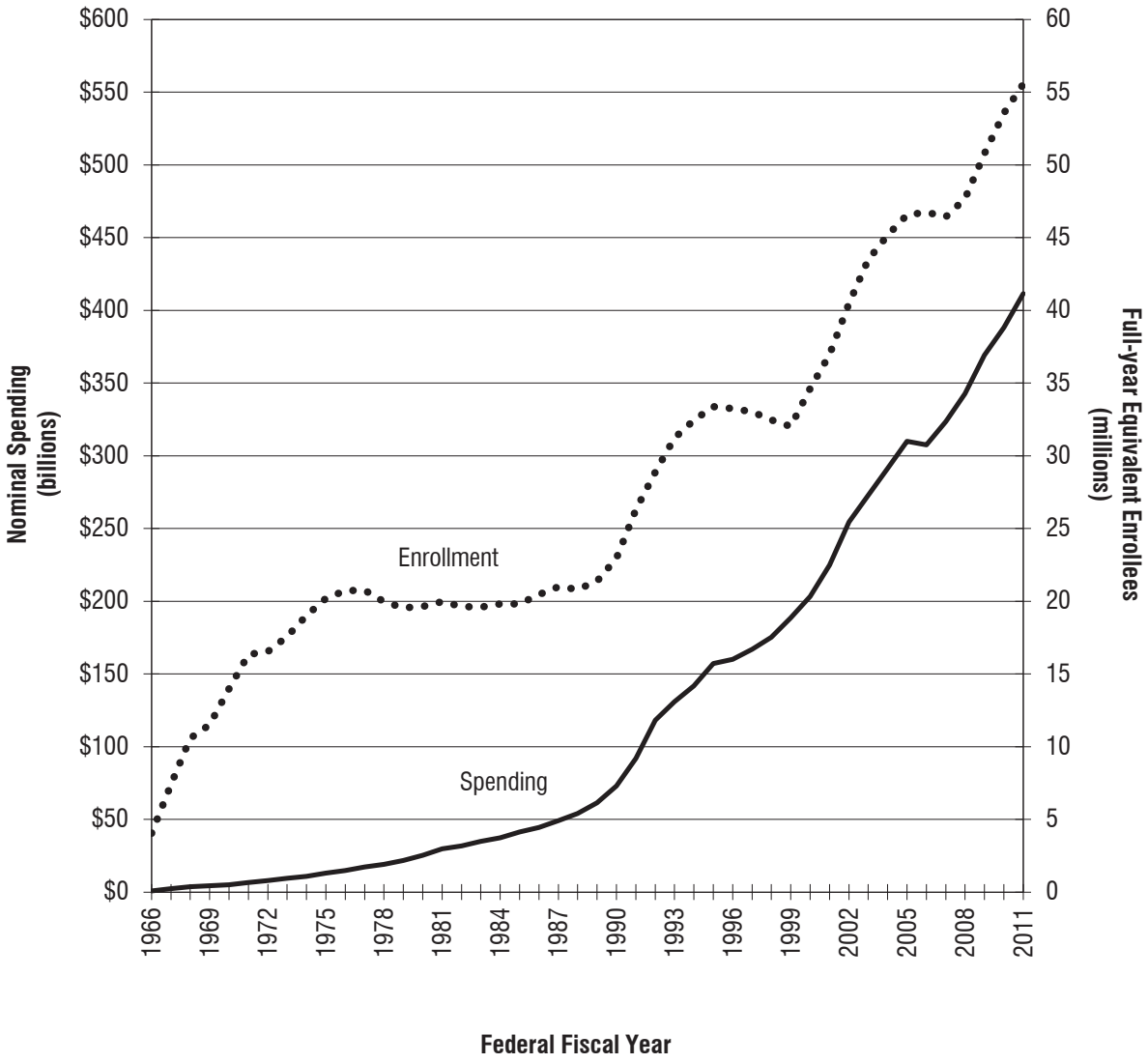
6 Benefit spending excludes administration and the Vaccines for Children program. As described in Section 5, FY 2009 benefit spending amounts are from the Medicaid Statistical Information System and have been adjusted to match totals reported by states in CMS-64 data. FY 1975 spending amounts do not need a similar adjustment because the data on which benefit spending were based in that year closely matched the CMS-64.

7 Results can differ if using different years or eras. The period FY 1975 to FY 2009 is used here to examine factors driving growth over the Medicaid program's long history, rather than a particular time period (e.g., recent growth fueled by recessions in the early and late 2000s). Historical analyses of Medicaid spending often begin with FY 1975, after the program had stabilized following growth during its initial startup phase.

8 As noted in the text, the real Medicaid spending figures used in this calculation are adjusted for health care inflation. If the real Medicaid spending figures were instead adjusted for economy-wide inflation, the portion of growth attributable to per-beneficiary spending would be higher—because health care inflation in excess of economy-wide inflation would be added to the list of explanatory factors, such as the changing breadth of Medicaid benefit packages. For example, if the FY 1975 spending amounts were converted to real dollars using economy-wide inflation rather than health care inflation, only 41.0 percent of real Medicaid benefit spending growth would be attributable to growth in the number of beneficiaries, and per-beneficiary spending would account for 59.0 percent of the growth.

9 See Social Security Administration (SSA), *Trends in the Social Security and Supplemental Security Income disability programs* (Baltimore, MD: SSA, Publication no. 13-1183, August 2006), 29. http://www.socialsecurity.gov/policy/docs/chartbooks/disability_trends/trends.pdf. Medicare Savings Programs—the Qualified Medicare Beneficiary (QMB) program, Specified Low-Income Medicare Beneficiary (SLMB) program, and Qualifying Individual (QI) program—are administered by state Medicaid programs; the amount of Medicare premiums and cost sharing (i.e., deductibles and co-insurance) paid varies by the type of MSP.

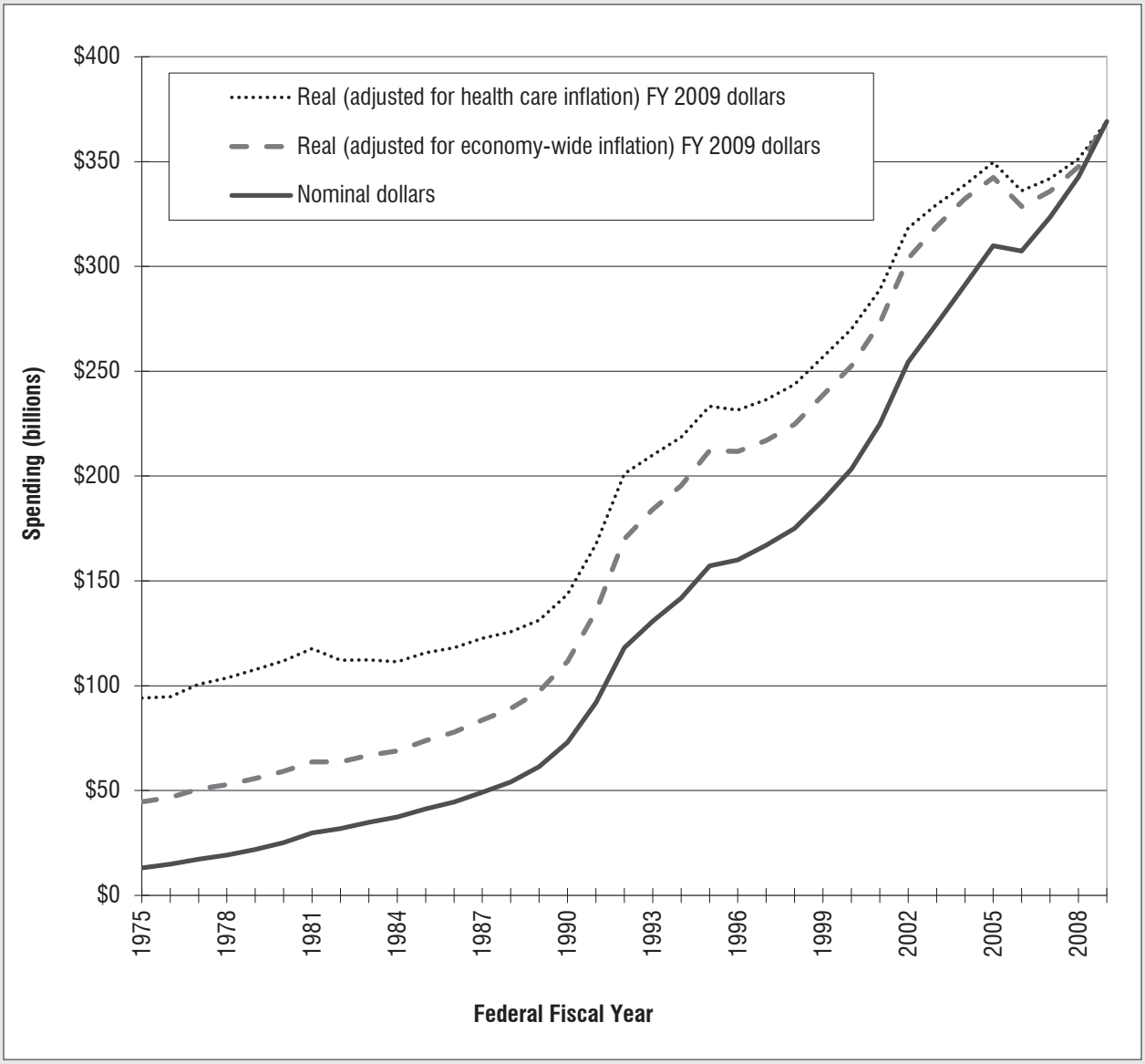
FIGURE 1. Medicaid Enrollment and Spending, FY 1966–FY 2011



Notes: Spending consists of federal and state Medicaid expenditures for benefits and administration, excluding the Vaccines for Children program. Numbers exclude CHIP-financed coverage. Enrollment data for FY 2009–2011 are projected. Data prior to FY 1977 have been adjusted to the current federal fiscal year basis (October 1 to September 30). The amounts in this figure may differ from those published elsewhere due to slight differences in the timing of data and the treatment of certain adjustments. Enrollment counts are full-year equivalents and, for fiscal years prior to FY 1990, have been estimated from counts of persons served (see Section 5 of MACStats for a discussion of how enrollees are counted).

Source: Data compilation provided to MACPAC by Office of the Actuary, CMS, April 2012

FIGURE 2. Medicaid Spending in Nominal and Real Dollars, FY 1975–FY 2009



Notes: Spending includes benefits and administrative spending. The bottom line in this figure (and in Figure 1) shows actual (nominal) spending. The middle line transforms nominal Medicaid spending to real FY 2009 dollars by adjusting for economy-wide inflation, using the Gross Domestic Product price deflator. The top line also shows real FY 2009 dollars, but based on inflation for health care in particular. Real historical Medicaid spending adjusted for health care inflation is higher than when adjusted for economy-wide inflation, which reflects the long history of health care inflation in excess of economy-wide inflation. The drop in spending for FY 2006, compared to FY 2005, is the result of the implementation of Medicare Part D.

Sources: Nominal Medicaid spending from Figure 1; real spending based on MACPAC analysis of nominal spending and quarterly National Income and Product Account (NIPA) historical tables for Quarter 1 of 2012 from the Bureau of Economic Analysis, U.S. Department of Commerce (http://www.bea.gov/histdata/NIyear.asp)

TABLE 1. Number of Medicaid Beneficiaries (Persons Served) by Eligibility Group, FY 1975–FY 2009 (thousands)

Year	Total	Children	Adults	Disabled	Aged	Unknown
1975	22,007	9,598	4,529	2,464	3,615	1,801
1976	22,815	9,924	4,773	2,669	3,612	1,837
1977	22,832	9,651	4,785	2,802	3,636	1,958
1978	21,965	9,376	4,643	2,718	3,376	1,852
1979	21,520	9,106	4,570	2,753	3,364	1,727
1980	21,605	9,333	4,877	2,911	3,440	1,044
1981	21,980	9,581	5,187	3,079	3,367	766
1982	21,603	9,563	5,356	2,891	3,240	553
1983	21,554	9,535	5,592	2,921	3,372	134
1984	21,607	9,684	5,600	2,913	3,238	172
1985	21,814	9,757	5,518	3,012	3,061	466
1986	22,515	10,029	5,647	3,182	3,140	517
1987	23,109	10,168	5,599	3,381	3,224	737
1988	22,907	10,037	5,503	3,487	3,159	721
1989	23,511	10,318	5,717	3,590	3,132	754
1990	25,255	11,220	6,010	3,718	3,202	1,105
1991	27,967	12,855	6,703	4,033	3,341	1,035
1992	31,150	15,200	7,040	4,487	3,749	674
1993	33,432	16,285	7,505	5,016	3,863	763
1994	35,053	17,194	7,586	5,458	4,035	780
1995	36,282	17,164	7,604	5,858	4,119	1,537
1996	36,118	16,739	7,127	6,221	4,285	1,746
1997	34,872	15,791	6,803	6,129	3,955	2,195
1998	40,096	18,969	7,895	6,637	3,964	2,631
1999	39,748	18,233	7,446	6,690	3,698	3,682
2000	41,212	18,528	8,538	6,688	3,640	3,817
2001	45,164	20,181	9,707	7,114	3,812	4,349
2002	46,839	21,487	10,847	7,182	3,789	3,534
2003	50,716	23,742	11,530	7,664	4,041	3,739
2004	54,250	25,415	12,325	8,123	4,349	4,037
2005	56,276	25,979	12,431	8,205	4,395	5,266
2006	56,264	26,358	12,495	8,334	4,374	4,703
2007	55,210	26,061	12,264	8,423	4,044	4,418
2008	56,962	26,479	12,739	8,685	4,147	4,912
2009[1]	60,426	28,312	14,026	9,055	4,191	4,841

Notes: Beneficiaries (enrollees for whom payments are made) are shown here because they provide the only historical time series data directly available prior to FY 1990. Most current analyses of individuals in Medicaid reflect enrollees. For additional discussion, see Section 5 of MACStats. The increase in FY 1998 reflects a change in how Medicaid beneficiaries are counted: beginning in FY 1998, a Medicaid-eligible person who received only coverage for managed care benefits was included in this series as a beneficiary. Excludes Medicaid-expansion CHIP children.

Children and adults who qualify for Medicaid on the basis of a disability are included in the disabled category. In addition, although disability is not a basis of eligibility for aged individuals, states may also report some enrollees age 65 and older in the disabled category. Unlike the majority of the June 2012 MACStats, this table (along with Table 2) does *not* recategorize individuals age 65 and older who are reported as disabled, due to a lack of necessary detail in the historical data. Generally, individuals whose eligibility group is unknown are persons who were enrolled in the prior year but had a Medicaid claim paid in the current year.

1 This table shows the number of beneficiaries. See Table 6 for the number of Medicaid enrollees in FY 2009 data from CMS. FY 2009 unavailable for Massachusetts; FY 2008 values used instead.

Sources: For FY 1999 to FY 2009: MACPAC analysis of Medicaid Statistical Information System (MSIS). For FY 1975 to FY 1998: CMS Medicare & Medicaid Statistical Supplement, 2010 edition, Table 13.4

TABLE 2. Components of Growth in Real Medicaid Benefit Spending, FY 1975–FY 2009

		FY 1975 (in FY 2009 dollars)	FY 2009[1]	Annual Growth Rate	Relative Contribution to Real Spending Growth, FY 1975 to FY 2009
All eligibility groups					
	Spending per beneficiary	$4,342	$6,567[2]	1.2%	31.5%
	Number of beneficiaries (millions)	20.2	55.6	3.0	68.5
	Total benefit spending (millions)	**$87,732**	**$364,827**	**4.3**	**100.0**
Children					
	Spending per beneficiary	$1,700	$2,454[2]	1.1	3.6
	Number of beneficiaries (millions)	9.6	28.3	3.2	15.6
	Total benefit spending (millions)	**$16,320**	**$69,410**	**4.3**	**19.2**
Adults					
	Spending per beneficiary	$3,399	$3,684[2]	0.2	0.5
	Number of beneficiaries (millions)	4.5	14.0	3.4	12.6
	Total benefit spending (millions)	**$15,395**	**$51,668**	**3.6**	**13.1**
Disabled					
	Spending per beneficiary	$9,529	$18,276[2]	1.9	13.1
	Number of beneficiaries (millions)	2.5	9.1	3.9	38.2
	Total benefit spending (millions)	**$23,480**	**$165,482[3]**	**5.9**	**51.2**
Aged					
	Spending per beneficiary	$9,000	$18,675[2]	2.2	14.4
	Number of beneficiaries (millions)	3.6	4.2	0.4	2.1
	Total benefit spending (millions)	**$32,537**	**$78,266[3]**	**2.6**	**16.5**

Notes: Beneficiaries (enrollees for whom payments are made) are shown here because they provide the only historical time series data available prior to FY 1990. Most current analyses of individuals in Medicaid reflect enrollees, as shown in Table 6. For additional discussion of the definitions of enrollees and beneficiaries, see Section 5 of MACStats.

Dollar amounts were adjusted for inflation using the Gross Domestic Product price deflator for health care (see text for additional discussion). In this table, real Medicaid spending growth is attributed to either spending per beneficiary or number of beneficiaries. The growth attributable to the interaction of the two factors is allocated according to the shares separately attributable to each factor.

Children and adults who qualify for Medicaid on the basis of a disability are included in the disabled category. In addition, although disability is not a basis of eligibility for aged individuals, states may also report some enrollees age 65 and older in the disabled category. Unlike the majority of the June 2012 MACStats, this table (along with Table 1) does *not* recategorize individuals age 65 and older who are reported as disabled, due to a lack of necessary detail in the historical data.

The number of beneficiaries excludes individuals whose basis of Medicaid eligibility is unknown. Generally, individuals whose eligibility group is unknown are persons who were enrolled in the prior year but had a Medicaid claim paid in the current year. In this analysis, FY 1975 benefit spending for these individuals was allocated proportionally to the four eligibility groups in the table. FY 2009 benefit spending reflects MSIS data that have been adjusted to match CMS-64 totals; see Section 5 of MACStats for a discussion of the methodology used.

Results can differ if using different years or eras. The period FY 1975 to FY 2009 is used here to examine factors driving growth over the Medicaid program's long history, rather than a particular time period (e.g., recent growth fueled by recessions in the early and late 2000s).

1 FY 2009 data unavailable for Massachusetts; FY 2008 values used instead.

2 Benefit spending per beneficiary shown here differs from the FY 2009 benefit spending per full-year equivalent enrollee shown in Table 8 and Figure 4.

3 Total benefit spending shown here differs from the FY 2009 benefit spending in Table 7 and Figure 3. Unlike the majority of the June 2012 MACStats, this table (along with Table 1) does not recategorize individuals age 65 and older who are reported as disabled.

Sources: For FY 2009: MACPAC analysis of Medicaid Statistical Information System (MSIS) and CMS-64 net financial management report data as of May 2012. For FY 1975: CMS Medicare & Medicaid Statistical Supplement, 2010 edition

Health and Other Characteristics of Medicaid/CHIP Populations

Section 2 of MACStats, including Tables 3A through 5C, uses federal survey data to describe how Medicaid and the State Children's Health Insurance Program (CHIP) enrollees differ from individuals with other types of coverage in terms of their self-reported demographic, socioeconomic, and health characteristics as well as their use of care. It also explores how, even within the same age group, individuals enrolled in Medicaid or CHIP can differ markedly from one another, based on their responses to the survey.

Source of Data for Tables 3A–5C

Every year, thousands of non-institutionalized[1] Americans are interviewed about their health insurance and health status for the National Health Interview Survey (NHIS). Individuals' responses to the NHIS questions are the basis for the results in Tables 3A through 5C.

The NHIS is an annual face-to-face household survey of civilian non-institutionalized persons designed to monitor the health of the U.S. population through the collection of information on a broad range of health topics.[2] Administered by the National Center for Health Statistics within the Centers for Disease Control and Prevention, the NHIS consists of a nationally representative sample from approximately 35,000 households containing about 87,500 people.[3] Tables 3A through 5C are based on NHIS data, pooling the years 2008 through 2010.[4] Although there are other federal surveys, the NHIS is used here because it is generally considered to be one of the best surveys for health insurance coverage estimates, and it captures detailed information on individuals' health status.[5] As with most surveys, information about participation in programs such as Medicaid, CHIP, Medicare, Supplemental Security Income (SSI), and Social Security Disability Income may not be accurately reported by respondents in the NHIS. As a result, they

may not match estimates of program participation computed from the programs' administrative data.

NHIS data also serve as the basis for most of the findings in Section B of this Report. For additional information on the general strengths and weaknesses of results from household survey data such as the NHIS, see Box b-2 in Section B.

Organization of Tables

For the tables in this Section, the U.S. population is divided into the three age groups that are commonly used in MACPAC analyses because they correspond to some of the key eligibility pathways in Medicaid and CHIP:

- Tables 3A–C provide estimates of children age 0 to 18;
- Tables 4A–C of adults age 19 to 64; and
- Tables 5A–C of adults age 65 and older.

The tables for each age group explore the following self-reported characteristics from the survey data:

- health insurance coverage and demographics (Tables 3A, 4A, and 5A);
- health characteristics (Tables 3B, 4B, and 5B); and
- use of health care (Tables 3C, 4C, and 5C).

All of the tables are broken into two parts—first, they compare Medicaid/CHIP[6] enrollees in that age group to individuals with other sources of health insurance; second, they provide estimates for selected subgroups of Medicaid/CHIP enrollees in that age group.[7]

The summary of findings that follows describes the survey results for each age group—first comparing results across insurance types, then among Medicaid/CHIP enrollees in that age group.

Children under Age 19

Children in Medicaid or CHIP compared to other children. According to the NHIS data used in Table 3A, 34.1 percent of children were reported to be Medicaid/CHIP enrollees at the time of the survey,[8] while 55.8 percent of children were in private coverage, and 8.7 percent were uninsured. Children enrolled in Medicaid or CHIP are more likely to be Hispanic (33.6 percent) than are privately insured children (12.3 percent) and less likely to be Hispanic than are uninsured children (38.7 percent); Medicaid/CHIP children are more likely to be non-Hispanic black (23.5 percent) than are privately insured (9.1 percent) or uninsured children (11.4 percent).

According to the survey results shown in Table 3B, which focuses on children's health characteristics, children enrolled in Medicaid or CHIP are more likely than privately insured or uninsured children to be in fair or poor health and to have certain impairments and health conditions (e.g., ADHD/ADD, asthma, autism). Table 3C, which focuses on children's health care use, shows that children enrolled in Medicaid or CHIP were more likely to have had a visit to the emergency department (ED) in the past year and to have been regularly taking prescription medications for at least three months. Analyses in Chapter 2 of MACPAC's March 2012 Report to the Congress showed that, even after controlling for differences in enrollees' health, demographic, and socioeconomic characteristics, children enrolled in Medicaid or CHIP were still significantly more likely to have had an ED visit compared to children with employer-sponsored insurance or uninsured children.

Comparisons of children within Medicaid/CHIP. For the right-hand portion of Tables 3A–C, children enrolled in Medicaid or CHIP are grouped into one of three categories:

- children who receive SSI benefits and are therefore disabled under that program's definition;[9]
- children who do not receive SSI, but who are classified as children with special health care needs (CSHCN); and
- children who neither receive SSI nor are considered CSHCN.

CSHCN are defined by the Maternal and Child Health Bureau (MCHB) within the Health Resources and Services Administration as a group of children who "have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally."[10] This definition, which is used by all states for policy and program planning purposes for CSHCN, is a broad classification that encompasses children with disabilities and also children with chronic conditions (e.g., asthma, juvenile diabetes, sickle cell anemia) that range from mild to severe. It includes children who are "at risk" of these conditions and those who have been diagnosed, as well as children who require "related services" not traditionally considered health services (for example, social and home care services, school and developmental programs).

Very few children have conditions severe enough and family incomes so low as to qualify for SSI. Table 3A shows that only 3.2 percent of children with Medicaid or CHIP receive SSI. Therefore, the CSHCN designation is intended to capture a broader group of children with chronic health conditions. Many researchers use the MCHB definition for CSHCN, although they may not include the at-risk population in their analyses. MACPAC analyses of CSHCN in this Report may not fully include the at-risk population. Based on an approach developed by researchers,[11] CSHCN are identified here as those who have at least one of five broad symptoms of a chronic health problem as a result of a health condition lasting at least 12 months. By this definition, a CSHCN:

- is limited or prevented in his or her ability to do things most children of the same age can do;
- needs or uses medications prescribed by a doctor (other than vitamins);
- needs or uses specialized therapies such as physical, occupational, or speech therapy;
- has above-routine need or use of medical, mental health, or education services; or
- needs or receives treatment or counseling for an emotional, behavioral, or developmental problem.[12]

It should be noted that CSHCN can vary substantially in their health status and use of health care services. A CSHCN could be a child with intensive health care needs and high health care expenses who has severe functional limitations (e.g., spina bifida, cerebral palsy, paralysis) and would qualify for SSI if his or her family income were low enough.[13] On the other hand, a CSHCN could also be a child who has asthma, attention deficit disorder, or depression that is well-managed through the use of prescription medications. Regardless of whether functional limitations are mild, moderate, or severe, however, CSHCN share a heightened need for health care services in order to maintain their health and to be able to function appropriately for their age.

Among children with Medicaid or CHIP, the three subgroups analyzed here often differ significantly from children with Medicaid or CHIP overall. Selected findings include:

Significant differences in general health exist among children enrolled in Medicaid or CHIP. Among children enrolled in Medicaid or CHIP, 19.5 percent of those receiving SSI are reported to

be in fair or poor health, compared to 13.0 percent for non-SSI CSHCN and 1.1 percent for children who are neither SSI nor CSHCN.[14]

Prevalence of specific health conditions varies among children enrolled in Medicaid or CHIP. According to the survey data, the prevalence of ADHD/ADD among Medicaid/CHIP enrolled children is 43.2 percent for SSI children, 40.3 percent for non-SSI CSHCN, and 2.0 percent for children who are neither SSI nor CSHCN. The prevalence of asthma reported by SSI children was 32.4 percent, compared to 40.3 percent for non-SSI CSHCN and 10.8 percent for children who are neither SSI nor CSHCN.

Significant differences in use of recent care exist among children enrolled in Medicaid or CHIP. SSI children and non-SSI CSHCN are each nearly twice as likely to visit health care providers four or more times within a year as are children with Medicaid or CHIP who are neither SSI nor CSHCN.

Adults Age 19 to 64

Non-elderly adults in Medicaid compared to other non-elderly adults. According to the NHIS estimates shown in Table 4A, 8.9 percent of non-institutionalized adults age 19 to 64 were enrolled in Medicaid.[15] The Medicaid enrollees in this age group are significantly more likely to be female and to be the parent of a dependent child, compared to those with private insurance, Medicare, or no insurance.

As shown in Table 4B, the non-elderly adults enrolled in Medicaid (who are generally eligible on the basis of being the parent of a dependent child, pregnant, or disabled) reported that they were in worse health than were those enrolled in private coverage or the uninsured, but were in better health than were those enrolled in Medicare (nearly all of whom are eligible for that program on the basis of a disability). This is the case for several variables—for example, whether individuals are working, are in fair or poor health, have any of several limitations in their activities of daily living (ADLs), have lost all of their natural teeth, and have any of numerous specific health conditions (e.g., hypertension, coronary heart disease, cancer, diabetes).

Table 4C, which focuses on non-elderly adults' health care use, shows that non-elderly adults enrolled in Medicaid reported they were significantly more likely than those with private insurance to have had four or more visits to a doctor or other health professional in the past 12 months. However, additional analyses suggest that these differences are mostly driven by differences in health status.[16]

Table 4C also shows that adults with Medicaid were more likely to report having visited the ED during the past year. Analyses in Section B of this Report indicate that, even after controlling for differences in enrollees' health, demographic, and socioeconomic characteristics, non-elderly adults enrolled in Medicaid are still significantly more likely to report having an ED visit than are those with employer-sponsored insurance or no insurance.

Comparisons of non-elderly adults within Medicaid. Among 19- to 64-year-olds, nearly all individuals who are dually enrolled in both Medicaid and Medicare have low incomes and qualify for these programs on the basis of a disability.[17] Among non-elderly adults enrolled in Medicaid, 12.3 percent reported they were also enrolled in Medicare (Table 4A).[18]

The right-hand portion of Tables 4A–C groups the 19- to 64-year-old Medicaid enrollees into one of three categories, the first two of which are primarily composed of persons with disabilities:

- individuals also enrolled in Medicare (dual eligibles);
- Medicaid enrollees receiving SSI who are not enrolled in Medicare; and
- Medicaid enrollees who are neither SSI nor Medicare enrollees.

Significant differences in self-reported health exist among 19- to 64-year-olds enrolled in Medicaid. Individuals dually enrolled in Medicaid and Medicare as well as non-dual SSI beneficiaries report fair or poor health (59.3 percent and 59.5 percent, respectively)[19] at much higher rates than do non-SSI, non-dual enrollees (19.9 percent).

Among 19- to 64-year-olds enrolled in Medicaid, those who were also enrolled in Medicare or SSI were more likely to report limitations in activities of daily living as well as the presence of chronic conditions such as heart disease, diabetes, depression, chronic bronchitis, and arthritis than the overall Medicaid population in this age group (Table 4B). Persons with disabilities were also reported to have higher use of care—in particular, for at-home care and visits to a doctor or other health professional in the past 12 months—than were 19- to 64-year-old Medicaid enrollees overall (Table 4C). Individuals dually enrolled in Medicaid and Medicare and non-dual SSI beneficiaries were also more likely than 19- to 64-year-old Medicaid enrollees overall to have had an ED visit in the past 12 months.

Adults Age 65 and Older

Elderly adults in Medicaid compared to other elderly adults. According to the NHIS estimates in Table 5A, 7.4 percent of non-institutionalized adults age 65 and older were enrolled in Medicaid. Medicare covered nearly all individuals age 65 and older. Among Medicaid enrollees age 65 and older, 92.1 percent reported they were also enrolled in Medicare (Table 5A).[20] Conversely, of the Medicare enrollees in this age group, 7.2 percent reported they were enrolled in Medicaid. Elderly Medicaid enrollees were more likely to report being female and less likely to report being white (non-Hispanic) than were those with Medicare or private coverage.

Compared to those enrolled in private coverage or Medicare, elderly Medicaid enrollees were more likely to report being in fair or poor health, being in worse health compared to 12 months before, and having any of several limitations in their ADLs (Table 5B). Elderly Medicaid enrollees were also more likely than those with other coverage to have any of a number of specific chronic conditions.

As shown in Table 5C, elderly Medicaid enrollees were also more likely than those with private or Medicare coverage to have received at-home care, to have had multiple visits to a doctor or other health professional, and to have visited an ED in the past 12 months.

Comparisons of elderly adults within Medicaid. The right-hand portion of Tables 5A–C groups Medicaid enrollees age 65 and older into one of two categories:

- those reporting a functional limitation; and
- those not reporting a functional limitation.

Individuals with a functional limitation are those who reported any degree of difficulty—ranging from "only a little difficult" to "can't do at all"—performing any of a dozen activities by themselves and without special equipment.[21] It should be noted that individuals with functional limitations can vary substantially in their health needs—from being bedridden in one's home[22] to being relatively healthy but responding that walking a quarter of a mile is "only a little difficult." The right-hand portion of Tables 5A–C illustrates how these two groups of individuals vary significantly from aged Medicaid/CHIP enrollees overall. However, because more than three-quarters of aged

Medicaid enrollees have functional limitations, those with functional limitations drive the overall characteristics of aged enrollees, and thus do not show significant differences from the total as often as do those with no functional limitations.

Compared to elderly Medicaid enrollees overall, Medicaid enrollees who reported no functional limitations were less likely to be 85 years old or older, to report being in fair or poor health, and to have any of several specific chronic health conditions. They were also less likely to have visited a doctor or other health professional or to have visited an ED in the past 12 months.

Future MACPAC analyses of these data may consider different subpopulations and assess how enrollees' characteristics and use of care have changed over time.

Endnotes

1 Although the discussion below generally omits the term "non-institutionalized" for brevity, all estimates exclude individuals living in nursing homes and other institutional settings.

2 Centers for Disease Control and Prevention (CDC), About the National Health Interview Survey, (Atlanta, GA: CDC, 2012). http://www.cdc.gov/nchs/nhis/about_nhis.htm.

3 The annual NHIS questionnaire consists of three major components—the Family Core, the Sample Adult Core, and the Sample Child Core. The Family Core collects information for all family members regarding household composition and socioeconomic and demographic characteristics, along with basic indicators of health status, activity limitation, and health insurance. The Sample Adult and Sample Child Cores obtain additional information on the health of one randomly selected adult and child in the family.

4 Data were pooled to yield sufficiently large samples to produce reliable subgroup estimates and to increase the capacity to detect meaningful differences between subgroups and insurance categories.

5 G. Kenney and V. Lynch, Monitoring children's health insurance coverage under CHIPRA using federal surveys, in *Databases for estimating health insurance coverage for children: A workshop summary*, edited by T. Plewes (Washington, DC: The National Academies Press, 2010), 72. http://www.nap.edu/catalog/13024.html.

6 The NHIS asks separately about Medicaid and CHIP. However, Medicaid and CHIP estimates are not produced separately from the NHIS for several reasons; for example, many states' CHIP and Medicaid programs use the same name, so respondents would not necessarily know whether their child's coverage was funded by Medicaid or CHIP. The separate survey questions are used to reduce surveys' undercount of Medicaid and CHIP enrollees, not to produce valid estimates separately for each program. Thus, survey estimates generally combine Medicaid and CHIP into a single category, as is done here.

7 Health and other characteristics presented in Tables 3A–5C are for the Medicaid/CHIP population as a whole because the data source (NHIS) does not publish separate results for Medicaid and CHIP enrollees.

8 See MACStats Section 5 (including Tables 13A–D) for a discussion of how the percentage of individuals covered by Medicaid and CHIP can vary depending on several factors, including the source of data and the time period examined.

9 For children under age 18 to be determined disabled under SSI rules, the child must have a medically determinable physical or mental impairment(s) causing marked and severe functional limitations, and that can be expected to cause death or last at least 12 months (§1614(a)(3)(C)(i) of the Social Security Act). For additional discussion of disability as determined under the SSI program and its interaction with Medicaid eligibility, see Chapter 1 in the Commission's March 2012 Report to the Congress.

10 M. McPherson et al., A new definition of children with special health care needs, *Pediatrics* 102 (1998), 137–140.

11 C. Bethell et al., Identifying children with special health needs: Development and evaluation of a short screening instrument, *Ambulatory Pediatrics* 2 (2002), 38–48.

12 Since the NHIS does not explicitly include the standard CSHCN screening questions, this analysis uses an adaptation developed by Christine Coyer of the Urban Institute for the 2008–2010 NHIS based on an operationalization of the CSHCN screener for the 1999–2000 NHIS (A. Davidoff, Identifying children with special health care needs in the National Health Interview Survey: A new resource for policy analysis, *Health Services Research* 39 (2004), 53–72). While the method used in this edition of MACStats attempts to replicate the standard CSHCN screener as much as possible, there are other ways one could attempt to operationalize the CSHCN definition using the NHIS.

13 Children who are receiving SSI should meet the criteria for being a CSHCN; however, some do not. While we do not have enough information to assess the reasons that children who are reported to have SSI did not meet the criteria for CSHCN, it could be because: (1) the parent erroneously reported in the survey that the children received SSI, or (2) the parents neglected to report in the survey the children's health information related to their eligibility for SSI and thus as CSHCN.

14 Although this particular statistical significance testing is not displayed in Table 3B, all of these estimates are significantly different from one another.

15 Although CHIP covers adults in a handful of states, their numbers are so small compared to Medicaid that the discussion in this Section uses "Medicaid" to refer to adults enrolled in Medicaid or CHIP.

16 For example, see Table 6 in MACPAC Contractor Report No. 2.

17 Nearly all individuals under age 65 who are dually enrolled in Medicaid and Medicare have obtained their Medicare coverage after a two-year waiting period following their initial receipt of Social Security Disability Insurance (SSDI) benefits. During the two-year waiting period and beyond, SSDI beneficiaries may have incomes low enough to qualify for SSI benefits that confer automatic Medicaid eligibility in most states; they may also qualify for Medicaid via other non-SSI pathways (e.g., as a low-income parent or an individual with high medical expenses who "spends down" to a Medicaid income eligibility level). For information on SSI and SSDI, see Chapter 1 in the Commission's March 2012 Report to the Congress.

18 Conversely, of the Medicare enrollees in this age group, 31.1 percent also were enrolled in Medicaid.

19 Although this particular statistical significance testing is not displayed in Table 4B, these two estimates are significantly different from the estimate for non-dual SSI beneficiaries (21.3 percent).

20 Nearly all individuals are entitled to Medicare coverage upon turning 65; as with Medicare enrollees under age 65, they may have incomes low enough or medical expenses high enough to qualify for Medicaid as well.

21 The survey includes questions about the following activities: walking a quarter of a mile, walking up 10 steps without resting, standing or being on one's feet for about two hours, sitting for about two hours, stooping or kneeling, reaching up over one's head, using one's fingers to grasp or handle small objects, lifting or carrying something as heavy as 10 pounds, pushing or pulling large objects such as a living-room chair, going out to do things like shopping, participating in social activities such as visiting friends, or doing things to relax at home such as reading or watching TV.

22 Individuals in institutions such as nursing homes or assisted living facilities are not interviewed in the NHIS.

TABLE 3A. Health Insurance and Demographic Characteristics of Non-institutionalized Individuals Age 0–18 by Source of Health Insurance, 2008–2010

		Selected Sources of Insurance[1]			Medicaid/CHIP[2]			
	All Children	Medicaid/ CHIP[2]	Private[3]	Uninsured[4]	Medicaid/ CHIP children	SSI	Non-SSI CSHCN[5]	Neither SSI nor CSHCN
Health Insurance Coverage		**34.1%**	55.8%	8.7%	**100.0%**	3.2%	18.1%	78.7%
Age (categories sum to 100%)								
0–5	32.5%*	**38.7%**	29.6%*	26.1%*	**38.7%**	15.4%*	23.1%*	43.2%*
6–11	30.7	**31.6**	30.6	28.7*	**31.6**	36.2	38.9*	29.7*
12–18	36.9*	**29.7**	39.8*	45.2*	**29.7**	48.4*	38.0*	27.1*
Gender (categories sum to 100%)								
Male	51.2%	**51.0%**	51.2%	52.1%	**51.0%**	63.0%*	58.5%*	48.8%*
Female	48.8	**49.0**	48.8	47.9	**49.0**	37.0*	41.5*	51.2*
Race (categories sum to 100%)								
Hispanic	22.0%*	**33.6%**	12.3%*	38.7%*	**33.6%**	24.7%*	20.5%*	37.0%*
White, non-Hispanic	55.6*	**35.5**	70.2*	42.4*	**35.5**	35.6	46.8*	32.9*
Black, non-Hispanic	14.4*	**23.5**	9.1*	11.4*	**23.5**	34.4*	24.7	22.7
Other and multiple races, non-Hispanic	8.0	**7.4**	8.4	7.5	**7.4**	5.3	8.0	7.4
Health insurance								
Medicaid/CHIP	34.1%*	**100.0%**	2.3%*	–	**100.0%**	100.0%	100.0%	100.0%
Private	55.8*	**3.8**	100.0*	–	**3.8**	10.1*	6.0*	3.0

See Table 3C for source and notes.

TABLE 3B. Health Characteristics of Non-institutionalized Individuals Age 0–18 by Source of Health Insurance, 2008–2010

		Selected Sources of Insurance[1]			Medicaid/CHIP[2]			
	All Children	Medicaid/ CHIP[2]	Private[3]	Uninsured[4]	Medicaid/ CHIP children	SSI	Non-SSI CSHCN[5]	Neither SSI nor CSHCN
Children with disabilities or with special health care needs								
Receives Supplemental Security Income (SSI)	1.3%*	**3.2%**	0.5%*	0.4%*	**3.2%**	100.0%*	–	–
Children with special health care needs (CSHCN)[5]	15.3*	**20.7**	13.0*	10.8*	**20.7**	80.4*[6]	100.0%*	–
Current health status (categories sum to 100%)								
Excellent or very good	82.6%*	**72.4%**	89.2%*	79.0%*	**72.4%**	40.1%*	52.5%*	78.3%*
Good	15.4*	**23.7**	9.9*	19.0*	**23.7**	40.3*	34.5*	20.6*
Fair or poor	2.0*	**3.8**	0.9*	2.1*	**3.8**	19.5*	13.0*	1.1*
Impairments								
Impairment requiring special equipment	1.1%*	**1.5%**	1.1%*	0.5%*	**1.5%**	10.4%*	5.3%*	0.3%*
Impairment limits ability to crawl, walk, run, play[7]	1.9*	**2.9**	1.6*	1.4*	**2.9**	17.7*	10.0*	0.6*
Impairment lasted, or expected to last 12+ months[8]	1.7*	**2.6**	1.4*	1.3*	**2.6**	17.7*	9.1*	0.4*
Specific health conditions								
Ever told child has:								
ADHD/ADD[8]	7.8%*	**11.2%**	6.4%*	5.2%*	**11.2%**	43.2%*	40.3%*	2.0%*
Asthma	13.9*	**16.8**	12.8*	10.4*	**16.8**	32.4*	40.3*	10.8*
Autism[7]	0.9*	**1.1**	0.8*	0.4*	**1.1**	13.6*	3.8*	†
Cerebral palsy[7]	0.2	**0.4**	0.2*	†	**0.4**	5.5*	1.1*	†
Congenital heart disease	1.3	**1.6**	1.2*	0.9*	**1.6**	5.9*	4.6*	0.7*
Diabetes	0.2	**0.3**	0.2	†	**0.3**	†	1.3*	†
Down syndrome[7]	0.1	**0.2**	0.1	†	**0.2**	3.1*	0.5	†
Mental retardation[7]	0.6*	**1.2**	0.4*	†	**1.2**	13.5*	3.8*	0.1*
Other developmental delay[7]	4.4*	**6.2**	3.8*	3.0*	**6.2**	44.7*	22.2*	0.9*
Sickle cell anemia[7]	0.2*	**0.3**	0.0*	0.1*	**0.3**	1.7	0.9*	0.2*

See Table 3C for source and notes.

TABLE 3C. Use of Care by Non-institutionalized Individuals Age 0–18 by Source of Health Insurance, 2008–2010

		Selected Sources of Insurance[1]			Medicaid/CHIP[2]			
	All Children	Medicaid/ CHIP[2]	Private[3]	Uninsured[4]	Medicaid/ CHIP children	SSI	Non-SSI CSHCN[5]	Neither SSI nor CSHCN
Received well-child check-up in past 12 months[7]	77.9%*	**80.6%**	80.5%	49.4%*	**80.6%**	84.0%	84.8%*	79.4%
Regularly taking prescription drug(s) for 3+ months[8]	13.2*	**15.3**	13.2*	6.0*	**15.3**	48.6*	55.1*	4.7*
Number of times saw a doctor or other health professional in past 12 months (categories sum to 100%)								
None	10.6%*	**9.3%**	7.6%*	34.4%*	**9.3%**	4.9%*	4.4%*	10.6%*
1	20.8*	**19.4**	20.8*	24.7*	**19.4**	15.0	10.0*	21.8*
2–3	36.2	**34.9**	38.7*	25.8*	**34.9**	22.6*	27.4*	37.2*
4+	32.4*	**36.3**	32.9*	15.1*	**36.3**	57.5*	58.1*	30.4*
Number of emergency room visits in past 12 months (categories sum to 100%)								
None	78.5%*	**70.6%**	82.9%*	81.8%*	**70.6%**	65.8%	59.1%*	73.5%*
1	13.9*	**17.4**	12.1*	11.6*	**17.4**	17.8	20.0*	16.8
2–3	6.1*	**9.3**	4.3*	5.3*	**9.3**	7.6	14.5*	8.1*
4+	1.5*	**2.7**	0.7*	1.4*	**2.7**	8.8*	6.4*	1.6*

Notes: Health insurance coverage is defined at the time of the survey. Totals of health insurance coverage may sum to more than 100% because individuals may have multiple sources of coverage. Responses to recent care questions are based on the previous 12 months, during which time the individual may have had different coverage than that shown in the table. In order to focus on a consistent sample across the measures included in this table, the tabulations reported here are based on the NHIS sample child/adult weights. Somewhat different estimates might be obtained using the broader person file weights for the subset of variables that are available for all persons in the household. This analysis provides conservative estimates of statistical significance; it does not take into account subgroups' non-independence by incorporating the covariance.

† Estimate has a relative standard error of greater than 50 percent.

* Statistically different from Medicaid/CHIP at the (.05) level, two-tailed test.

– Quantity zero; amounts shown as 0.0 round to less than 0.1 in this table.

1 Not separately shown are the estimates of children covered by Medicare (0.3 percent, generally children with end-stage renal disease), any type of military health plan (VA, TRICARE, and CHAMP-VA), or other government programs.

2 Medicaid/CHIP also includes persons covered by other state-sponsored health plans.

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

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

5 A standard screener has been developed by researchers (Bethell et al. 2002) to identify CSHCN as those who have at least one of five broad symptoms of a chronic health problem (e.g., needs or uses prescription medications) as a result of a health condition(s) lasting at least 12 months. Since the NHIS does not explicitly include the standard CSHCN screener, this analysis adapted Davidoff's (2004) methodology for identifying CSHCN, which was developed for the 1999–2000 NHIS, to the 2008–2010 NHIS. While this method attempts to replicate the standard CSHCN screener as much as possible on the NHIS, there are other ways of operationalizing the CSHCN definition on the NHIS. For full references to Bethell and Davidoff, see endnotes in text of Section 2.

6 For a child to be eligible for SSI, one of the criteria is that the child has a medically determinable physical or mental impairment(s) that results in marked and severe functional limitations and generally is expected to last at least 12 months or result in death. Thus, children who are eligible for SSI should meet the criteria for being a CSHCN; however, some do not. While we do not have enough information to assess the reasons that these Medicaid/CHIP children who are reported to have SSI did not meet the criteria for CSHCN, it could be because (1) the parents erroneously reported in the survey that the children received SSI, or (2) the parents neglected to report in the survey the children's health information related to their eligibility for SSI and thus as CSHCN.

7 Question only asked for children age 0 to 17.

8 Question only asked for children age 2 to 17.

Source: Urban Institute analysis of the National Health Interview Survey (NHIS) for MACPAC; the estimates for 2008–2010 are based on household interviews of a sample of the civilian non-institutionalized population

TABLE 4A. Health Insurance and Demographic Characteristics of Non-institutionalized Individuals Age 19–64 by Source of Health Insurance, 2008–2010

		Selected Sources of Insurance[1]				Medicaid[2]			
	Adults Age 19–64	Medicaid[2]	Private[3]	Medicare	Uninsured[4]	Medicaid adults age 19–64	Medicare (duals)	Non-dual SSI	Neither SSI nor Medicare
Health Insurance Coverage		**8.9%**	66.3%	3.5%	20.9%	**100.0%**	12.3%	15.6%	72.3%
Age (categories sum to 100%)									
19–24	13.5%*	**18.9%**	10.9%*	1.6%*	20.3%	**18.9%**	1.8%*	9.6%*	23.9%*
25–44	43.9*	**46.8**	42.9*	21.1*	50.0*	**46.8**	31.6*	37.3*	51.4*
45–54	23.8*	**19.4**	25.9*	28.8*	18.7	**19.4**	32.8*	27.2*	15.4*
55–64	18.7*	**15.0**	20.4*	48.5*	11.0*	**15.0**	33.7*	26.0*	9.3*
Gender (categories sum to 100%)									
Male	49.2%*	**34.5%**	48.8%*	50.3%*	55.6%*	**34.5%**	45.1%*	40.6%*	31.3%*
Female	50.8*	**65.5**	51.2*	49.7*	44.4*	**65.5**	54.9*	59.4*	68.7*
Race (categories sum to 100%)									
Hispanic	15.1%*	**21.4%**	9.7%*	8.4%*	30.2%*	**21.4%**	9.1%*	13.8%*	25.2%*
White, non-Hispanic	66.1*	**48.5**	73.8*	68.5*	49.3	**48.5**	64.3*	52.8	44.8*
Black, non-Hispanic	12.1*	**23.9**	9.6*	18.5*	14.2*	**23.9**	21.6	28.8*	23.2
Other and multiple races, non-Hispanic	6.7	**6.2**	6.9	4.6*	6.2	**6.2**	5.0	4.7	6.7
Family characteristics									
Parent of a dependent child[5]	39.0%*	**50.1%**	39.0%*	14.7%*	36.9%*	**50.1%**	13.2%*	18.9%*	63.1%*
Health insurance									
Medicaid/CHIP	8.9%*	**100.0%**	0.4%*	31.1%*	–	**100.0%**	100.0%	100.0%	100.0%
Medicare	3.5*	**12.3**	1.1*	100.0*	–	**12.3**	100.0*	–	–
Private	66.3*	**2.9**	100.0*	21.2*	–	**2.9**	2.8	2.3	3.1

See Table 4C for source and notes.

TABLE 4B. Health Characteristics of Non-institutionalized Individuals Age 19–64 by Source of Health Insurance, 2008–2010

		Selected Sources of Insurance[1]				Medicaid[2]			
	Adults Age 19–64	Medicaid[2]	Private[3]	Medicare	Uninsured[4]	Medicaid adults age 19–64	Medicare (duals)	Non-dual SSI	Neither SSI nor Medicare
Disability and work status									
Receives Supplemental Security Income (SSI)	2.4%*	**20.9%**	0.3%*	22.2%	0.4%*	**20.9%**	44.3%*	100.0%*	–
Receives Social Security Disability Insurance (SSDI)	3.3*	**14.5**	1.3*	62.5*	0.6*	**14.5**	65.0*	17.4	5.3%*
Working	72.3*	**36.2**	82.2*	11.9*	63.1*	**36.2**	9.3*	9.7*	46.6*
Current health status (categories sum to 100%)									
Excellent or very good	64.0%*	**39.1%**	71.3%*	12.1%*	56.8%*	**39.1%**	10.7%*	16.0%*	48.9%*
Good	25.1*	**30.0**	22.4*	28.0	30.8	**30.0**	29.9	24.5*	31.1
Fair or poor	10.9*	**30.9**	6.3*	59.9*	12.4*	**30.9**	59.3*	59.5*	19.9*
Health compared to 12 months ago (categories sum to 100%)									
Better	19.8%	**20.7%**	20.1%	16.2%	18.4%	**20.7%**	18.3%	20.7%	21.2%
Worse	8.1*	**16.3**	6.0*	26.0*	9.5*	**16.3**	28.9*	22.0*	13.0*
Same	72.1*	**63.0**	73.9*	57.8*	72.1*	**63.0**	52.9*	57.3*	65.9*
Activities of daily living (ADLs)									
Help with any personal care needs[6]	1.2%*	**6.8%**	0.5%*	13.2%*	0.5%*	**6.8%**	19.9%*	16.2%*	2.5%*
Help with bathing/showering	0.7*	**4.5**	0.2*	8.2*	0.2*	**4.5**	13.2*	11.7*	1.4*
Help with dressing	0.7*	**3.9**	0.3*	8.1*	0.2*	**3.9**	12.8*	9.7*	1.2*
Help with eating	0.2*	**1.6**	0.1*	2.8*	0.1*	**1.6**	5.1*	4.3*	0.4*
Help with transferring (in/out of bed or chairs)	0.6*	**3.5**	0.2*	6.9*	0.2*	**3.5**	10.3*	7.8*	1.4*
Help with toileting	0.4*	**2.7**	0.1*	5.0*	0.1*	**2.7**	9.0*	6.5*	0.8*
Help getting around in home	0.5*	**2.8**	0.2*	5.4*	0.2*	**2.8**	8.6*	5.5*	1.2*
Number of above ADLs reported (categories sum to 100%)									
0	99.0%*	**94.2%**	99.6%*	88.8%*	99.6%*	**94.2%**	82.9%*	86.2%*	97.9%*
1	0.2*	**0.9**	0.1*	1.9*	0.1*	**0.9**	2.0*	2.7*	0.4*
2	0.3*	**1.4**	0.1*	2.7*	0.1*	**1.4**	3.9*	3.1*	0.6*
3	0.2*	**1.1**	0.1*	2.1*	0.0*	**1.1**	3.6*	2.0	0.5*
4+	0.4*	**2.4**	0.1*	4.6*	0.1*	**2.4**	7.6*	6.1*	0.7*

TABLE 4B, Continued

	Adults Age 19–64	Selected Sources of Insurance[1]				Medicaid[2]			
		Medicaid[2]	Private[3]	Medicare	Uninsured[4]	Medicaid adults age 19–64	Medicare (duals)	Non-dual SSI	Neither SSI nor Medicare
Specific health conditions									
Currently pregnant	1.2%*	**4.9%**	1.0%*	†	0.5%*	**4.9%**	†	0.8%*	6.6%*
Functional limitation[7]	28.7*	**48.0**	25.3*	83.1%*	25.8*	**48.0**	83.0%*	75.7*	36.0*
Difficulty walking without equipment	3.2*	**12.1**	1.7*	32.3*	1.8*	**12.1**	34.9*	24.6*	5.6*
Health condition that requires special equipment (e.g., cane, wheelchair)	4.0*	**12.7**	2.6*	33.4*	2.0*	**12.7**	35.5*	25.0*	6.2*
Lost all natural teeth	4.7*	**9.6**	3.5*	18.6*	4.9*	**9.6**	20.0*	17.8*	6.1*
Depressed/anxious feelings[8]	12.8*	**28.4**	8.6*	36.7*	17.1*	**28.4**	43.4*	41.1*	23.3*
Ever told had hypertension	23.5*	**31.9**	23.0*	55.9*	17.6*	**31.9**	55.4*	47.7*	24.4*
Ever told had coronary heart disease	2.4*	**4.2**	2.1*	13.2*	1.4*	**4.2**	9.9*	7.8*	2.5*
Ever told had heart attack	1.9*	**4.0**	1.5*	11.2*	1.3*	**4.0**	9.3*	7.9*	2.3*
Ever told had stroke	1.6*	**4.7**	1.0*	12.0*	1.1*	**4.7**	12.1*	8.6*	2.6*
Ever told had cancer	5.2*	**6.3**	5.6	13.5*	2.9*	**6.3**	12.2*	9.7*	4.6*
Ever told had diabetes	6.7*	**12.6**	6.0*	25.9*	4.9*	**12.6**	28.3*	22.3*	7.9*
Ever told had arthritis	17.5*	**25.1**	17.4*	51.5*	10.9*	**25.1**	50.6*	40.8*	17.4*
Ever told had asthma	13.0*	**19.6**	12.4*	22.6*	11.6*	**19.6**	27.4*	25.6*	16.9*
Past 12 months, told had chronic bronchitis	4.0*	**8.2**	3.3*	13.5*	3.6*	**8.2**	15.5*	13.7*	5.7*
Past 12 months, told had liver condition	1.5*	**3.5**	1.1*	6.1*	1.4*	**3.5**	7.3*	6.7*	2.1*
Past 12 months, told had weak/failing kidneys	1.3*	**4.1**	0.8*	8.0*	1.2*	**4.1**	10.9*	6.7*	2.5*

See Table 4C for source and notes.

TABLE 4C. Use of Care by Non-institutionalized Individuals Age 19–64 by Source of Health Insurance, 2008–2010

		Selected Sources of Insurance[1]				Medicaid[2]			
	Adults Age 19–64	Medicaid[2]	Private[3]	Medicare	Uninsured[4]	Medicaid adults age 19–64	Medicare (duals)	Non-dual SSI	Neither SSI nor Medicare
Received at-home care in past 12 months	1.3%*	**5.1%**	0.9%*	8.9%*	0.5%*	**5.1%**	15.0%*	9.2%*	2.5%*
Number of times saw a doctor or other health professional in past 12 months (categories sum to 100%)									
None	21.7%*	**14.0%**	15.1%	6.5%*	47.9%*	**14.0%**	4.2%*	8.4%*	16.9%*
1	17.5*	**11.9**	18.4*	5.6*	18.3*	**11.9**	3.4*	7.7*	14.3*
2–3	26.4*	**20.3**	30.4*	16.7*	16.9*	**20.3**	17.5	16.2*	21.6
4+	34.3*	**53.8**	36.1*	71.3*	16.9*	**53.8**	74.9*	67.7*	47.2*
Number of emergency room visits in past 12 months (categories sum to 100%)									
None	79.7%*	**59.6%**	83.3%*	60.3%	79.0%*	**59.6%**	54.0%*	52.9%*	61.9%
1	12.8*	**19.1**	11.8*	18.7	12.4*	**19.1**	19.7	19.3	18.9
2–3	5.4*	**12.8**	3.9*	12.7	6.2*	**12.8**	14.4	16.0*	11.9
4+	2.1*	**8.5**	1.0*	8.4	2.4*	**8.5**	11.8	11.8*	7.2

Notes: Estimates for 2008–2010 are based on household interviews of a sample of the civilian non-institutionalized population. Health insurance coverage is defined as coverage at the time of the survey. Totals of health insurance coverage may sum to more than 100 percent because individuals may have multiple sources of coverage. Responses to recent care questions are based on the previous 12 months, during which time the individual may have had different coverage than that shown in the table. In order to focus on a consistent sample across the measures included in this table, the tabulations reported here are based on the NHIS sample adult weights. Somewhat different estimates might be obtained using the broader person file weights for the subset of variables that are available for all persons in the household. This analysis provides conservative estimates of statistical significance; it does not take into account subgroups' non-independence by incorporating the covariance.

† Estimate has a relative standard error of greater than 50 percent.

* Statistically different from Medicaid at the (.05) level, two-tailed test.

– Quantity zero; amounts shown as 0.0 round to less than 0.1 in this table.

1 Not separately shown are the estimates of individuals covered by any type of military health plan (VA, TRICARE, and CHAMP-VA) or other government programs.

2 Medicaid also includes adults reporting coverage through the CHIP program or other state-sponsored health plans. Separate results for Medicaid and CHIP are generally not published from federal surveys such as NHIS. CHIP enrollment of adults is small, totaling approximately 226,000 ever enrolled during FY 2011 (March 2012 MACStats).

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

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

5 Parent of a dependent child is defined as an adult with at least one dependent child living in that health insurance unit.

6 Only adults who report needing assistance with personal care needs are asked about each of the following specific personal care needs. Each specific personal care need is reported as the overall population prevalence (rather than the prevalence among those needing help with any personal care needs).

7 Individuals with a functional limitation are those who reported any degree of difficulty—ranging from "only a little difficult" to "can't do at all"—doing any of a dozen activities (e.g., walking a quarter of a mile, stooping or kneeling) by themselves and without special equipment.

8 Reports feeling sad, hopeless, worthless, nervous, restless, or that everything was an effort all or most of the time.

Source: Urban Institute analysis of the National Health Interview Survey (NHIS) for MACPAC; the estimates for 2008–2010 are based on household interviews of a sample of the civilian non-institutionalized population

TABLE 5A. Health Insurance and Demographic Characteristics of Non-institutionalized Individuals Age 65 and Older by Source of Health Insurance, 2008–2010

		Selected Sources of Insurance[1]			Medicaid[2]		
	Adults Age 65+	Medicaid[2]	Private[3]	Medicare	All Medicaid adults age 65+	Functional limitation[4]	No functional limitation
Health Insurance Coverage		**7.4%**	55.8%	95.1%	**100.0%**	77.7%	22.3%
Age (categories sum to 100%)							
65–74	54.3%	**54.0%**	53.8%	53.2%	**54.0%**	52.9%	58.2%
75–84	33.8	**34.6**	34.3	34.6	**34.6**	33.8	36.8
85+	12.0	**11.4**	12.0	12.2	**11.4**	13.3	5.0*
Gender (categories sum to 100%)							
Male	43.3%*	**32.8%**	43.4%*	42.7%*	**32.8%**	28.5%	47.7%*
Female	56.7*	**67.2**	56.6*	57.3*	**67.2**	71.5	52.3*
Race (categories sum to 100%)							
Hispanic	7.1%*	**23.1%**	3.0%*	6.7%*	**23.1%**	22.4%	25.4%
White, non-Hispanic	79.7*	**48.2**	87.7*	80.7*	**48.2**	50.2	42.5
Black, non-Hispanic	8.4*	**18.7**	5.6*	8.2*	**18.7**	19.6	15.5
Other and multiple races, non-Hispanic	4.8*	**9.9**	3.7*	4.4*	**9.9**	7.8	16.6
Health insurance							
Medicaid/CHIP	7.4%*	**100.0%**	0.7%*	7.2%*	**100.0%**	100.0%	100.0%
Medicare	95.1*	**92.1**	94.3*	100.0*	**92.1**	92.2	91.9
Private	55.8*	**4.9**	100.0*	55.4*	**4.9**	4.2	7.4

See Table 5C for source and notes.

TABLE 5B. Health Characteristics of Non-institutionalized Individuals Age 65 and Older by Source of Health Insurance, 2008–2010

		Selected Sources of Insurance[1]			Medicaid[2]		
	Adults Age 65+	Medicaid[2]	Private[3]	Medicare	All Medicaid adults age 65+	Functional limitation[4]	No functional limitation
Disability and work status							
Receives Supplemental Security Income (SSI)	4.0%*	35.4%	0.5%*	3.9%*	35.4%	36.7%	29.6%
Working	15.3*	3.3	18.3*	14.0*	3.3	2.3	6.9*
Current health status (categories sum to 100%)							
Excellent or very good	41.7%*	18.0%	45.8%*	41.6%*	18.0%	12.3%*	38.4%*
Good	34.3*	31.1	35.3*	34.4*	31.1	28.5	40.9*
Fair or poor	23.9*	50.8	18.8*	24.1*	50.8	59.1*	20.8*
Health compared to 12 months ago (categories sum to 100%)							
Better	13.3%	12.6%	13.0%	13.2%	12.6%	12.3%	13.7%
Worse	12.4*	21.4	11.2*	12.6*	21.4	25.6*	6.5*
Same	74.3*	66.1	75.8*	74.2*	66.1	62.1	79.7*
Activities of daily living (ADLs)							
Help with any personal care needs[5]	6.4%*	19.6%	4.7%*	6.6%*	19.6%	24.0%*	3.8%*
Help with bathing/showering	4.8*	15.6	3.5*	4.9*	15.6	19.3	2.2*
Help with dressing	3.7*	11.6	2.7*	3.8*	11.6	14.1	2.1*
Help with eating	1.3*	4.6	0.9*	1.3*	4.6	5.6	†
Help with transferring (in/out of bed or chairs)	2.8*	9.2	2.0*	2.8*	9.2	11.0	2.1*
Help with toileting	2.1*	6.5	1.6*	2.1*	6.5	7.8	1.4*
Help getting around in home	2.5*	7.5	1.9*	2.6*	7.5	9.0	1.4*
Number of above ADLs reported (categories sum to 100%)							
0	94.2%*	82.2%	95.7%*	94.1%*	82.2%	77.9%*	97.8%*
1	1.5*	3.5	1.2*	1.5*	3.5	4.5	†
2	1.4*	5.0	1.0*	1.5*	5.0	6.4	†
3	0.8*	2.9	0.5*	0.8*	2.9	3.6	†
4+	2.1*	6.4	1.5*	2.1*	6.4	7.7	1.4*

TABLE 5B, Continued

	Adults Age 65+	Selected Sources of Insurance[1]			Medicaid[2]		
		Medicaid[2]	Private[3]	Medicare	All Medicaid adults age 65+	Functional limitation[4]	No functional limitation
Specific health conditions							
Functional limitation[4]	63.8%*	77.7%	62.3%*	64.4%*	77.7%	100.0%*	0.0%*
Difficulty walking without equipment	18.7*	36.7	16.6*	19.1*	36.7	44.9*	6.5*
Health condition that requires special equipment (e.g., cane, wheelchair)	20.4*	36.6	18.3*	20.9*	36.6	45.0*	7.4*
Lost all natural teeth	24.6*	42.9	21.2*	24.7*	42.9	46.3	31.4*
Depressed/anxious feelings[6]	9.8*	22.7	7.9*	9.9*	22.7	27.0	8.0*
Ever told had hypertension	62.4*	71.2	61.9*	62.8*	71.2	75.2	56.5*
Ever told had coronary heart disease	15.3*	18.6	15.4*	15.4*	18.6	21.1	9.9*
Ever told had heart attack	11.3*	14.7	11.1*	11.3*	14.7	16.2	9.6*
Ever told had stroke	8.8*	13.0	8.4*	9.0*	13.0	16.1	2.3*
Ever told had cancer	23.6*	18.0	26.2*	23.9*	18.0	19.4	12.3*
Ever told had diabetes	19.8*	28.9	17.9*	20.0*	28.9	32.9	14.3*
Ever told had arthritis	51.2*	57.5	52.0*	51.8*	57.5	66.7*	25.1*
Ever told had asthma	11.2*	16.0	10.8*	11.2*	16.0	17.8	9.5*
Past 12 months, told had chronic bronchitis	6.0*	9.9	5.3*	6.1*	9.9	11.5	4.3*
Past 12 months, told had liver condition	1.4*	3.6	1.1*	1.4*	3.6	3.9	†
Past 12 months, told had weak/failing kidneys	4.4*	9.0	3.8*	4.5*	9.0	10.3	4.5*

See Table 5C for source and notes.

TABLE 5C. Use of Care by Non-institutionalized Individuals Age 65 and Older by Source of Health Insurance, 2008–2010

		Selected Sources of Insurance[1]			Medicaid[2]		
	Adults Age 65+	Medicaid[2]	Private[3]	Medicare	All Medicaid adults age 65+	Functional limitation[4]	No functional limitation
Received at-home care in past 12 months	7.8%*	**19.9%**	7.1%*	8.0%*	**19.9%**	24.1%*	5.2%*
Number of times saw a doctor or other health professional in past 12 months (categories sum to 100%)							
None	5.8%	**6.3%**	4.3%*	5.4%	**6.3%**	3.8%*	14.7%*
1	9.8*	**6.7**	9.8*	9.6*	**6.7**	5.1	12.4*
2–3	25.1*	**17.1**	26.2*	24.9*	**17.1**	15.4	22.9
4+	59.3*	**69.9**	59.6*	60.1*	**69.9**	75.7*	50.0*
Number of emergency room visits in past 12 months (categories sum to 100%)							
None	76.0%*	**67.4%**	77.4%*	75.6%*	**67.4%**	64.0%	79.3%*
1	15.6	**16.1**	15.5	15.8	**16.1**	17.0	13.4
2–3	6.3*	**11.4**	5.3*	6.5*	**11.4**	13.3	4.8*
4+	2.1*	**5.1**	1.8*	2.1*	**5.1**	5.8	2.4*

Notes: Health insurance coverage is defined at the time of the survey. Totals of health insurance coverage may sum to more than 100 percent because individuals may have multiple sources of coverage. Responses to recent care questions are based on the previous 12 months, during which time the individual may have had different coverage than that shown in the table. Not separately shown are the estimates of individuals covered by any type of military health plan (VA, TRICARE, and CHAMP-VA) or other government programs. In order to focus on a consistent sample across the measures included in this table, the tabulations reported here are based on the NHIS sample adult weights. Somewhat different estimates might be obtained using the broader person file weights for the subset of variables that are available for all persons in the household. This analysis provides conservative estimates of statistical significance; it does not take into account subgroups' non-independence by incorporating the covariance.

† Estimate has a relative standard error of greater than 50 percent.

* Statistically different from Medicaid at the (.05) level, two-tailed test.

– Quantity zero; amounts shown as 0.0 round to less than 0.1 in this table.

1 Not separately shown are the estimates of individuals covered by any type of military health plan (VA, TRICARE, and CHAMP-VA) or other government programs.

2 Medicaid also includes adults reporting coverage through CHIP or other state-sponsored health plans.

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

4 Individuals with a functional limitation are those who reported any degree of difficulty—ranging from "only a little difficult" to "can't do at all"—doing any of a dozen activities (e.g., walking a quarter of a mile, stooping or kneeling) by themselves and without special equipment.

5 Only adults who report needing assistance with personal care needs are asked about each of the following specific personal care needs. Each need is reported as the overall population prevalence (rather than the prevalence among those needing help with any personal care needs).

6 Reports feeling sad, hopeless, worthless, nervous, restless, or that everything was an effort all or most of the time.

Source: Urban Institute analysis of the National Health Interview Survey (NHIS) for MACPAC; the estimates for 2008–2010 are based on household interviews of a sample of the civilian non-institutionalized population

3

Medicaid Enrollment and Benefit Spending

Section 3 of MACStats provides information on Medicaid enrollment and benefit spending, with various breakouts by state, eligibility group, dual-eligible status, and type of service. The source for this information is Medicaid Statistical Information System (MSIS) data for fiscal year (FY) 2009 (the most recent available for all but one state) that have been adjusted to match benefit spending totals reported by states in CMS-64 data, as discussed in Section 5 of MACStats.

As demonstrated in the following tables and figures, Medicaid benefit spending varies widely across populations:

- **Distribution of spending among eligibility groups.** Non-disabled adults and children represent the majority of Medicaid enrollees nationally and within each state (Table 6), but enrollees eligible on the basis of a disability and those who are age 65 and older account for the largest share of the program's spending on benefits (Table 7).
- **Benefit spending per enrollee.** Enrollees eligible on the basis of a disability and those who are age 65 and older have average per person Medicaid benefit spending that is 3 to 5 times that of other enrollees (Figure 4 and Table 8).
- **Individuals dually enrolled in Medicaid and Medicare.** Among dual eligibles, about 60 percent of enrollment and Medicaid benefit spending is for individuals age 65 and older (Tables 6 and 7).
- **Spending by type of service.** Spending by type of service varies among populations. A large share of spending for disabled and aged enrollees covers long-term services and supports (LTSS), while a substantial portion of spending for non-disabled children and adults is accounted for by managed care payments (Figures 3 and 4).
- **Users of LTSS.** LTSS users—primarily enrollees eligible on the basis of a disability and those age 65 and older—account for only about 7 percent of Medicaid enrollees,

but nearly half of all Medicaid spending (Figure 5). Acute care represents a minority of Medicaid spending for most LTSS users (Figure 6), and these individuals have average per person Medicaid benefit spending that is more than 10 times that of enrollees who are not using LTSS (Figure 7).

Variation across states. In addition to varying by population group, Medicaid benefit spending per enrollee also varies substantially across states (Table 8). Reasons for cross-state variation may include the breadth of benefits that states choose to cover; the proportion of enrollees receiving the full benefit package or a more limited version; enrollee case mix (based on health status and other characteristics); the underlying costs of delivering health care services in specific geographic areas; and state policies regarding provider payments, care management, and other issues.

Information reported by states in MSIS for FY 2009 indicates that the proportion of enrollees receiving limited benefits ranged from less than 5 percent in some states to more than 20 percent in others (Table 8). These percentages vary by enrollee population, but it is important to note that states may not consistently identify their limited-benefit enrollees in MSIS. For example, many states with family planning waivers report that a substantial portion of their non-disabled adult enrollees receive limited benefits; however, some states with family planning waivers report lower than expected numbers of limited-benefit enrollees.[1] Among Medicaid enrollees eligible on the basis of a disability and those age 65 and older, most individuals receiving limited benefits are dual eligibles for whom Medicaid only provides assistance with Medicare premiums and cost sharing.

Even when comparisons are limited to similar populations, Medicaid spending per enrollee still varies substantially across states. For example, one analysis of disabled enrollees with similar income levels (i.e., low enough to qualify for cash assistance under the Supplemental Security Income program) receiving full Medicaid-only benefits on a fee-for-service basis (i.e., excluding enrollees with limited benefits, those with Medicare coverage, and those in managed care) found that:[2]

- Medicaid spending per enrollee on acute care in the highest-spending state was more than double the amount in the lowest-spending state.
- In the 10 highest-spending states, 72 percent of their difference from the national average Medicaid spending per enrollee was due to the volume of services delivered, rather than the price of services; in the 10 lowest-spending states, 58 percent of their difference from the national average was due to volume.
- Compared to inpatient, physician, and prescription drug spending, there is more interstate variation in Medicaid spending per enrollee for mental health and other acute care services; in addition, there is substantially more variation in LTSS spending than in acute care spending.

Endnotes

1 As of January 31, 2009, the following states had implemented waivers providing Medicaid coverage limited to family planning: AL, AZ, AR, CA, DE, FL, IA, IL, LA, MD, MI, MN, MO, MS, NY, NC, NM, OK, OR, PA, RI, SC, TX, VA, WA, WI, and WY. See Centers for Medicare & Medicaid Services (CMS), *Section 1115 demonstrations, state profiles: Approvals through January 31, 2009* (Baltimore, MD: CMS, 2009).

2 T. Gilmer and R. Kronick, Differences in the volume of services and in prices drive big variations in Medicaid spending among U.S. states and regions, *Health Affairs* 30 (2011): 1316–1324. http://content.healthaffairs.org/content/30/7/1316.

TABLE 6. Medicaid Enrollment by State, Eligibility Group, and Dual Eligible Status, FY 2009 (thousands)

		Percentage of Enrollees in Eligibility Group[1]				Dual Eligible Status[2]					
						All duals		Duals with full benefits		Duals with limited benefits	
State	Total	Children	Adults	Disabled	Aged	Total	Percentage age 65+	Total	Percentage age 65+	Total	Percentage age 65+
Total	**62,295**	**48.2%**	**26.8%**	**15.2%**	**9.8%**	**9,413**	**60.2%**	**7,264**	**60.3%**	**2,149**	**59.7%**
Alabama	955	49.0	16.8	21.5	12.7	207	57.7	99	53.4	108	61.7
Alaska	117	56.0	23.6	13.1	7.2	13	54.1	13	53.7	0	70.3
Arizona	1,721	44.7	41.3	8.1	5.9	160	59.3	123	55.5	37	71.9
Arkansas	680	52.3	17.1	20.4	10.2	118	55.0	67	60.4	52	48.1
California	10,941	38.6	43.2	9.1	9.1	1,229	70.6	1,202	70.4	27	76.3
Colorado	632	59.3	17.9	13.9	9.0	85	59.5	70	58.7	15	63.4
Connecticut	587	51.7	24.8	11.8	11.7	106	60.7	80	58.6	27	67.2
Delaware	207	41.8	40.1	11.5	6.6	25	54.7	11	54.8	13	54.6
District of Columbia	168	44.8	24.5	21.6	9.2	23	60.1	19	59.6	4	62.1
Florida	3,420	50.6	19.9	16.5	13.0	644	65.4	372	68.3	272	61.4
Georgia	1,819	57.9	16.8	15.9	9.4	272	59.1	145	59.2	126	59.0
Hawaii	243	40.7	38.5	10.8	10.0	34	68.7	30	69.4	4	62.5
Idaho	223	61.4	13.5	17.5	7.6	32	49.7	22	49.3	10	50.6
Illinois	2,660	53.7	27.0	11.4	7.8	339	56.8	299	56.0	40	63.2
Indiana	1,113	55.6	22.6	14.2	7.6	158	49.8	100	54.4	57	41.7
Iowa	514	46.7	30.1	14.9	8.3	83	51.1	69	48.5	14	64.1
Kansas	373	56.1	14.6	19.5	9.8	65	51.5	48	53.1	18	47.3
Kentucky	876	46.9	16.1	26.1	10.9	180	52.0	109	52.8	70	50.6
Louisiana	1,113	51.8	19.0	19.1	10.1	186	59.1	108	57.0	78	61.9
Maine	352	35.4	29.8	17.6	17.2	98	61.2	54	47.4	44	78.2
Maryland	841	48.9	26.9	15.5	8.6	112	57.9	75	58.3	37	57.2
Massachusetts[3]	1,489	29.0	26.5	33.6	10.9	255	53.9	248	52.7	7	95.6
Michigan	2,006	55.0	21.8	16.4	6.9	269	49.5	237	49.1	32	52.2
Minnesota	880	47.4	27.5	14.1	10.9	138	55.0	125	54.0	13	65.0
Mississippi	754	50.4	16.5	21.3	11.8	151	57.7	81	60.5	70	54.5
Missouri	1,033	52.8	18.4	19.6	9.1	181	49.7	164	49.5	17	51.9
Montana	115	55.2	18.6	17.1	9.1	19	56.0	16	54.0	3	66.7
Nebraska	242	56.5	18.4	15.2	9.9	42	53.5	38	52.7	4	60.0
Nevada	290	57.9	19.2	14.0	8.9	42	60.1	22	65.9	20	53.7
New Hampshire	159	59.5	14.1	16.7	9.7	30	47.8	21	48.2	9	46.8

TABLE 6, Continued

State	Total	Percentage of Enrollees in Eligibility Group[1]				Dual Eligible Status[2]					
						All duals		Duals with full benefits		Duals with limited benefits	
		Children	Adults	Disabled	Aged	Total	Percentage age 65+	Total	Percentage age 65+	Total	Percentage age 65+
New Jersey	986	54.2%	13.6%	17.1%	15.1%	206	66.5%	179	65.9%	27	70.3%
New Mexico	540	61.5	20.3	11.5	6.7	58	60.4	40	60.5	18	60.2
New York	5,208	38.4	37.7	12.6	11.3	761	68.3	674	67.1	87	77.4
North Carolina	1,795	52.2	20.5	17.1	10.2	317	56.5	251	55.9	66	58.5
North Dakota	75	52.0	21.1	14.7	12.2	15	58.7	12	58.1	4	60.6
Ohio	2,114	49.0	25.0	17.6	8.3	313	51.8	215	54.3	97	46.3
Oklahoma	771	55.9	20.6	14.9	8.7	117	55.2	97	55.1	20	55.7
Oregon	564	50.8	23.4	16.1	9.7	94	56.6	63	58.1	31	53.5
Pennsylvania	2,304	45.0	20.3	24.4	10.3	400	55.6	339	54.5	61	61.1
Rhode Island	196	45.4	24.0	19.7	10.9	40	59.2	35	57.6	6	68.6
South Carolina	875	50.6	23.1	16.8	9.5	153	54.6	133	53.9	20	59.0
South Dakota	124	58.7	16.9	14.3	10.1	21	59.7	14	61.2	7	56.9
Tennessee	1,496	50.3	19.4	20.3	10.0	288	50.7	196	45.9	92	61.1
Texas	4,488	63.1	13.7	13.3	9.8	645	66.5	415	67.6	230	64.5
Utah	329	56.0	27.2	12.0	4.7	28	44.0	26	43.0	3	54.5
Vermont	182	36.8	39.8	12.6	10.9	33	59.6	25	54.6	7	76.9
Virginia	927	54.2	16.5	17.9	11.4	176	57.4	120	60.0	55	51.7
Washington	1,159	56.4	20.3	15.7	7.6	150	54.5	112	57.4	38	46.2
West Virginia	417	47.5	14.9	27.6	10.0	82	50.4	50	51.2	32	49.2
Wisconsin	1,139	39.7	34.4	13.4	12.5	213	65.4	195	65.4	18	65.6
Wyoming	82	65.4	14.7	12.9	7.0	11	53.1	7	52.1	3	55.1

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

Although state-level information is not yet available, the estimated number of individuals ever enrolled in Medicaid (excluding Medicaid-expansion CHIP) is 66.7 million for FY 2010; 69.3 million for FY 2011; 70.7 million for FY 2012; and 71.0 million for FY 2013. These FY 2010–FY 2013 figures exclude about one million enrollees in the territories (MACPAC communication with CMS Office of the Actuary, February 2012).

1 Children and adults under age 65 who qualify for Medicaid on the basis of a disability are included in the disabled category. About 690,000 enrollees age 65 and older are identified in the data as disabled; given that disability is not an eligibility pathway for individuals age 65 and older, MACPAC recodes these enrollees as "aged."

2 Dual eligibles are enrolled in both Medicaid and Medicare; those with limited benefits only receive Medicaid assistance with Medicare premiums and cost sharing.

3 FY 2009 data unavailable for Massachusetts; FY 2008 values shown instead.

Source: MACPAC analysis of Medicaid Statistical Information System (MSIS) annual person summary (APS) data from CMS as of May 2012

TABLE 7. Medicaid Benefit Spending by State, Eligibility Group, and Dual Eligible Status, FY 2009 (millions)

		Percentage of Benefit Spending Attributable to Eligibility Group[1]				Dual Eligible Status[2]					
						All duals		Duals with full benefits		Duals with limited benefits	
State	Total	Children	Adults	Disabled	Aged	Total	Percentage attributable to age 65+	Total	Percentage attributable to age 65+	Total	Percentage attributable to age 65+
Total	**$364,827**	**19.0%**	**14.2%**	**42.7%**	**24.1%**	**$134,966**	**61.2%**	**$130,623**	**61.5%**	**$4,343**	**53.2%**
Alabama	4,416	26.1	8.4	37.8	27.7	1,755	68.1	1,534	69.6	222	57.9
Alaska	1,070	29.0	15.3	37.3	18.4	298	55.6	298	55.6	1	66.2
Arizona	8,665	21.6	37.0	28.8	12.6	1,645	59.0	1,589	58.8	56	64.1
Arkansas	3,452	21.6	4.5	45.7	28.2	1,509	60.8	1,321	64.1	188	37.7
California	41,390	15.8	14.8	41.6	27.7	15,298	67.8	15,226	67.8	72	68.3
Colorado	3,555	22.0	11.7	42.3	24.0	1,293	61.4	1,275	61.4	18	58.7
Connecticut	6,035	14.8	8.9	41.4	34.8	3,491	57.3	3,441	57.4	51	51.5
Delaware	1,212	18.2	29.3	34.4	18.0	362	58.4	337	59.3	25	47.2
District of Columbia	1,626	12.4	11.1	53.7	22.8	559	59.1	522	60.4	37	41.7
Florida	15,089	18.0	12.4	43.2	26.4	6,111	62.0	5,535	63.0	576	52.7
Georgia	7,693	25.7	19.0	36.1	19.2	2,126	64.4	1,941	65.4	185	53.5
Hawaii	1,308	14.3	24.9	35.5	25.3	482	67.1	474	67.3	7	54.0
Idaho	1,277	20.7	10.3	51.0	18.0	408	52.0	392	52.4	16	42.5
Illinois	13,140	23.5	17.3	41.3	17.8	3,707	56.2	3,634	56.3	73	48.8
Indiana	5,906	18.9	12.9	45.6	22.5	2,344	54.7	2,225	55.7	119	34.5
Iowa	2,960	16.9	11.7	49.0	22.4	1,322	49.7	1,296	49.6	26	55.1
Kansas	2,444	18.2	8.1	49.4	24.3	1,041	54.2	1,011	54.7	30	37.9
Kentucky	5,401	21.7	12.7	46.6	19.0	1,696	59.2	1,573	60.3	124	46.3
Louisiana	6,513	19.9	12.6	49.6	18.0	1,968	56.9	1,820	57.1	148	54.8
Maine	2,518	19.7	10.0	47.1	23.2	1,063	53.3	997	52.1	66	71.2
Maryland	6,524	18.7	14.2	44.8	22.2	2,109	61.8	2,011	62.3	98	50.8
Massachusetts[3]	10,822	17.1	13.8	44.4	24.7	4,380	57.2	4,370	57.1	11	93.8
Michigan	10,583	20.2	17.0	41.6	21.2	3,460	64.1	3,392	64.5	67	44.2
Minnesota	7,387	17.6	11.5	47.3	23.6	3,230	51.6	3,208	51.5	22	55.0
Mississippi	3,948	21.5	11.6	42.6	24.3	1,407	66.4	1,255	68.6	152	48.7
Missouri	7,748	23.4	9.4	48.1	19.1	2,603	52.9	2,568	53.1	34	41.1
Montana	876	20.9	12.2	40.2	26.7	353	65.9	345	66.2	8	53.6
Nebraska	1,616	24.1	8.9	42.4	24.6	683	54.0	677	54.0	6	45.3

TABLE 7, Continued

State	Total	Percentage of Benefit Spending Attributable to Eligibility Group[1]				Dual Eligible Status[2]					
						All duals		Duals with full benefits		Duals with limited benefits	
		Children	Adults	Disabled	Aged	Total	Percentage attributable to age 65+	Total	Percentage attributable to age 65+	Total	Percentage attributable to age 65+
Nevada	$1,383	26.9%	11.3%	44.2%	17.6%	$370	61.8%	$331	63.6%	$39	46.0%
New Hampshire	1,327	25.6	8.3	37.0	29.1	610	60.3	588	60.7	22	49.6
New Jersey	9,667	14.4	7.2	44.9	33.5	4,746	63.7	4,709	63.6	37	69.3
New Mexico	3,290	40.1	18.2	34.7	7.0	481	43.9	443	42.9	38	56.1
New York	49,369	10.6	18.0	42.1	29.4	21,614	62.6	21,408	62.4	206	73.8
North Carolina	11,506	22.3	13.7	44.4	19.6	3,790	59.1	3,679	59.4	110	48.7
North Dakota	572	14.0	8.9	42.3	34.8	338	58.2	333	58.3	5	48.5
Ohio	14,150	14.0	13.0	47.0	25.9	5,626	59.7	5,414	60.5	212	37.6
Oklahoma	3,938	25.8	11.5	42.7	20.0	1,382	54.7	1,357	54.8	25	49.2
Oregon	3,678	17.0	16.0	41.3	25.7	1,410	65.2	1,364	65.8	46	45.5
Pennsylvania	17,232	16.4	9.2	46.6	27.7	6,762	67.3	6,678	67.5	84	56.1
Rhode Island	1,893	19.7	16.9	43.4	20.0	747	58.3	739	58.2	8	61.0
South Carolina	5,099	21.0	15.1	44.1	19.9	1,725	58.8	1,703	58.8	22	56.3
South Dakota	713	24.8	11.7	41.8	21.8	269	57.5	254	57.8	15	51.0
Tennessee	7,290	23.7	16.2	41.9	18.3	2,329	55.2	2,164	56.1	164	44.2
Texas	23,705	32.2	9.4	39.7	18.7	6,527	65.1	5,947	64.9	580	66.4
Utah	1,629	25.7	15.1	47.7	11.5	407	34.0	401	33.8	6	46.8
Vermont	1,191	4	4	4	4	4	4	4	4	4	4
Virginia	5,775	22.8	9.5	45.6	22.1	2,103	56.1	2,008	56.7	95	43.8
Washington	6,603	20.2	13.3	42.6	24.0	2,290	64.3	2,203	65.2	86	42.3
West Virginia	2,434	16.0	7.8	48.1	28.1	1,003	67.2	950	68.2	53	49.4
Wisconsin	6,684	12.8	16.4	41.4	29.5	3,343	57.7	3,305	57.6	37	66.3
Wyoming	526	25.7	9.6	42.6	22.2	225	51.0	213	51.2	12	46.3

Notes: Includes federal and state funds. Excludes administrative spending, the territories, and Medicaid-expansion CHIP. Benefit spending from MSIS data has been adjusted to reflect CMS-64 totals; see Section 5 of MACStats for methodology, which differs from the one used to produce FY 2008 spending figures presented in prior MACPAC reports.

1 Children and adults under age 65 who qualify for Medicaid on the basis of a disability are included in the disabled category. About 690,000 enrollees age 65 and older are identified in the data as disabled; given that disability is not an eligibility pathway for individuals age 65 and older, MACPAC recodes these enrollees as "aged."

2 Dual eligibles are enrolled in both Medicaid and Medicare; those with limited benefits only receive Medicaid assistance with Medicare premiums and cost sharing.

3 FY 2009 data unavailable for Massachusetts; FY 2008 values shown instead.

4 Due to large differences in the way managed care spending is reported by Vermont in CMS-64 and MSIS data, benefit spending based on MACPAC's adjustment methodology is not reported at a level lower than total Medicaid.

Sources: MACPAC analysis of Medicaid Statistical Information System (MSIS) annual person summary (APS) data and CMS-64 Financial Management Report (FMR) net expenditure data from CMS as of May 2012

TABLE 8. Medicaid Benefit Spending Per Full-year Equivalent (FYE) Enrollee by State and Eligibility Group, FY 2009

State	Total			Children			Adults			Disabled			Aged		
		Benefit spending per FYE			Benefit spending per FYE			Benefit spending per FYE			Benefit spending per FYE			Benefit spending per FYE	
	Percentage of FYEs with limited benefits[1]	All enrollees	Excluding those with limited benefits[2]	Percentage of FYEs with limited benefits[1]	All enrollees	Excluding those with limited benefits[2]	Percentage of FYEs with limited benefits[1]	All enrollees	Excluding those with limited benefits[2]	Percentage of FYEs with limited benefits[1]	All enrollees	Excluding those with limited benefits[2]	Percentage of FYEs with limited benefits[1]	All enrollees	Excluding those with limited benefits[2]
Total	**11.3%**	**$7,322**	**$7,971**	**1.6%**	**$2,872**	**$2,896**	**28.3%**	**$4,395**	**$5,332**	**8.9%**	**$18,266**	**$19,722**	**21.9%**	**$16,364**	**$20,262**
Alabama	23.7	5,563	6,598	0.1	3,035	3,034	75.8	3,086	6,062	19.5	9,049	10,604	55.4	11,180	22,425
Alaska	0.3	11,876	11,902	-	6,102	6,102	0.0	9,192	9,184	0.6	28,688	28,838	2.3	26,130	26,691
Arizona	10.0	6,766	7,086	3.7	3,215	3,255	15.3	6,649	7,280	6.5	19,593	19,804	27.7	12,282	15,734
Arkansas	19.9	6,040	7,005	2.3	2,472	2,499	71.6	1,806	4,437	19.2	12,842	14,694	36.2	15,932	23,164
California	29.4	4,911	6,456	7.9	1,988	2,094	65.8	1,853	3,199	0.7	18,643	18,689	3.8	12,733	13,020
Colorado	3.6	7,556	7,626	0.3	2,852	2,818	5.1	5,818	5,356	6.0	19,771	20,771	16.3	17,430	20,505
Connecticut	4.6	12,163	12,649	-	3,478	3,478	-	4,593	4,593	12.2	40,356	45,520	25.9	35,196	46,923
Delaware	15.4	7,460	8,421	2.3	3,241	3,297	18.8	5,904	6,717	25.3	19,130	24,737	54.2	17,792	36,705
District of Columbia	2.6	11,211	11,094	0.0	3,075	3,075	0.7	5,305	4,751	4.0	27,448	27,858	16.4	27,451	31,397
Florida	13.1	5,836	6,173	1.0	2,069	2,022	23.3	4,692	4,439	18.2	13,216	15,430	37.0	10,394	15,176
Georgia	8.1	5,572	5,870	0.0	2,465	2,463	1.0	8,357	8,112	17.8	10,975	12,920	43.8	9,872	16,377
Hawaii	1.4	6,599	6,653	0.0	2,229	2,229	0.0	4,703	4,699	4.5	19,453	20,212	8.3	15,732	16,930
Idaho	5.0	7,425	7,715	-	2,531	2,531	0.0	7,576	7,576	11.8	18,366	20,531	30.0	15,685	21,727
Illinois	5.2	5,707	5,893	0.1	2,468	2,467	14.1	3,844	4,105	4.9	19,624	20,450	12.4	12,900	14,472
Indiana	5.5	6,485	6,727	0.0	2,160	2,160	0.0	4,320	4,320	20.2	18,742	22,817	29.3	18,274	25,039
Iowa	10.7	7,268	7,883	1.5	2,598	2,619	26.8	3,227	3,621	5.9	20,450	21,554	21.2	18,187	22,573
Kansas	5.5	8,679	9,036	0.0	2,860	2,856	0.7	6,341	6,103	12.6	18,851	21,241	23.4	19,315	24,717
Kentucky	8.8	7,526	8,050	0.0	3,498	3,497	0.4	7,598	7,541	14.7	12,128	13,846	38.0	12,097	18,408
Louisiana	14.8	6,749	7,515	0.0	2,519	2,518	45.6	5,129	7,364	13.7	16,894	19,143	43.4	11,645	19,154
Maine	13.0	8,378	9,374	0.1	4,743	4,746	0.2	2,965	2,971	14.6	20,776	23,941	56.1	10,793	22,622
Maryland	10.7	9,451	10,011	1.4	3,567	3,573	22.5	5,666	5,443	11.2	24,324	26,943	29.2	22,672	30,910
Massachusetts[3]	1.5	8,665	8,742	0.0	5,090	5,090	0.0	4,698	4,698	0.1	11,267	11,271	12.6	18,884	21,115
Michigan	5.9	6,405	6,711	1.2	2,292	2,312	18.6	5,858	6,962	4.5	14,921	15,465	13.3	19,051	21,618
Minnesota	5.2	11,029	11,511	1.0	3,976	3,992	11.9	5,272	5,827	3.7	31,159	32,156	11.8	25,175	28,124
Mississippi	16.3	6,403	7,070	0.0	2,804	2,803	41.7	5,366	6,301	20.1	11,452	13,654	43.5	11,829	19,305
Missouri	5.3	9,305	9,633	0.1	3,991	3,991	23.1	5,657	6,181	4.1	21,770	22,579	9.2	18,890	20,614
Montana	2.2	10,366	10,508	-	3,914	3,914	0.1	8,187	8,185	2.9	21,387	21,811	16.9	28,368	33,519
Nebraska	1.9	8,465	8,600	0.0	3,442	3,441	0.0	5,786	5,784	4.4	20,935	21,810	10.8	19,520	21,736

TABLE 8, Continued

State	Total			Children			Adults			Disabled			Aged		
		Benefit spending per FYE			Benefit spending per FYE			Benefit spending per FYE			Benefit spending per FYE			Benefit spending per FYE	
	Percentage of FYEs with limited benefits[1]	All enrollees	Excluding those with limited benefits[2]	Percentage of FYEs with limited benefits[1]	All enrollees	Excluding those with limited benefits[2]	Percentage of FYEs with limited benefits[1]	All enrollees	Excluding those with limited benefits[2]	Percentage of FYEs with limited benefits[1]	All enrollees	Excluding those with limited benefits[2]	Percentage of FYEs with limited benefits[1]	All enrollees	Excluding those with limited benefits[2]
Nevada	8.1%	$6,595	$6,837	0.1%	$3,072	$3,059	2.2%	$4,819	$4,377	21.4%	$17,829	$21,742	40.1%	$11,134	$17,067
New Hampshire	6.0	10,598	11,081	-	4,482	4,482	-	7,827	7,827	17.4	21,652	25,598	27.8	30,376	40,886
New Jersey	3.3	11,581	11,815	0.0	3,061	3,059	1.9	7,750	7,025	5.0	27,812	29,168	13.8	24,320	27,855
New Mexico	10.3	7,336	7,736	0.0	4,728	4,719	37.7	7,351	9,120	10.8	20,330	22,445	29.1	7,222	9,250
New York	4.8	11,317	11,615	1.8	3,151	3,187	5.8	5,701	5,635	3.0	33,683	34,489	13.6	27,364	30,894
North Carolina	8.2	8,040	8,535	0.1	3,400	3,397	25.0	6,746	8,018	8.8	18,246	19,749	21.1	13,916	17,196
North Dakota	5.4	9,899	10,379	-	2,614	2,614	0.0	5,259	5,259	12.6	24,830	28,112	25.0	25,982	34,223
Ohio	4.8	8,104	8,386	-	2,271	2,271	0.0	4,679	4,679	13.7	20,204	22,959	26.0	24,564	32,470
Oklahoma	7.1	6,625	6,968	0.1	2,934	2,934	27.9	5,055	6,048	7.3	16,678	17,840	16.4	13,665	16,085
Oregon	11.1	8,513	9,324	3.4	2,970	3,056	14.3	6,340	6,838	15.5	18,658	21,728	30.7	19,892	28,067
Pennsylvania	6.3	9,018	9,505	0.2	3,316	3,312	18.7	4,625	5,301	4.3	15,733	16,330	16.3	23,411	27,652
Rhode Island	3.8	11,591	11,862	0.0	5,025	5,022	3.3	9,408	9,446	3.2	22,838	23,294	20.2	19,760	24,192
South Carolina	9.8	7,070	7,558	0.2	2,913	2,910	37.9	5,286	6,790	4.2	16,642	17,291	12.5	13,695	15,458
South Dakota	6.3	7,269	7,586	0.0	3,040	3,040	0.1	6,259	6,230	16.5	18,695	21,811	32.6	14,382	20,309
Tennessee	6.5	5,756	6,006	0.0	2,723	2,720	0.2	5,356	5,308	11.4	10,912	11,953	37.5	10,061	15,233
Texas	6.5	7,044	7,149	0.0	3,610	3,583	2.5	7,178	6,005	13.5	17,301	19,419	34.3	11,171	15,226
Utah	1.2	7,274	7,192	0.1	3,327	3,316	1.3	4,761	4,317	2.6	22,970	23,423	8.4	14,876	15,814
Vermont	4.5	8,112	[4]	-	[4]	[4]	-	[4]	[4]	6.9	[4]	[4]	29.4	[4]	[4]
Virginia	7.2	7,629	8,015	0.0	3,192	3,191	6.4	5,437	5,415	15.4	17,494	20,185	27.1	13,745	18,151
Washington	8.5	6,730	7,131	0.1	2,335	2,335	29.2	5,152	6,600	10.9	17,225	18,841	19.4	20,274	24,430
West Virginia	8.0	7,273	7,736	0.0	2,465	2,465	0.0	5,008	5,007	13.2	11,417	12,853	37.1	18,999	29,047
Wisconsin	8.8	7,342	7,872	4.8	2,352	2,419	16.7	3,904	4,314	3.9	19,723	20,390	8.2	15,671	16,853
Wyoming	5.7	8,509	8,784	0.8	3,321	3,343	4.0	6,991	7,061	13.7	24,423	27,468	34.2	24,416	35,306

Notes: Includes federal and state funds. Excludes administrative spending, the territories, and Medicaid-expansion CHIP. Children and adults under age 65 who qualify for Medicaid on the basis of a disability are included in the disabled category. About 690,000 enrollees age 65 and older are identified in the data as disabled; given that disability is not an eligibility pathway for individuals age 65 and older, MACPAC recodes these enrollees as "aged." Benefit spending from MSIS data has been adjusted to reflect CMS-64 totals; see Section 5 of MACStats for methodology, which differs from the one used to produce FY 2008 spending figures presented in prior MACPAC reports.

In this table, enrollees with limited benefits are defined as those reported by states in MSIS as receiving coverage of only family planning services, assistance with Medicare premiums and cost sharing, or emergency services. Additional individuals may receive limited benefits for other reasons, but are not broken out here.

– Quantity zero; amounts shown as 0.0 round to less than 0.1 in this table.

1 These percentages are likely to be underestimated because comparisons with other data sources indicate that some states do not identify all of their limited benefit enrollees in MSIS.

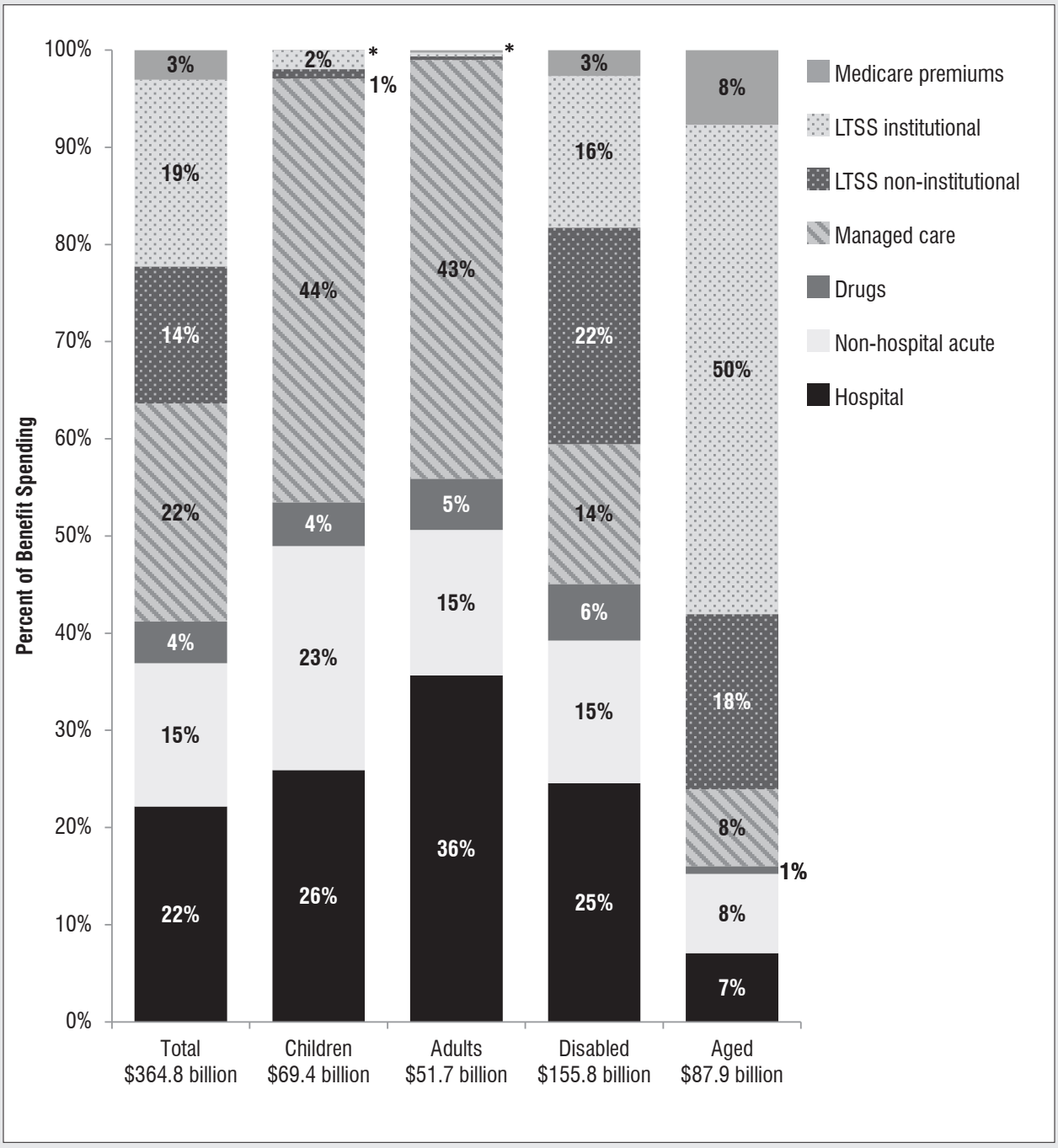
2 Calculated by removing limited-benefit enrollees and their spending.

3 FY 2009 data unavailable for Massachusetts; FY 2008 values shown instead.

4 Due to large differences in the way managed care spending is reported by Vermont in CMS-64 and MSIS data, benefit spending based on MACPAC's adjustment methodology is not reported at a level lower than total Medicaid.

Sources: MACPAC analysis of Medicaid Statistical Information System (MSIS) annual person summary (APS) data and CMS-64 Financial Management Report (FMR) net expenditure data from CMS as of May 2012

FIGURE 3. Distribution of Medicaid Benefit Spending by Eligibility Group and Service Category, FY 2009

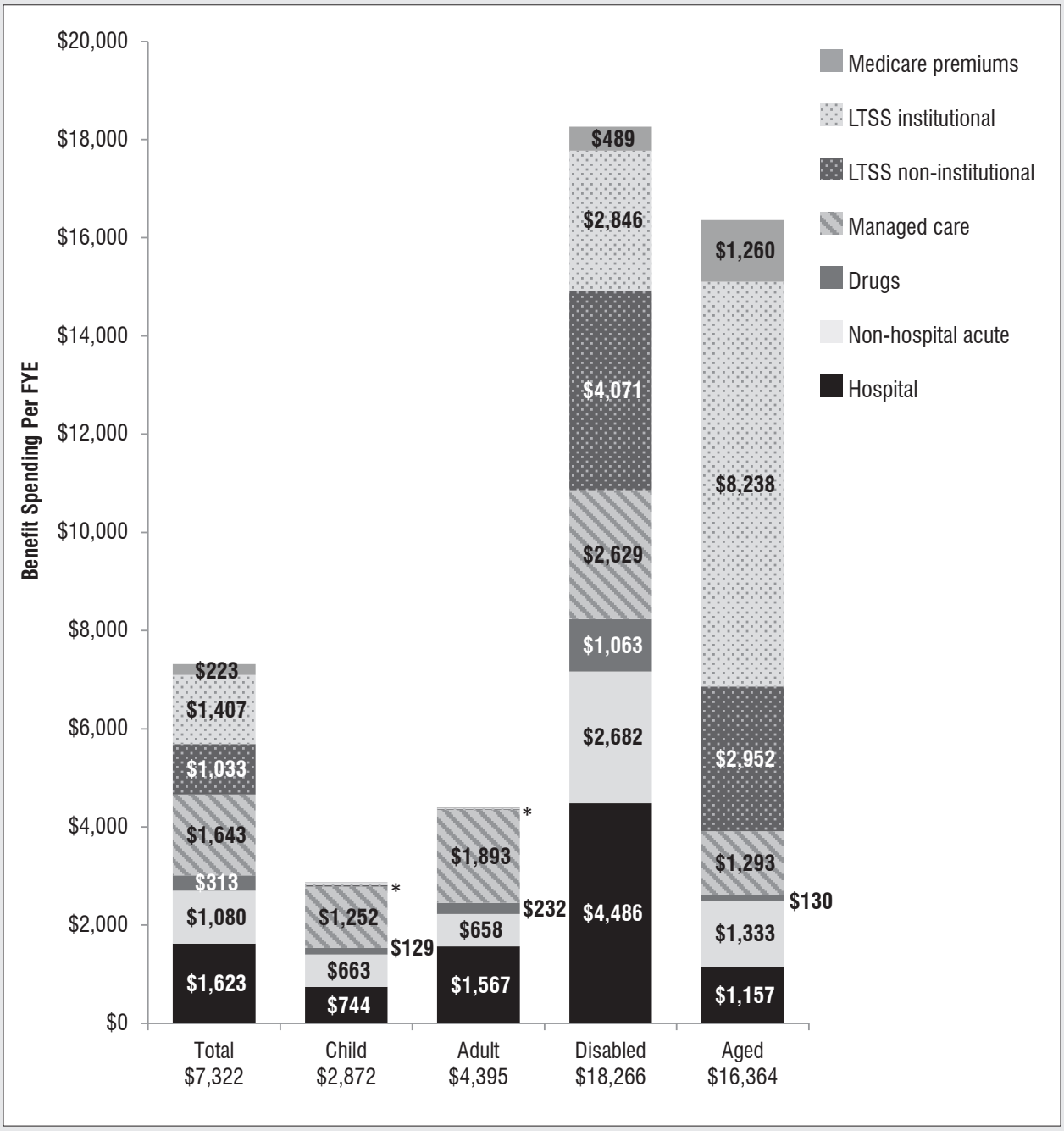


Notes: LTSS = long-term services and supports. Includes federal and state funds. Excludes administrative spending, the territories, and Medicaid-expansion CHIP enrollees. Children and non-aged adults who qualify for Medicaid on the basis of a disability are included in the disabled category. About 690,000 enrollees age 65 and older are identified in the data as disabled; given that disability is not an eligibility pathway for individuals age 65 and older, MACPAC recodes these enrollees as "aged." Amounts are fee-for-service unless otherwise noted. Benefit spending from MSIS data has been adjusted to reflect CMS-64 totals; see Section 5 of MACStats for methodology, including a list of services in each category and a description of how the FY 2009 methodology differs from the one used to produce FY 2008 spending figures presented in prior MACPAC reports. FY 2009 data unavailable for Massachusetts; FY 2008 values used instead.

* Values less than 1 percent not shown.

Sources: MACPAC analysis of Medicaid Statistical Information System (MSIS) annual person summary (APS) data and CMS-64 Financial Management Report (FMR) net expenditure data from CMS as of May 2012

FIGURE 4. Medicaid Benefit Spending Per Full-year Equivalent (FYE) Enrollee by Eligibility Group and Service Category, FY 2009

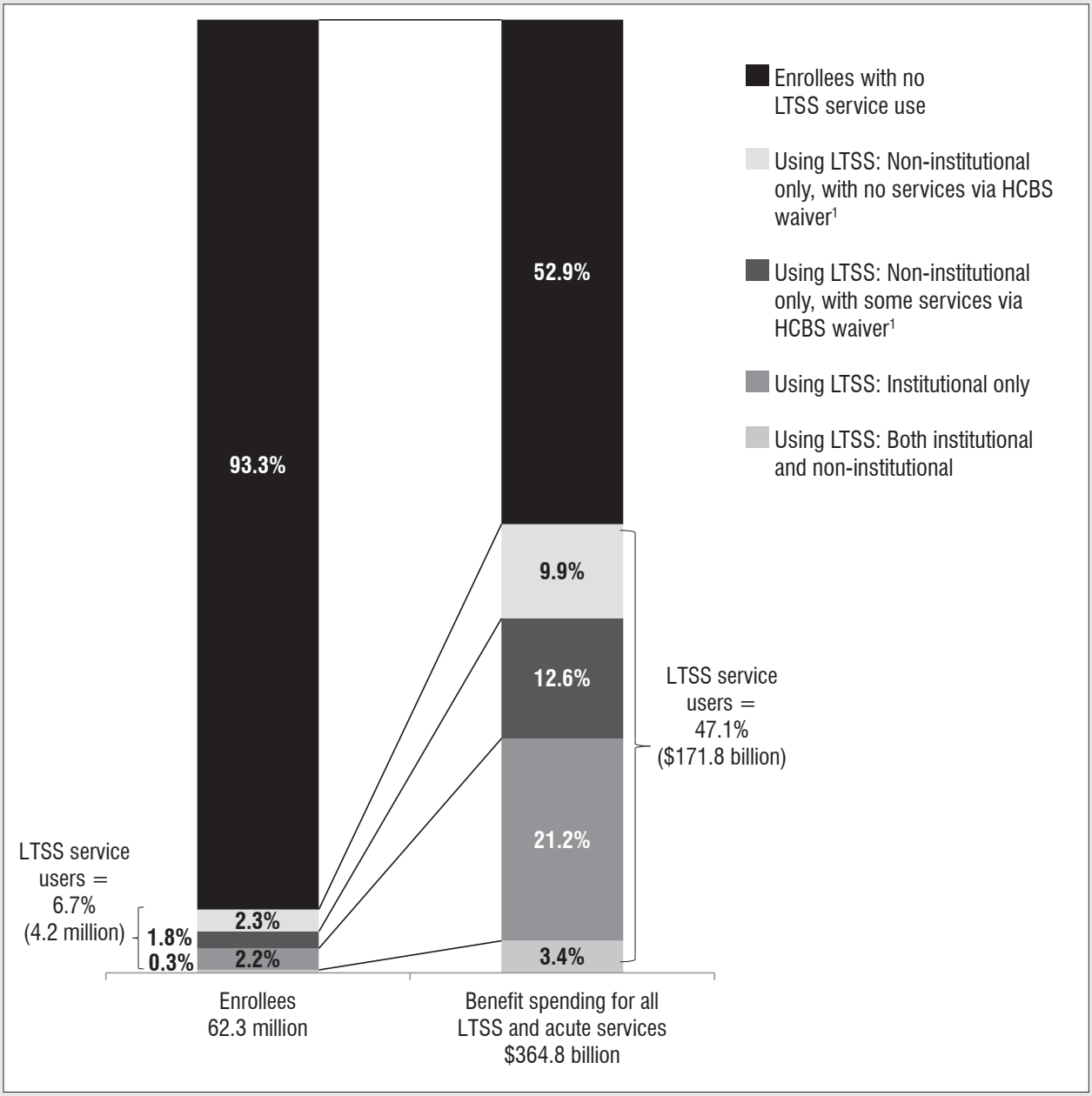


Notes: LTSS = long-term services and supports. Includes federal and state funds. Excludes administrative spending, the territories, and Medicaid-expansion CHIP enrollees. Children and non-aged adults who qualify for Medicaid on the basis of a disability are included in the disabled category. About 690,000 enrollees age 65 and older are identified in the data as disabled; given that disability is not an eligibility pathway for individuals age 65 and older, MACPAC recodes these enrollees as "aged." Amounts are fee-for-service unless otherwise noted. Benefit spending from MSIS data has been adjusted to reflect CMS-64 totals; see Section 5 of MACStats for methodology, including a list of services in each category and a description of how the FY 2009 methodology differs from the one used to produce FY 2008 spending figures presented in prior MACPAC reports. Amounts reflect all enrollees, including those with limited benefits; see Table 8 notes for more information. FY 2009 data unavailable for Massachusetts; FY 2008 values used instead.

* Values less than $100 not shown.

Sources: MACPAC analysis of Medicaid Statistical Information System (MSIS) annual person summary (APS) data and CMS-64 Financial Management Report (FMR) net expenditure data from CMS as of May 2012

FIGURE 5. Distribution of Medicaid Enrollment and Benefit Spending by Users and Non-users of Long-term Services and Supports, FY 2009

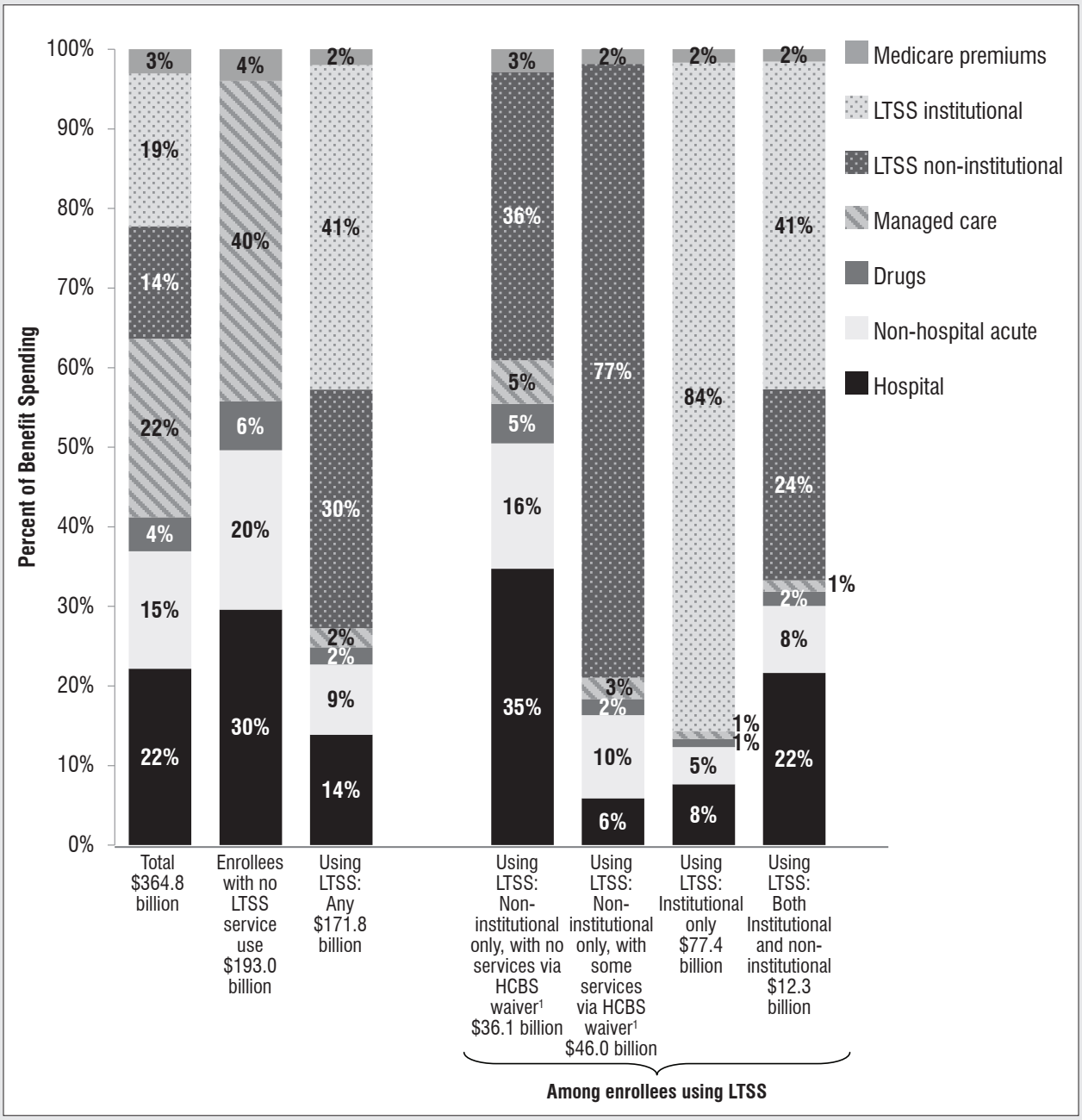


Notes: HCBS = home and community-based services; LTSS = long-term services and supports. Includes federal and state funds. Excludes administrative spending, the territories, and Medicaid-expansion CHIP. Benefit spending from MSIS data has been adjusted to match CMS-64 totals; see Section 5 of MACStats for methodology, including a list of services in each category and a description of how the FY 2009 methodology differs from the one used to produce FY 2008 spending figures presented in prior MACPAC reports. FY 2009 data unavailable for Massachusetts; FY 2008 values used instead. LTSS users are defined here as enrollees using at least one LTSS service during the year under a fee-for-service arrangement, regardless of the amount (the data do not allow a breakout of LTSS services delivered through managed care). For example, an enrollee with a short stay in a nursing facility for rehabilitation following a hospital discharge and an enrollee with permanent residence in a nursing facility would both be counted as LTSS users. More refined definitions that take these and other factors into account would produce different results and will be considered in future Commission work.

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

Sources: MACPAC analysis of Medicaid Statistical Information System (MSIS) annual person summary (APS) data and CMS-64 Financial Management Report (FMR) net expenditure data from CMS as of May 2012

FIGURE 6. Distribution of Medicaid Benefit Spending by Long-term Services and Supports Use and Service Category, FY 2009

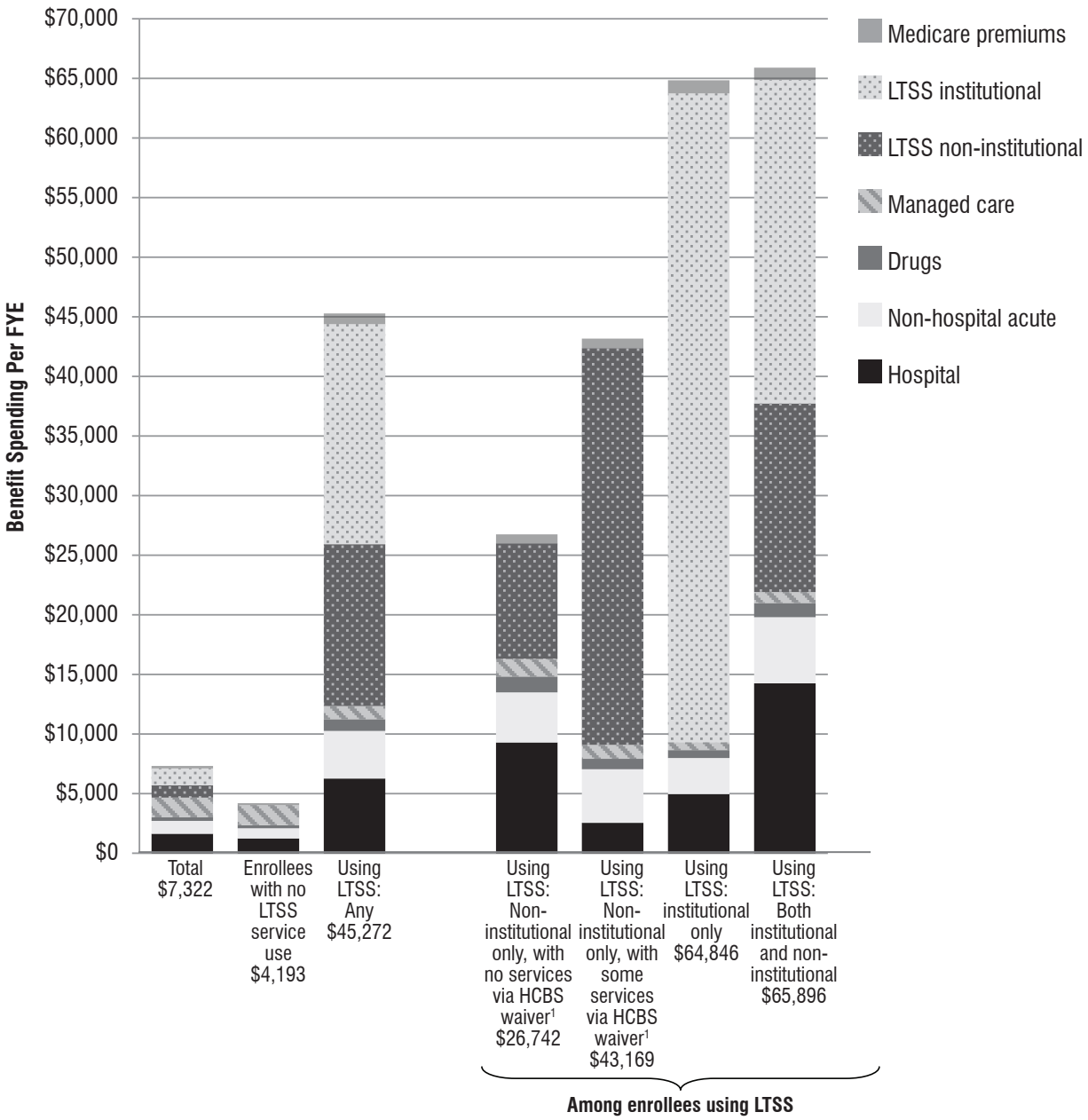


Notes: HCBS = home and community-based services; LTSS = long-term services and supports. Includes federal and state funds. Excludes administrative spending, the territories, and Medicaid-expansion CHIP. Benefit spending from MSIS data has been adjusted to match CMS-64 totals; see Section 5 of MACStats for methodology, including a list of services in each category and a description of how the FY 2009 methodology differs from the one used to produce FY 2008 spending figures presented in prior MACPAC reports. FY 2009 data unavailable for Massachusetts; FY 2008 values used instead. LTSS users are defined here as enrollees using at least one LTSS service during the year under a fee-for-service arrangement, regardless of the amount (the data do not allow a breakout of LTSS services delivered through managed care). For example, an enrollee with a short stay in a nursing facility for rehabilitation following a hospital discharge and an enrollee with permanent residence in a nursing facility would both be counted as LTSS users. More refined definitions that take these and other factors into account would produce different results and will be considered in future Commission work.

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

Sources: MACPAC analysis of Medicaid Statistical Information System (MSIS) annual person summary (APS) data and CMS-64 Financial Management Report (FMR) net expenditure data from CMS as of May 2012

FIGURE 7. Medicaid Benefit Spending Per Full-year Equivalent (FYE) Enrollee by Long-term Services and Supports Use and Service Category, FY 2009



Notes: HCBS = home and community-based services; LTSS = long-term services and supports. Includes federal and state funds. Excludes administrative spending, the territories, and Medicaid-expansion CHIP. Benefit spending from MSIS data has been adjusted to match CMS-64 totals; see Section 5 of MACStats for methodology, including a list of services in each category and a description of how the FY 2009 methodology differs from the one used to produce FY 2008 spending figures presented in prior MACPAC reports. FY 2009 data unavailable for Massachusetts; FY 2008 values used instead. LTSS users are defined here as enrollees using at least one LTSS service during the year under a fee-for-service arrangement, regardless of the amount (the data do not allow a breakout of LTSS services delivered through managed care). For example, an enrollee with a short stay in a nursing facility for rehabilitation following a hospital discharge and an enrollee with permanent residence in a nursing facility would both be counted as LTSS users. More refined definitions that take these and other factors into account would produce different results and will be considered in future Commission work.

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

Sources: MACPAC analysis of Medicaid Statistical Information System (MSIS) annual person summary (APS) data and CMS-64 Financial Management Report (FMR) net expenditure data from CMS as of May 2012

Medicaid Managed Care

Section 4 of MACStats provides state-level information on Medicaid managed care enrollment and spending. Depending on the context in which it is used, the term "managed care" may refer to several different arrangements, including comprehensive risk-based and limited-benefit plans that provide a contracted set of services in exchange for a capitated (per member per month) payment, as well as primary care case management (PCCM) programs that typically pay primary care providers a small monthly fee to coordinate enrollees' care.[1]

The use of Medicaid managed care for non-disabled children and adults under age 65 has been common for a number of years. However, a majority of states currently use or are actively considering some form of managed care as an option for persons with disabilities in Medicaid,[2] and there is growing interest in managed care for individuals dually enrolled in Medicaid and Medicare.

- **Share of enrollees in managed care.** The national percentage of Medicaid enrollees (including Medicaid-expansion State Children's Health Insurance Program (CHIP)) in managed care ranged from less than half to more than 70 percent in 2010, depending on the definition of managed care that is used (Table 9).
- **Types of managed care.** The use of managed care varies widely by state, both in the arrangements used and the populations served. In 2010, all but two states reported using some form of managed care, including comprehensive risk-based plans, limited-benefit plans, or PCCM programs (Tables 9 and 10).
- **Variation by eligibility group.** Table 11 shows the share of each of the major Medicaid eligibility groups that is enrolled in managed care, by state. The national percentage of Medicaid enrollees (excluding Medicaid-expansion CHIP) in any form of managed care ranged from 38 percent among enrollees age 65 and older to 86 percent among non-disabled child enrollees in fiscal year 2009. Participation in comprehensive risk-based managed care plans was lowest among aged and disabled eligibility groups (12 percent and 28 percent, respectively) and highest among non-disabled adults and children (46 percent and 61 percent).[3]

- **Individuals dually enrolled in Medicaid and Medicare.** For dual eligibles, enrollment in Medicaid limited-benefit plans (which typically cover only behavioral health, transportation, or dental services) is more common than enrollment in Medicaid comprehensive risk-based plans or PCCM programs. For dual eligibles enrolled in a "comprehensive" Medicaid managed care plan, Medicare is still the primary payer of most acute care services; as a result, the Medicaid plan may only provide a subset of the comprehensive services normally covered under its contract with the state. Some individuals may receive both Medicaid and Medicare services under managed care arrangements, but the extent to which these services are coordinated by a single managed care entity varies. Thirty-eight percent of individuals dually enrolled in Medicaid and Medicare were enrolled in some form of Medicaid managed care in FY 2009 (Table 11), but only about 10 percent (9 percent using one data source for 2010 and 12 percent using another for FY 2009, Tables 9 and 11) were in Medicaid comprehensive risk-based plans.
- **Managed care spending.** Table 12 shows the share of Medicaid benefit spending that goes toward payments for managed care. The national percentage of Medicaid benefit spending on any form of managed care ranges from about 8 percent among aged enrollees to more than 40 percent among non-disabled child and adult enrollees. In states with comprehensive risk-based managed care, these plans account for the majority of managed care spending.

Endnotes

1 Medicaid and CHIP Payment and Access Commission (MACPAC), *Report to the Congress: The evolution of managed care in Medicaid*, June 2011 (Washington, DC: MACPAC, 2011). http://www.macpac.gov/reports.

2 Medicaid and CHIP Payment and Access Commission (MACPAC), *Report to the Congress on Medicaid and CHIP*, March 2012 (Washington, DC: MACPAC, 2012). http://www.macpac.gov/reports.

3 Readers will note that the percentages of enrollees in any form of managed care and in comprehensive risk-based managed care vary between Tables 9 and 11; as discussed in Section 5, this is due to differences between the Medicaid Statistical Information System and Medicaid managed care enrollment report data.

TABLE 9. Percentage of Medicaid Enrollees in Managed Care by State, July 1, 2010

	All Medicaid Enrollees					Individuals Dually Enrolled in Medicaid and Medicare	
		Percentage in managed care					
State	Number	Any managed care[1]	Comprehensive risk–based or PCCM[2,3]	Comprehensive risk–based[2]	PCCM	Number	Percentage in comprehensive risk–based managed care[2]
Total	**53,565,848**	**71.5%**	**63.3%**	**48.0%**	**15.3%**	**8,887,087**	**9.1%**
Alabama	872,501	59.6	57.1	–	57.1	187,130	–
Alaska	113,439	–	–	–	–	13,064	–
Arizona	1,322,359	90.5	90.5	90.5	–	147,772	68.2
Arkansas	595,556	78.4	70.3	0.0	70.3	110,894	0.0
California	7,326,862	55.0	54.6	54.6	–	1,135,406	18.9
Colorado	554,275	94.6	13.0	8.2	4.8	78,556	6.0
Connecticut	542,524	69.9	69.9	69.8	0.1	106,443	–
Delaware	180,429	77.4	73.0	73.0	–	23,185	–
District of Columbia	221,348	69.7	69.7	69.7	–	16,447	0.6
Florida	2,853,392	64.5	58.6	38.2	20.4	577,163	4.0
Georgia	1,496,733	91.0	70.4	62.2	8.3	236,983	–
Hawaii	260,457	98.0	98.0	98.0	–	29,723	89.0
Idaho	213,559	87.6	87.6	–	87.6	22,993	–
Illinois	2,429,500	56.5	56.5	7.5	49.0	649,200	–
Indiana	1,035,251	70.4	74.7	67.6	7.1	131,771	–
Iowa	429,860	90.1	46.4	0.0	46.4	74,980	0.1
Kansas	325,593	86.6	57.4	50.3	7.1	68,931	0.4
Kentucky	813,062	88.2	59.2	20.4	38.8	165,940	18.7
Louisiana	1,180,923	63.7	63.7	0.0	63.7	176,078	0.1
Maine	287,055	67.7	67.7	–	67.7	84,539	–
Maryland	901,560	79.5	74.8	74.8	–	102,557	0.1
Massachusetts	1,417,247	53.5	55.5	32.8	22.8	242,000	6.8
Michigan	1,828,749	86.2	65.5	65.5	–	239,262	0.2
Minnesota	734,366	63.8	63.8	63.8	–	121,394	41.3
Mississippi	702,775	75.9	–	–	–	152,414	–
Missouri	892,261	99.1	42.3	42.3	–	168,084	0.1
Montana[4]	100,726	74.6	74.6	0.0	74.5	19,970	0.2
Nebraska	230,498	85.6	39.4	17.5	21.9	33,223	–
Nevada	265,019	85.1	55.1	55.1	–	39,796	–
New Hampshire	131,470	–	–	–	–	26,405	–

TABLE 9, Continued

State	All Medicaid Enrollees					Individuals Dually Enrolled in Medicaid and Medicare	
		Percentage in managed care					
	Number	Any managed care[1]	Comprehensive risk–based or PCCM[2,3]	Comprehensive risk–based[2]	PCCM	Number	Percentage in comprehensive risk–based managed care[2]
New Jersey	1,039,398	76.8	76.8	76.8	–	189,503	12.1
New Mexico	546,101	73.1	73.2	73.2	–	62,442	51.3
New York	4,740,518	68.1	67.4	67.1	0.3	676,143	1.3
North Carolina	1,465,190	77.5	76.2	0.0	76.2	286,798	0.0
North Dakota	62,486	67.3	67.3	0.1	67.2	14,081	0.2
Ohio	2,125,105	73.5	73.5	73.5	–	284,818	0.2
Oklahoma	669,499	90.1	67.1	0.0	67.1	101,359	0.1
Oregon	550,319	86.7	71.8	71.1	0.7	88,039	37.4
Pennsylvania	2,029,591	81.7	68.4	54.0	14.3	390,971	1.2
Rhode Island	189,286	67.4	68.7	67.4	1.3	35,752	0.5
South Carolina	807,591	100.0	62.5	48.7	13.8	131,649	0.3
South Dakota	113,274	80.3	80.3	–	80.3	18,429	–
Tennessee	1,204,239	100.0	96.4	96.4	–	233,094	57.6
Texas	3,763,896	67.0	67.0	44.4	22.6	578,134	15.5
Utah	269,643	83.3	41.4	17.1	24.3	22,947	12.4
Vermont	176,812	56.7	56.8	56.8	–	30,347	–
Virginia	883,916	59.2	65.6	59.3	6.3	161,847	0.3
Washington	1,121,278	86.7	58.9	58.4	0.6	149,182	0.8
West Virginia	335,397	48.6	51.4	48.6	2.8	70,172	–
Wisconsin	1,144,184	62.4	59.7	59.7	–	169,543	6.5
Wyoming	68,776	–	–	–	–	9,534	–

Notes: PCCM = primary care case management. Excludes the territories; unlike other tables and figures in the June 2012 MACStats, includes Medicaid-expansion CHIP enrollees.

– Quantity zero; amounts shown as 0.0 round to less than 0.1 in this table.

1 Any managed care includes comprehensive risk-based plans, limited-benefit plans, and PCCM programs.

2 Comprehensive risk-based managed care includes plans categorized by CMS and states as commercial, Medicaid-only, Health Insuring Organizations (HIOs), and Programs of All-Inclusive Care for the Elderly (PACE). HIOs exist only in California where selected county-organized health systems serve Medicaid enrollees. PACE combines Medicare and Medicaid financing for qualifying frail elderly dual eligibles. Some states report a larger number of enrollees in these comprehensive risk-based plans than they do for their unduplicated number of enrollees in any form of managed care; it is unclear whether this is a reporting error or whether there were some enrollees participating in more than one comprehensive risk-based plan as of the reporting date.

3 Figure is based on the sum of enrollees reported in comprehensive risk-based plans and PCCM programs. In some states, the sum exceeds the unduplicated number of enrollees in any form of managed care; it is unclear whether this is a reporting error or whether there were some enrollees participating in both types as of the reporting date.

4 Montana reported 144,740 PCCM enrollees and 43 PACE enrollees, but only 75,133 unduplicated enrollees in any form of managed care. PCCM figure shown here was obtained by subtracting PACE enrollees from the unduplicated total.

Source: MACPAC analysis of 2010 Medicaid Managed Care Enrollment Report data from CMS, as reported by states

TABLE 10. Number of Managed Care Entities by State and Type, July 1, 2010

	Comprehensive Risk-based Plans				Limited-benefit Plans			
State	Commercial MCO	Medicaid-only MCO	HIO	PACE	PIHP	PAHP	PCCM	Other
Total	**143**	**163**	**4**	**75**	**152**	**61**	**38**	**9**
Alabama	–	–	–	–	–	1	1	–
Alaska	–	–	–	–	–	–	–	–
Arizona	–	29	–	–	1	–	–	–
Arkansas	–	–	–	1	–	1	1	–
California	22	2	4	5	1	13	–	–
Colorado	–	2	–	3	6	–	2	–
Connecticut	1	2	–	–	–	–	1	2
Delaware	–	2	–	–	–	–	–	1
District of Columbia	–	2	–	–	1	1	–	–
Florida	21	6	–	3	27	9	1	2
Georgia	–	3	–	–	–	1	1	–
Hawaii	4	1	–	1	–	–	–	–
Idaho	–	–	–	–	–	2	1	–
Illinois	1	2	–	–	–	–	1	–
Indiana	4	1	–	–	–	–	2	1
Iowa	–	–	–	1	1	–	1	–
Kansas	–	2	–	2	1	2	1	–
Kentucky	–	1	–	–	–	1	1	–
Louisiana	–	–	–	2	–	–	1	–
Maine	–	–	–	–	–	–	1	–
Maryland	–	7	–	1	–	5	–	1
Massachusetts	2	6	–	6	1	–	1	–
Michigan	–	14	–	4	18	1	–	–
Minnesota	5	3	–	–	–	–	–	–
Mississippi	–	–	–	–	–	1	–	–
Missouri	–	6	–	1	–	1	–	–
Montana	–	–	–	1	–	–	2	–

TABLE 10, Continued

State	Comprehensive Risk-based Plans				Limited-benefit Plans			
	Commercial MCO	Medicaid-only MCO	HIO	PACE	PIHP	PAHP	PCCM	Other
Nebraska	1	–	–	–	–	–	1	1
Nevada	1	1	–	–	–	1	–	–
New Hampshire	–	–	–	–	–	–	–	–
New Jersey	1	3	–	2	–	1	–	–
New Mexico	5	1	–	1	1	–	–	–
New York	18	13	–	7	20	–	3	1
North Carolina	–	–	–	2	1	–	2	–
North Dakota	–	–	–	1	–	1	1	–
Ohio	–	7	–	2	–	–	–	–
Oklahoma	–	–	–	1	–	1	2	–
Oregon	2	13	–	1	9	6	1	–
Pennsylvania	13	–	–	12	39	2	1	–
Rhode Island	2	1	–	1	–	1	1	–
South Carolina	–	4	–	2	–	2	1	–
South Dakota	–	–	–	–	–	–	1	–
Tennessee	–	6	–	1	1	2	–	–
Texas	6	13	–	3	1	1	1	–
Utah	–	1	–	–	10	2	1	–
Vermont	–	1	–	1	–	–	–	–
Virginia	3	2	–	5	–	1	1	–
Washington	8	–	–	1	2	1	1	–
West Virginia	3	–	–	–	–	–	1	–
Wisconsin	20	6	–	1	11	–	–	–
Wyoming	–	–	–	–	–	–	–	–

Notes: HIO = Health Insuring Organization; MCO = managed care organization; PACE = Program of All-Inclusive Care for the Elderly; PAHP = prepaid ambulatory health plan; PIHP = prepaid inpatient health plan; PCCM = primary care case management. Excludes the territories.

Comprehensive risk-based managed care includes plans categorized by CMS and states as commercial, Medicaid-only, Health Insuring Organizations (HIOs), and Programs of All-Inclusive Care for the Elderly (PACE). HIOs exist only in California where selected county-organized health systems serve Medicaid enrollees. PACE combines Medicare and Medicaid financing for qualifying frail elderly dual eligibles. In the data reporting instructions provided by CMS to states, commercial plans are those that provide comprehensive services to both Medicaid and commercial and/or Medicare enrollees; Medicaid-only plans are those that provide comprehensive services to only Medicaid enrollees, not to commercial or Medicare enrollees. Based on an examination of plan names, it appears that states differ in their categorizations; for example, plans that operate in different states but are affiliated with the same parent company may be reported as commercial in one state and Medicaid-only in another.

Source: 2010 Medicaid Managed Care Enrollment Report data from CMS, as reported by states

TABLE 11. Percentage of Medicaid Enrollees in Managed Care by State and Eligibility Group, FY 2009

	Percentage of Enrollees											
	Any managed care						Comprehensive risk-based managed care					
State	Total	Children	Adults	Disabled	Aged	Dual eligibles[1]	Total	Children	Adults	Disabled	Aged	Dual eligibles[1]
Total	**70.1%**	**85.9%**	**58.7%**	**60.5%**	**38.2%**	**38.2%**	**47.3%**	**61.4%**	**45.6%**	**28.3%**	**12.2%**	**12.1%**
Alabama	68.1	97.1	21.6	65.4	21.7	20.8	3.0	–	0.0	6.0	13.8	14.0
Alaska	–	–	–	–	–	–	–	–	–	–	–	–
Arizona	89.6	95.6	84.5	94.0	74.2	79.4	83.5	89.7	77.8	88.5	69.1	74.8
Arkansas	80.3	97.4	48.5	78.9	48.4	48.3	–	–	–	–	–	–
California	58.2	77.7	27.1	92.6	88.7	92.5	37.8	63.0	22.4	26.4	15.4	17.3
Colorado	90.8	95.2	86.0	86.1	79.0	74.5	17.1	19.8	12.2	15.5	11.0	9.2
Connecticut	68.2	91.4	84.2	0.7	0.0	0.5	68.2	91.4	84.2	0.7	0.0	0.5
Delaware	88.8	97.2	89.6	78.3	48.7	51.0	76.6	88.2	83.5	51.8	4.6	7.8
District of Columbia	93.5	96.8	92.2	93.1	82.2	81.7	66.0	92.3	90.0	12.3	0.3	1.9
Florida	71.5	90.0	74.6	55.5	15.1	12.2	71.5	90.0	74.6	55.5	15.1	12.2
Georgia	87.4	95.9	88.1	75.0	54.7	53.6	67.5	91.4	82.8	4.0	0.0	0.5
Hawaii	94.1	97.0	93.6	92.3	86.6	86.6	94.1	97.0	93.6	92.3	86.6	86.6
Idaho	90.8	98.2	93.6	80.5	49.8	57.3	–	–	–	–	–	–
Illinois	70.3	83.8	76.6	35.0	8.0	4.1	7.7	10.2	8.0	0.1	0.1	0.1
Indiana	76.9	92.3	87.7	39.1	2.9	3.8	70.8	88.7	86.5	13.3	0.2	1.6
Iowa	73.9	95.0	51.6	92.1	3.5	43.9	1.1	1.7	0.9	0.1	0.1	0.1
Kansas	84.6	93.5	87.7	78.9	40.8	53.3	54.2	76.5	73.5	2.3	0.6	0.9
Kentucky	89.8	97.9	96.4	82.7	62.0	61.5	19.8	24.9	20.7	15.6	6.5	8.3
Louisiana	62.8	90.4	41.4	41.2	1.6	3.2	0.0	0.0	–	0.0	0.1	0.1
Maine	–	–	–	–	–	–	–	–	–	–	–	–
Maryland	70.7	93.7	58.0	59.2	1.4	4.2	70.7	93.7	58.0	59.2	1.4	4.2
Massachusetts[2]	54.6	82.8	73.7	29.6	10.2	9.7	31.2	58.5	37.1	10.1	8.7	6.6
Michigan	72.5	88.9	66.4	54.0	4.1	8.3	69.0	83.7	65.6	51.4	3.5	6.1
Minnesota	67.6	84.7	70.3	10.9	59.7	44.6	67.6	84.7	70.3	10.9	59.7	44.6
Mississippi	–	–	–	–	–	–	–	–	–	–	–	–

TABLE 11, Continued

	Percentage of Enrollees											
	Any managed care						Comprehensive risk-based managed care					
State	Total	Children	Adults	Disabled	Aged	Dual eligibles[1]	Total	Children	Adults	Disabled	Aged	Dual eligibles[1]
Missouri	72.4%	66.7%	60.0%	91.6%	89.4%	89.9%	46.6%	66.7%	59.7%	2.0%	0.0%	0.4%
Montana	64.4	79.7	63.6	49.9	1.3	2.4	–	–	–	–	–	–
Nebraska	36.6	46.0	39.5	19.8	3.1	1.2	18.6	23.0	20.6	10.6	1.5	0.6
Nevada	88.2	95.7	88.2	76.2	58.2	53.6	56.7	74.7	68.9	1.7	0.0	0.3
New Hampshire	–	–	–	–	–	–	–	–	–	–	–	–
New Jersey	90.5	95.7	84.6	90.3	77.4	78.6	72.0	92.7	80.3	52.2	12.6	11.4
New Mexico	68.7	81.5	57.4	56.6	5.1	4.9	68.1	81.4	57.3	53.4	4.4	4.6
New York	64.9	78.5	72.6	46.9	13.3	11.2	64.9	78.5	72.6	46.9	13.3	11.2
North Carolina	72.1	92.6	61.0	55.7	16.6	22.8	0.0	–	–	0.0	0.0	0.0
North Dakota	51.1	69.2	70.4	1.4	–	0.3	–	–	–	–	–	–
Ohio	76.9	92.6	94.7	42.3	4.7	3.5	76.9	92.6	94.7	42.3	4.7	3.5
Oklahoma	85.4	97.3	54.3	85.8	82.4	80.2	–	–	–	–	–	–
Oregon	87.0	94.2	82.2	82.5	68.0	66.8	71.6	82.0	72.1	59.2	37.1	39.6
Pennsylvania	87.3	95.1	81.8	92.2	52.1	65.9	60.0	73.9	62.9	53.8	8.2	7.6
Rhode Island	59.7	88.0	68.5	16.9	0.1	0.9	59.7	88.0	68.5	16.9	0.1	0.9
South Carolina	90.2	98.3	71.5	94.1	85.6	86.7	49.0	64.2	46.0	34.8	0.5	2.3
South Dakota	100.0	100.0	100.0	100.0	100.0	100.0	–	–	–	–	–	–
Tennessee	92.9	96.9	97.2	92.4	65.5	75.5	92.9	96.9	97.1	92.2	65.5	75.4
Texas	73.1	91.3	53.2	46.8	19.4	21.3	46.9	60.0	33.8	21.9	14.9	15.6
Utah	88.1	99.0	62.3	95.6	89.0	91.0	0.2	0.1	0.0	1.7	0.1	1.0
Vermont	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]
Virginia	66.5	82.9	72.2	43.6	16.3	10.9	60.3	77.9	67.4	36.3	3.9	2.3
Washington	69.1	87.6	60.9	40.8	12.1	6.1	62.2	87.0	60.3	4.3	2.7	2.1
West Virginia	55.0	89.3	78.7	2.9	0.0	0.5	50.8	82.8	73.9	1.8	0.0	0.4
Wisconsin	63.8	84.5	70.1	32.5	14.4	17.7	61.5	84.2	69.9	25.3	4.8	8.1
Wyoming	–	–	–	–	–	–	–	–	–	–	–	–

TABLE 11, Continued

	Percentage of Enrollees											
	Limited-benefit plan						Primary care case management					
State	Total	Children	Adults	Disabled	Aged	Dual eligibles[1]	Total	Children	Adults	Disabled	Aged	Dual eligibles[1]
Total	**33.0%**	**37.3%**	**23.4%**	**37.9%**	**30.0%**	**30.7%**	**12.4%**	**17.2%**	**8.3%**	**11.5%**	**1.7%**	**2.0%**
Alabama	65.1	97.1	21.5	59.6	8.2	7.2	45.9	71.7	13.5	38.7	1.3	1.4
Alaska	-	-	-	-	-	-	-	-	-	-	-	-
Arizona	84.1	93.0	81.4	72.0	51.9	59.2	-	-	-	-	-	-
Arkansas	79.2	95.8	47.6	78.7	48.3	48.2	60.3	84.8	24.4	55.4	4.9	7.0
California	54.4	70.8	24.7	92.2	88.0	92.0	-	-	-	-	-	-
Colorado	90.4	94.7	85.9	85.8	77.5	73.3	-	-	-	-	-	-
Connecticut	-	-	-	-	-	-	-	-	-	-	-	-
Delaware	87.0	96.1	86.9	76.7	47.8	49.3	-	-	-	-	-	-
District of Columbia	29.0	5.5	2.9	84.6	82.2	80.4	-	-	-	-	-	-
Florida	-	-	-	-	-	-	-	-	-	-	-	-
Georgia	86.9	95.2	87.6	74.9	54.7	53.6	8.6	0.4	0.1	47.7	7.6	6.6
Hawaii	1.6	3.6	0.1	0.7	-	0.0	-	-	-	-	-	-
Idaho	70.6	93.2	92.7	3.7	3.6	4.3	86.0	93.4	83.2	79.2	46.8	54.1
Illinois	2.5	3.4	2.6	0.0	-	0.0	64.0	75.1	70.6	34.9	7.8	4.0
Indiana	-	-	-	-	-	-	7.7	4.4	5.3	26.9	2.7	2.3
Iowa	73.9	95.0	51.6	92.1	3.4	43.9	38.5	61.8	31.3	1.4	-	0.2
Kansas	84.6	93.5	87.6	78.8	40.3	53.0	5.7	3.4	1.3	17.8	1.7	1.3
Kentucky	89.4	97.5	96.0	82.5	61.8	61.3	46.4	68.5	67.6	12.0	2.4	2.1
Louisiana	-	-	-	-	-	-	62.8	90.4	41.4	41.2	1.5	3.1
Maine	-	-	-	-	-	-	-	-	-	-	-	-
Maryland	-	-	-	-	-	-	-	-	-	-	-	-
Massachusetts[2]	25.5	27.8	39.2	20.5	1.5	3.3	-	-	-	-	-	-
Michigan	18.7	31.0	2.2	6.7	0.6	2.4	-	-	-	-	-	-
Minnesota	-	-	-	-	-	-	-	-	-	-	-	-
Mississippi	-	-	-	-	-	-	-	-	-	-	-	-
Missouri	26.2	0.1	0.4	91.2	89.4	89.7	-	-	-	-	-	-
Montana	-	-	-	-	-	-	64.4	79.7	63.6	49.9	1.3	2.4
Nebraska	-	-	-	-	-	-	19.1	24.3	20.1	10.1	1.7	0.6
Nevada	88.2	95.7	88.2	76.2	58.2	53.6	-	-	-	-	-	-
New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey	39.2	29.0	24.7	56.9	69.1	70.8	-	-	-	-	-	-
New Mexico	68.3	81.5	57.2	55.0	3.6	3.3	-	-	-	-	-	-
New York	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 11, Continued

	Percentage of Enrollees											
	Limited-benefit plan						Primary care case management					
State	Total	Children	Adults	Disabled	Aged	Dual eligibles[1]	Total	Children	Adults	Disabled	Aged	Dual eligibles[1]
North Carolina	5.5%	5.5%	5.7%	5.5%	5.0%	5.2%	71.1%	92.5%	60.0%	53.9%	12.4%	19.1%
North Dakota	-	-	-	-	-	-	51.1	69.2	70.4	1.4	-	0.3
Ohio	-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma	85.4	97.3	54.3	85.8	82.4	80.2	2.0	2.7	1.2	1.3	0.1	0.1
Oregon	86.7	93.8	82.2	82.4	67.5	66.5	0.9	1.0	0.3	1.3	1.4	1.3
Pennsylvania	86.7	94.6	80.8	92.0	51.4	65.4	17.2	21.2	17.7	16.2	1.1	1.8
Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina	90.0	98.0	71.4	94.0	85.6	86.7	13.2	16.6	8.0	13.6	6.7	8.6
South Dakota	100.0	100.0	100.0	100.0	100.0	100.0	44.1	55.6	55.2	14.6	0.4	0.9
Tennessee	59.2	57.3	56.0	74.6	43.8	54.6	-	-	-	-	-	-
Texas	10.5	12.7	5.4	9.5	4.2	4.7	25.2	32.1	19.8	16.2	0.3	1.0
Utah	88.1	99.0	62.3	95.6	89.0	91.0	-	-	-	-	-	-
Vermont	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]
Virginia	-	-	-	-	-	-	6.3	5.1	4.9	7.5	12.5	8.6
Washington	-	-	-	-	-	-	7.0	0.6	0.8	36.9	9.4	4.1
West Virginia	-	-	-	-	-	-	5.5	9.1	6.1	1.2	0.0	0.1
Wisconsin	5.0	3.8	2.4	9.6	11.5	12.0	-	-	-	-	-	-
Wyoming	-	-	-	-	-	-	-	-	-	-	-	-

Notes: Excludes the territories and Medicaid-expansion CHIP enrollees. Children and adults under age 65 who qualify for Medicaid on the basis of a disability are included in the disabled category. About 690,000 enrollees age 65 and older are identified in the data as disabled; given that disability is not an eligibility pathway for individuals age 65 and older, MACPAC recodes these enrollees as "aged." Any managed care includes comprehensive risk-based plans, limited-benefit plans, and PCCM programs. Enrollees are counted as participating in managed care if they were enrolled during the fiscal year and at least one managed care payment was made on their behalf during the fiscal year; this method underestimates participation somewhat because it does not capture enrollees who entered managed care late in the year but for whom a payment was not made until the following fiscal year. Managed care types do not sum to total because individuals are counted in every category for which a payment was made on their behalf during the year.

Figures shown here may differ from Table 9, which uses Medicaid Managed Care Enrollment Report data. Reasons for differences include differing time periods (the Medicaid Statistical Information System (MSIS) data used here include those ever enrolled in FY 2009), state reporting anomalies (e.g., some states report a very small number of comprehensive risk-based enrollees in MSIS who may be miscategorized), and Medicaid-expansion CHIP enrollees (excluded here but included in Table 9). Although the enrollment report used for Table 9 is a commonly cited source, it does not provide information on the characteristics of enrollees in managed care (e.g., eligibility group) or their spending and non-managed care service use. MSIS data are used here to provide this additional level of detail.

– Quantity zero; amounts shown as 0.0 round to less than 0.1 in this table.

1 Dual eligibles are enrolled in both Medicaid and Medicare; includes those with full Medicaid benefits and those with limited benefits who only receive Medicaid assistance with Medicare premiums and cost sharing. For dual eligibles enrolled in a comprehensive Medicaid managed care plan, Medicare is still the primary payer of most acute care services; as a result, the Medicaid plan may only provide a subset of the comprehensive services normally covered under its contract with the state.

2 FY 2009 data unavailable for Massachusetts; FY 2008 values shown instead.

3 Due to large differences in the way managed care spending is reported by Vermont in CMS-64 and MSIS data, managed care enrollment (which, for this table, is based on the presence of managed care spending in MSIS for a given enrollee) is not reported here.

Source: MACPAC analysis of Medicaid Statistical Information System (MSIS) annual person summary (APS) data from CMS as of May 2012

TABLE 12. Percentage of Medicaid Benefit Spending on Managed Care by State and Eligibility Group, FY 2009

	Percentage of Benefit Spending											
	Any managed care						Comprehensive risk-based managed care					
State	Total	Children	Adults	Disabled	Aged	Dual eligibles[1]	Total	Children	Adults	Disabled	Aged	Dual eligibles[1]
Total	**22.4%**	**43.6%**	**43.1%**	**14.4%**	**7.9%**	**7.2%**	**20.8%**	**41.0%**	**41.1%**	**13.0%**	**6.8%**	**5.7%**
Alabama	15.2	42.1	7.9	8.6	1.0	0.9	0.1	–	0.0	0.1	0.3	0.3
Alaska	–	–	–	–	–	–	–	–	–	–	–	–
Arizona	84.9	86.0	87.2	83.5	79.5	81.7	83.9	85.0	85.7	83.1	78.8	81.1
Arkansas	0.4	1.3	0.6	0.2	0.1	0.1	–	–	–	–	–	–
California	15.4	41.7	16.7	8.6	10.0	10.5	14.7	41.0	16.4	8.2	8.4	9.2
Colorado	12.6	19.8	8.8	11.7	9.4	9.3	6.9	7.4	5.2	6.2	8.6	6.4
Connecticut	12.6	50.0	57.9	0.0	0.0	0.0	12.6	50.0	57.9	0.0	0.0	0.0
Delaware	42.0	55.7	77.6	25.7	1.4	1.5	41.9	55.5	77.5	25.6	1.2	1.4
District of Columbia	19.9	56.9	70.8	9.0	0.8	1.4	19.0	56.6	70.7	7.7	0.0	0.3
Florida	16.6	31.2	18.1	14.1	9.9	5.8	16.6	31.2	18.1	14.1	9.9	5.8
Georgia	31.2	70.3	64.1	1.8	1.3	1.5	30.5	70.2	64.1	0.7	0.0	0.2
Hawaii	55.5	78.5	77.8	33.9	50.8	42.2	55.5	78.5	77.8	33.9	50.8	42.2
Idaho	3.1	11.3	3.8	0.4	0.6	0.8	–	–	–	–	–	–
Illinois	1.8	4.4	4.4	0.1	0.2	0.1	1.4	3.2	3.4	0.0	0.2	0.1
Indiana	23.1	60.9	76.9	3.6	0.1	0.3	22.9	60.6	76.6	3.4	0.0	0.3
Iowa	4.3	8.9	6.2	4.2	0.2	1.9	0.2	0.4	0.5	0.0	0.1	0.1
Kansas	21.0	57.4	69.8	8.7	2.5	3.7	15.1	49.8	69.1	0.6	0.6	0.5
Kentucky	16.2	28.4	22.2	14.5	2.5	3.2	15.1	25.5	20.8	14.0	2.1	2.7
Louisiana	0.1	0.3	0.1	0.0	0.1	0.0	0.0	0.0	–	0.0	0.1	0.0
Maine	–	–	–	–	–	–	–	–	–	–	–	–
Maryland	33.0	56.6	72.2	26.7	0.6	1.4	33.0	56.6	72.2	26.7	0.6	1.4
Massachusetts[2]	26.0	52.7	45.3	16.5	13.7	8.8	22.2	48.7	35.4	12.8	13.6	8.5
Michigan	46.5	66.2	70.6	48.2	5.0	17.8	41.2	65.7	60.9	41.4	1.7	3.2
Minnesota	33.3	75.5	78.7	4.8	36.8	20.5	33.3	75.5	78.7	4.8	36.8	20.5
Mississippi	–	–	–	–	–	–	–	–	–	–	–	–
Missouri	15.4	47.3	40.3	0.7	1.0	0.9	14.9	47.3	40.3	0.2	0.0	0.1
Montana	0.6	2.1	0.7	0.3	0.0	0.0	–	–	–	–	–	–
Nebraska	5.8	12.0	14.9	3.4	0.7	0.1	5.8	11.8	14.8	3.4	0.7	0.1
Nevada	15.9	39.5	44.3	0.3	0.3	0.3	15.6	39.2	44.2	0.1	0.0	0.0
New Hampshire	–	–	–	–	–	–	–	–	–	–	–	–

TABLE 12, Continued

	Percentage of Benefit Spending											
	Any managed care						Comprehensive risk-based managed care					
State	Total	Children	Adults	Disabled	Aged	Dual eligibles[1]	Total	Children	Adults	Disabled	Aged	Dual eligibles[1]
New Jersey	17.6%	50.9%	63.6%	11.0%	2.2%	1.3%	17.5%	50.8%	63.6%	10.9%	2.0%	1.1%
New Mexico	59.3	75.2	66.1	46.7	13.2	5.3	59.1	75.1	66.1	46.3	13.0	5.3
New York	17.6	42.1	40.4	8.3	8.3	5.7	17.6	42.1	40.4	8.3	8.3	5.7
North Carolina	1.1	1.6	0.5	1.3	0.2	0.8	0.0	–	–	0.0	0.0	0.0
North Dakota	0.5	2.5	1.3	0.0	–	0.0	–	–	–	–	–	–
Ohio	31.9	78.5	85.6	19.7	2.0	0.7	31.9	78.5	85.6	19.7	2.0	0.7
Oklahoma	3.8	7.4	2.1	2.7	2.7	2.5	–	–	–	–	–	–
Oregon	37.9	69.3	67.5	32.9	6.8	9.4	36.0	65.6	66.5	30.7	6.2	8.1
Pennsylvania	44.3	81.1	72.4	48.3	6.4	6.1	40.4	76.0	68.6	43.7	4.5	3.2
Rhode Island	27.4	68.4	54.2	11.0	0.0	0.2	27.4	68.4	54.2	11.0	0.0	0.2
South Carolina	18.1	30.3	28.5	16.1	1.8	2.2	17.3	29.0	28.0	15.7	0.2	0.9
South Dakota	0.2	0.5	0.2	0.1	0.1	0.1	–	–	–	–	–	–
Tennessee	49.2	72.6	74.5	42.0	13.1	18.8	49.2	72.6	74.5	42.0	13.1	18.8
Texas	18.9	37.0	23.9	8.4	7.8	7.7	18.6	36.5	23.7	8.0	7.8	7.6
Utah	16.6	15.8	8.5	21.9	7.3	19.9	0.4	0.2	0.0	0.8	0.0	0.7
Vermont	80.2	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]
Virginia	23.3	38.6	57.5	18.2	3.4	1.0	23.3	38.5	57.5	18.1	3.4	1.0
Washington	22.7	66.2	63.8	1.5	1.1	0.8	22.7	66.2	63.8	1.4	1.1	0.8
West Virginia	12.6	53.4	50.5	0.2	0.0	0.1	12.6	53.3	50.5	0.2	0.0	0.1
Wisconsin	40.4	57.7	64.5	30.3	33.8	32.2	27.7	56.6	64.3	16.4	10.5	10.9
Wyoming	–	–	–	–	–	–	–	–	–	–	–	–

Note: Includes federal and state funds. Excludes administrative spending, the territories, and Medicaid-expansion CHIP enrollees. Children and non-aged adults who qualify for Medicaid on the basis of a disability are included in the disabled category. About 690,000 enrollees age 65 and older are identified in the data as disabled; given that disability is not an eligibility pathway for individuals age 65 and older, MACPAC recodes these enrollees as "aged." Benefit spending from Medicaid Statistical Information System (MSIS) data has been adjusted to match CMS-64 totals; see Section 5 of MACStats for methodology, which differs from the one used to produce FY 2008 spending figures presented in prior MACPAC reports. Any managed care includes comprehensive risk-based plans, limited-benefit plans, and PCCM programs.

– Quantity zero; amounts shown as 0.0 round to less than 0.1 in this table.

1 Dual eligibles are enrolled in both Medicaid and Medicare; includes those with full Medicaid benefits and those with limited benefits who only receive Medicaid assistance with Medicare premiums and cost sharing. For dual eligibles enrolled in a comprehensive Medicaid managed care plan, Medicare is still the primary payer of most acute care services; as a result, the Medicaid plan may only provide a subset of the comprehensive services normally covered under its contract with the state.

2 FY 2009 data unavailable for Massachusetts; FY 2008 values shown instead.

3 Due to large differences in the way managed care spending is reported by Vermont in CMS-64 and MSIS data, benefit spending based on MACPAC's adjustment methodology is not reported at a level lower than total Medicaid managed care.

Source: MACPAC analysis of Medicaid Statistical Information System (MSIS) annual person summary (APS) data and CMS-64 Financial Management Report (FMR) net expenditure data from CMS as of May 2012

SECTION 5

Technical Guide to the June 2012 MACStats

Section 5 provides supplemental information to accompany the tables and figures in Sections 1 through 4 of MACStats. It describes key issues to consider when interpreting the data and comparing numbers across tables and figures and with data from other sources.

Guide to Interpreting Medicaid and CHIP Numbers

As described in MACPAC's March 2012 Report to the Congress, there are several reasons why estimates of Medicaid and State Children's Health Insurance Program (CHIP) enrollment and spending may vary.[1] These issues are noted here in the context of the tables and figures in the June 2012 MACStats. In addition, MACPAC has made certain adjustments to the spending data in MACStats that are described in detail later in this Section.

Tables 13A–D are used to illustrate how the factors described in this Section can affect enrollment numbers. Table 13A shows enrollment numbers for the entire U.S. population in 2009.[2] Tables 13B–D divide the U.S. population into the three age groups that are commonly used in MACPAC analyses because they correspond to some of the key eligibility pathways in Medicaid and CHIP:

- children age 0 to 18;
- adults age 19 to 64; and
- adults age 65 and older.

Data sources

Medicaid and CHIP enrollment and spending numbers are available from administrative data, which states and the federal government compile in the course of administering

these programs. The latest year of available data may differ, depending on the source. The administrative data used in this edition of MACStats include the following, which are submitted by the states to the Centers for Medicare & Medicaid Services (CMS):

- Form CMS-64 for state-level Medicaid spending, which is used throughout MACStats;
- the Medicaid Statistical Information System (MSIS) for person-level detail, which is used throughout MACStats;[3] and
- Medicaid managed care enrollment reports, which are used in Tables 9 and 10.

Additional information is available from nationally representative surveys based on interviews of individuals. The survey data used in Tables 3A–5C are from the National Health Interview Survey (NHIS), which is conducted for the U.S. Department of Health and Human Services.

Tables 13A–D show 2009 survey-based estimates of Medicaid/CHIP enrollment as well as comparable (point-in-time) estimates from the administrative data. Estimates of Medicaid/CHIP enrollment from survey data tend be lower than numbers from administrative data because survey respondents tend to underreport Medicaid and CHIP, among other reasons described later in this Section.

Enrollment period examined

The number of individuals enrolled at a particular point during the year will be lower than the total number enrolled at any point during an entire year. For example, the administrative data in Table 13B show that 48.4 percent of children (38.2 million) were enrolled in Medicaid or CHIP at some time during fiscal year (FY) 2009. However, numbers from the same data source illustrate that the number of children enrolled at a particular point in time (29.9 million, or approximately 37.8 percent of children) is much smaller than the number ever enrolled during the year.

Point-in-time data may also be referred to as average monthly enrollment or full-year equivalent enrollment.[4] Full-year equivalent enrollment is often used for budget analyses, such as those by the CMS Office of the Actuary and when comparing enrollment and expenditure numbers, as in Figure 1. Per enrollee spending levels based on full-year equivalents (Table 8) ensure that amounts are not biased by individuals' transitions in and out of Medicaid coverage during the year.

Enrollees versus beneficiaries

Depending on the source and the year in question, data may include slightly different numbers of individuals in Medicaid. Certain terms commonly used to refer to people with Medicaid have very specific definitions in administrative data sources provided by CMS:[5]

- *Enrollees* or *eligibles* are individuals who are eligible for and enrolled in Medicaid or CHIP. Prior to FY 1990, CMS did not track the number of Medicaid enrollees, only beneficiaries. For some historical numbers, CMS has estimated the number of enrollees prior to 1990 (Figure 1).
- *Beneficiaries* or *persons served* (or, less commonly, *recipients*) are enrollees who receive covered services or for whom Medicaid or CHIP payments are made. Prior to FY 1998, individuals were not counted as beneficiaries if managed care payments were the only Medicaid payments made on their behalf. Beginning in FY 1998, however, Medicaid managed care enrollees with no fee-for-service (FFS) spending were also counted as beneficiaries, which had a large impact on the numbers (Table 1).[6]

The following example illustrates the difference in these terms. In FY 2009, there were 30.0 million non-disabled child Medicaid (excluding Medicaid-expansion CHIP) *enrollees* (Table 6). However, there were 28.3 million *beneficiaries* in this eligibility group—that is, during FY 2009, a Medicaid FFS or managed care capitation payment was made on their behalf (Table 1).[7] Generally, the number of beneficiaries will approach the number of enrollees as more of these individuals use Medicaid-covered services or are enrolled in managed care.[8]

Institutionalized and limited-benefit enrollees

Administrative Medicaid data include enrollees who were in institutions such as nursing homes, as well as individuals who received only limited benefits (for example, only coverage for emergency services). Survey data tend to exclude such individuals from counts of coverage; the NHIS estimates in Tables 3A–5C do not include the institutionalized.

Table 13D shows point-in-time enrollment among those age 65 and older—5.4 million from the administrative data and 2.7 million from the survey data (NHIS). In percentage terms, the difference between the administrative data and the survey data is largest for this age group. This is primarily because the NHIS excludes the institutionalized and because, when Medicaid pays only for Medicare enrollees' cost sharing, NHIS generally does not count it as Medicaid coverage. Based on administrative data, 1.4 million Medicaid enrollees age 65 and older received only limited benefits from Medicaid.

CHIP enrollees

Medicaid-expansion CHIP enrollees are children who are entitled to the covered services of the state Medicaid program, but who are generally funded with CHIP dollars. Depending on the data source, Medicaid enrollment and spending figures may include both Medicaid enrollees funded with Medicaid dollars and Medicaid-expansion CHIP enrollees funded with CHIP dollars. We exclude Medicaid-expansion CHIP enrollees from Medicaid analyses where possible, but in some cases data sources do not allow these children to be broken out separately (for example, Table 9 includes these enrollees, while nearly all other tables and figures in MACStats exclude them).

Methodology for Adjusting Benefit Spending Data

The FY 2009 Medicaid benefit spending amounts shown in the June 2012 MACStats were calculated based on MSIS data that have been adjusted to match total benefit spending reported by states in CMS-64 data.[9] Although the CMS-64 provides a more complete accounting of spending and is preferred when examining state or federal spending totals, MSIS is the only data source that allows for analysis of benefit spending by eligibility group and other enrollee characteristics.[10] We adjust the MSIS amounts for several reasons:

- CMS-64 data provide an official accounting of state spending on Medicaid for purposes of receiving federal matching dollars; in contrast, MSIS data are used primarily for statistical purposes.
- MSIS generally understates total Medicaid benefit spending because it excludes disproportionate share hospital payments and additional types of supplemental payments made to hospitals and other providers, Medicare premium payments, and certain other amounts.[11]
- MSIS generally overstates net spending on prescribed drugs, because it excludes rebates from drug manufacturers.

TABLE 13A. Medicaid and CHIP Enrollment as a Percentage of the U.S. Population, 2009

Medicaid and CHIP Enrollment (All Ages)	Administrative Data: Ever enrolled during the year	Administrative Data: Point in time	Survey Data (NHIS): Point in time
Medicaid	62.3 million	49.8 million	Not available
CHIP	8.1 million	5.2 million	Not available
Totals for Medicaid and CHIP	70.4 million	55.1 million	45.1 million
U.S. Population	**Census Bureau**		**Survey Data (NHIS)**
	307.5 million	306.3 million	301.4 million, excluding active-duty military and individuals in institutions
Medicaid and CHIP Enrollment as a Percentage of U.S. Population			
	22.9% (70.4/307.5)	18.0% (55.1/306.3)	15.0% (45.1/301.4)

See Table 13D for sources and notes.

TABLE 13B. Medicaid and CHIP Enrollment as a Percentage of Children Under Age 19, 2009

Medicaid and CHIP Enrollment Among Children Under Age 19	Administrative Data: Ever enrolled during the year	Administrative Data: Point in time	Survey Data (NHIS): Point in time
Medicaid	30.5 million	24.9 million	Not available
CHIP	7.7 million	5.0 million	Not available
Totals for Medicaid and CHIP	38.2 million	29.9 million	26.6 million
Children Under Age 19	**Census Bureau**		**Survey Data (NHIS)**
	79.0 million	78.9 million	78.5 million, excluding active-duty military and individuals in institutions
Medicaid and CHIP Enrollment as a Percentage of All Children Under 19			
	48.4% (38.2/79.0)	37.8% (29.9/78.9)	33.9% (26.6/78.5)

See Table 13D for sources and notes.

TABLE 13C. Medicaid and CHIP Enrollment as a Percentage of Adults Age 19–64, 2009

Medicaid and CHIP Enrollment Among Adults Age 19–64	Administrative Data: Ever enrolled during the year	Administrative Data: Point in time	Survey Data (NHIS): Point in time
Medicaid	25.7 million	19.6 million	Not available
CHIP	0.4 million	0.3 million	Not available
Totals for Medicaid and CHIP	26.1 million	19.8 million	15.8 million
Adults Age 19–64	**Census Bureau**		**Survey Data (NHIS)**
	188.8 million	188.0 million	184.9 million, excluding active-duty military and individuals in institutions
Medicaid and CHIP Enrollment as a Percentage of All Adults Age 19–64			
	13.8% (26.1/188.8)	10.5% (19.8/188.0)	8.5% (15.8/184.9)

See Table 13D for sources and notes.

TABLE 13D. Medicaid and CHIP Enrollment as a Percentage of Adults Age 65 and Older, 2009

Medicaid and CHIP Enrollment Among Adults Age 65 and Older	Administrative Data: Ever enrolled during the year	Administrative Data: Point in time	Survey Data (NHIS): Point in time
Medicaid	6.1 million	5.4 million	Not available
CHIP	–	–	Not available
Totals for Medicaid and CHIP	6.1 million	5.4 million	2.7 million
Adults Age 65 and Older	**Census Bureau**		**Survey Data (NHIS)**
	39.7 million	39.4 million	38.0 million, excluding active-duty military and individuals in institutions
Medicaid and CHIP Enrollment as a Percentage of All Adults Age 65 and Older			
	15.4% (6.1/39.7)	13.7% (5.4/39.4)	7.2% (2.7/38.0)

Notes: Excludes U.S. territories. Medicaid enrollment numbers obtained from administrative data include 7.8 million individuals ever enrolled during the year who received limited benefits (e.g., emergency services only, Medicaid payment only for Medicare enrollees' cost sharing), of whom 0.6 million were under age 19, 5.8 million were age 19 to 64, and 1.4 million were 65 or older. In the event individuals were reported to be in both Medicaid and CHIP during the year, individuals are to be counted only once in the administrative data, based on their most recent source of coverage. Overcounting of enrollees in the administrative data may occur because individuals may move and be enrolled in two states' Medicaid programs during the year. The NHIS excludes individuals in institutions, such as nursing homes, and active-duty military; in addition, surveys such as NHIS generally do not count limited benefits as Medicaid/CHIP coverage. Administrative data (with the exception of Massachusetts, for which FY 2008 values were used) and Census Bureau data are for FY 2009 (October 2008 through September 2009); the NHIS data are for sources of insurance at the time of the survey in calendar year 2009. The Census Bureau number in the ever-enrolled column was the estimated U.S. resident population as of September 2009 (the month in FY 2009 with the largest count); a number of residents ever living in the U.S. during the year is not available. The Census Bureau point-in-time number is the average estimated monthly number of U.S. residents for FY 2009.

Sources: MACPAC analysis of Medicaid Statistical Information System (MSIS) annual person summary (APS) data from the Centers for Medicare & Medicaid Services (CMS) as of May 2012; CHIP Statistical Enrollment Data System (SEDS) from CMS as of May 2012, as reported by states; the National Health Interview Survey (NHIS); and U.S. Census Bureau data, Monthly Postcensal Resident Population, by single year of age, sex, race, and Hispanic origin (http://www.census.gov/popest/data/national/asrh/2009/2009-nat-res.html)

- Even after accounting for differences in their scope and design, MSIS still tends to produce lower total benefit spending than the CMS-64.[12]
- The extent to which MSIS differs from the CMS-64 varies by state, meaning that a cross-state comparison of unadjusted MSIS amounts may not reflect true differences in benefit spending. See Table 14 for unadjusted benefit spending amounts in MSIS as a percentage of benefit spending in the CMS-64.

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

- We aggregate the service types into broad categories that are comparable between the two sources. This is necessary because there is not a one-to-one correspondence of service types in the MSIS and CMS-64 data. Even service types that have identical names may still be reported differently in the two sources due to differences in the instructions given to states. Table 15 provides additional detail on the categories used.
- We calculate state-specific adjustment factors for each of the service categories by dividing CMS-64 benefit spending by MSIS benefit spending.
- We then multiply MSIS dollar amounts in each service category by the state-specific factors to obtain adjusted MSIS spending. For example, in a state with a FFS hospital factor of 1.2, each Medicaid enrollee with hospital spending in MSIS would have that spending multiplied by 1.2; doing so makes the sum of adjusted hospital spending amounts among individual Medicaid enrollees in MSIS total the aggregate hospital spending reported by states in the CMS-64.[13]

By making these adjustments to the MSIS data, we are attempting to provide more complete estimates of Medicaid benefit spending across states that can be analyzed by eligibility group and other enrollee characteristics. Other organizations, including the Office of the Actuary at CMS, the Kaiser Commission on Medicaid and the Uninsured, and the Urban Institute use methodologies that are similar to MACPAC's but may differ in various ways—for example, by using different service categories or producing estimates for future years based on actual data for earlier years.

Readers should note that MACPAC refined its methodology for adjusting MSIS benefit spending data following the publication of its March 2012 Report to the Congress. As a result, the current methodology used to produce FY 2009 spending figures presented in the June 2012 MACStats differs from the one used to produce FY 2008 spending figures presented in prior MACPAC reports. Key differences between the current and previous methodologies include:

- Separation of the "other" service type in MSIS into spending on: (1) home and community-based services (HCBS) waivers, and (2) non-HCBS waiver items and services. Since all spending on "other" in MSIS was previously categorized as "LTSS non-institutional," this change substantially reduced the number of non-disabled children and adults identified as having long-term services and supports (LTSS) spending.
- Shifting inpatient psychiatric services for individuals under age 21 and mental health facility services for individuals age 65 and older out of the hospital category and into the LTSS institutional category. Although some of these services may be provided in response to an acute episode, many are provided on a longer-term basis and are thus more appropriately categorized as LTSS.

TABLE 14. Medicaid Benefit Spending in MSIS and CMS-64 Data by State, FY 2009 (billions)

State	MSIS	CMS-64	MSIS as a Percentage of CMS-64
Total	**$321.7**	**$364.8**	**88.2%**
Alabama	3.6	4.4	82.1
Alaska	1.0	1.1	96.9
Arizona	8.6	8.7	99.4
Arkansas	3.5	3.5	100.9
California	35.0	41.4	84.5
Colorado	3.3	3.6	92.5
Connecticut	5.3	6.0	87.6
Delaware	1.3	1.2	104.3
District of Columbia	1.9	1.6	118.6
Florida	14.1	15.1	93.1
Georgia	7.4	7.7	95.9
Hawaii	1.2	1.3	89.5
Idaho	1.3	1.3	104.1
Illinois	11.7	13.1	88.7
Indiana	5.3	5.9	89.8
Iowa	2.9	3.0	96.9
Kansas	2.3	2.4	94.8
Kentucky	4.9	5.4	91.1
Louisiana	5.2	6.5	80.2
Maine	1.5	2.5	58.8
Maryland	6.1	6.5	93.8
Massachusetts[1]	8.8	10.8	81.0
Michigan	10.1	10.6	95.9
Minnesota	7.0	7.4	95.2
Mississippi	3.2	3.9	81.0
Missouri	5.7	7.7	73.2
Montana	0.7	0.9	81.6
Nebraska	1.5	1.6	95.2
Nevada	1.2	1.4	86.5
New Hampshire	1.0	1.3	74.9
New Jersey	7.9	9.7	81.4
New Mexico	2.6	3.3	78.7
New York	44.9	49.4	90.9
North Carolina	9.6	11.5	83.3
North Dakota	0.6	0.6	101.5
Ohio	13.6	14.2	96.3
Oklahoma	3.4	3.9	87.2
Oregon	2.8	3.7	76.1
Pennsylvania	14.2	17.2	82.4
Rhode Island	1.5	1.9	78.4
South Carolina	4.6	5.1	90.9
South Dakota	0.7	0.7	100.0
Tennessee	7.2	7.3	98.8
Texas	18.5	23.7	78.2
Utah	1.9	1.6	114.7
Vermont	1.0	1.2	81.4
Virginia	5.5	5.8	95.4
Washington	5.7	6.6	86.8
West Virginia	2.6	2.4	106.4
Wisconsin	5.7	6.7	85.9
Wyoming	0.6	0.5	104.9

Note: See text for a discussion of differences between MSIS and CMS-64 data. Both sources reflect unadjusted amounts as reported by states. Includes federal and state funds. Both sources exclude administrative spending, the territories, and Medicaid-expansion CHIP; in addition, the CMS-64 amounts exclude $7.3 billion in offsetting collections from third-party liability, estate, and other recoveries.

1 FY 2009 data unavailable for Massachusetts; FY 2008 values shown instead.

Sources: MACPAC analysis of MSIS Annual Person Summary (APS) data and CMS-64 Financial Management Report (FMR) net expenditure data from CMS as of May 2012

TABLE 15. Service Categories Used to Adjust FY 2009 Medicaid Benefit Spending in MSIS to Match CMS-64 Totals

Service Category	MSIS Service Types	CMS-64 Service Types
Hospital	▶ Inpatient hospital ▶ Outpatient hospital	▶ Inpatient hospital non-DSH ▶ Inpatient hospital DSH ▶ Outpatient hospital ▶ Emergency services for aliens[1]
Non-hospital acute care	▶ Physician ▶ Dental ▶ Nurse midwife ▶ Nurse practitioner ▶ Other practitioner ▶ Non-hospital outpatient clinic ▶ Lab/X-ray ▶ Sterilizations ▶ Abortions ▶ Hospice ▶ Targeted case management ▶ Physical, occupational, speech, and hearing therapy ▶ Non-emergency transportation ▶ Private duty nursing ▶ Rehabilitative services ▶ Other care, excluding HCBS waiver	▶ Physician ▶ Dental ▶ Other practitioner ▶ Non-hospital outpatient clinic ▶ Rural health clinic ▶ Federally qualified health center ▶ Lab/X-ray ▶ Sterilizations ▶ Abortions ▶ Hospice ▶ Targeted case management ▶ EPSDT screenings ▶ Care not otherwise categorized
Drugs	▶ Drugs (gross spending)	▶ Drugs (gross spending) ▶ Drug rebates
Managed care and premium assistance	▶ HMO (i.e., comprehensive risk-based managed care; includes PACE) ▶ PHP ▶ PCCM	▶ MCO (i.e., comprehensive risk-based managed care) ▶ PACE ▶ PAHP ▶ PIHP ▶ PCCM ▶ Premium assistance for employer-sponsored coverage
LTSS non-institutional	▶ Home health ▶ Personal care ▶ HCBS waiver	▶ Home health ▶ Personal care ▶ HCBS waiver

TABLE 15, Continued

Service Category	MSIS Service Types	CMS-64 Service Types
LTSS institutional	▶ Nursing facility ▶ ICF-ID ▶ Inpatient psychiatric for under age 21 ▶ Mental health facility for the aged	▶ Nursing facility ▶ ICF-ID ▶ Mental health facility for under age 21 or age 65+ non-DSH ▶ Mental health facility for under age 21 or age 65+ DSH
Medicare[2, 3]		▶ Medicare Part A and Part B premiums ▶ Medicare coinsurance and deductibles for QMBs

Notes: DSH = disproportionate share hospital; EPSDT = Early and Periodic Screening, Diagnostic, and Treatment; HCBS = home and community-based services; HMO = health maintenance organization; ICF-ID = intermediate care facility for persons with intellectual disabilities; LTSS = long-term services and supports; MCO = managed care organization; PACE = Program of All-Inclusive Care for the Elderly; PAHP = prepaid ambulatory health plan; PIHP = prepaid inpatient health plan; PHP = prepaid health plan, either a PAHP or a PIHP; PCCM = primary care case management; QMB = qualified medicare beneficiary.

Service categories and types reflect fee-for-service spending unless noted otherwise. Service types with identical names in the MSIS and CMS-64 may still be reported differently in the two sources due to differences in the instructions given to states; amounts for those that appear only in the CMS-64 (e.g., DSH) are distributed across Medicaid enrollees with MSIS spending in the relevant service categories (e.g., hospital).

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

2 Medicare premiums are not reported in MSIS. We distribute CMS-64 amounts across dual-eligible enrollees in MSIS.

3 Medicare coinsurance and deductibles are reported under individual service types throughout MSIS. We distribute the CMS-64 amount for QMBs across CMS-64 spending in the hospital and non-hospital acute categories prior to calculating adjustment factors, based on the distribution of spending for these categories among QMBs in MSIS.

Source: MACPAC analysis of MSIS Annual Person Summary (APS) data and CMS-64 Financial Management Report (FMR) net expenditure data from CMS

- Shifting rehabilitation, private duty nursing, targeted case management, and hospice out of the LTSS non-institutional category and into the non-hospital acute care category. After a review of the definitions used in various analyses and in recent legislation and regulations, MACPAC determined that these four services were not consistently referred to as LTSS and therefore adjusted its LTSS categorization to exclude them.

Managed Care Enrollment and Spending Guide

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

- **Medicaid Managed Care Data Collection System (MMCDCS).** The MMCDCS provides aggregate enrollment statistics and other basic information for each managed care plan within a state. CMS uses the MMCDCS to create an annual Medicaid managed care enrollment report,[14] which is the source of information on Medicaid managed care most commonly cited by CMS as well as outside analysts and researchers. CMS also uses the MMCDCS to produce an annual National Summary of State Medicaid Managed Care Programs that describes the managed care programs within a state (generally defined by the statutory authority under which they operate),[15] each of which may include several managed care plans.

- **MSIS.** The MSIS provides person-level and claims-level information for all Medicaid enrollees.[16] With regard to managed care, the information collected for each enrollee includes: (1) plan ID numbers and types for up to four managed care plans (including comprehensive risk-based plans, primary care case management programs, and limited-benefit plans) under which the enrollee is covered, (2) the waiver ID number, if enrolled in a 1915(b) or other waiver, (3) claims that provide a record of each capitated payment made on behalf of the enrollee to a managed care plan (these are generally referred to as capitated claims), and (4) in some states, a record of each service received by the enrollee from a provider under contract with a managed care plan (these generally do not include a payment amount and are referred to as encounter or "dummy" claims). As discussed in MACPAC's March 2011 and June 2011 Reports to the Congress, all states collect encounter data from their Medicaid managed care plans, but some do not report them in MSIS. Managed care enrollees may also have FFS claims in MSIS if they used services that were not included in their managed care plan's contract with the state.
- **CMS-64.** The CMS-64 provides aggregate spending information for Medicaid by major benefit categories, including managed care. The spending amounts reported by states on the CMS-64 are used to calculate their federal matching dollars.
- **Statistical Enrollment Data System (SEDS).** The SEDS provides aggregate statistics on CHIP enrollment and child Medicaid enrollment that include the number covered under FFS and managed care systems. SEDS is the only comprehensive source of information on managed care participation among separate CHIP enrollees across states; however, it is generally not used to examine managed care participation among Medicaid-expansion CHIP and regular Medicaid enrollees, for which other data sources are available.

In Tables 9 and 10, the statistics cited on managed care are from CMS's 2010 Medicaid managed care enrollment report. However, this enrollment report does not provide information on characteristics of enrollees in managed care aside from dual eligibility for Medicare (e.g., basis of eligibility and demographics such as age, sex, and race/ethnicity). It also does not include information on their spending and service use outside of managed care. As a result, we supplement statistics from the enrollment report with MSIS and CMS-64 data; for example, Tables 11 and 12 use MSIS data to show the percentage of various populations in managed care and the percentage of their Medicaid benefit spending accounted for by managed care.

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

- Figures in the annual Medicaid managed care enrollment report published by CMS include Medicaid-expansion CHIP enrollees. Although we generally exclude these children (about 2 million, depending on the time period) from Medicaid analyses, it is not possible to do so with the enrollment report data cited for Tables 9 and 10. Tables 11 and 12—which show the percentage of child, adult, disabled, aged, and dual-eligible enrollees who are enrolled in Medicaid managed care and the percentage of their Medicaid benefit spending that was for managed care—are based on MSIS data and exclude Medicaid-expansion CHIP enrollees.[17]
- The types of managed care reported by states may differ somewhat between the Medicaid managed care enrollment report and the

MSIS. For example, some states report a small number of enrollees in comprehensive risk-based managed care in one data source but not the other (Tables 9 and 11). Anomalies in the MSIS data are documented by CMS as it reviews each state's quarterly submission,[18] but not all issues may be identified in this process.

- The Medicaid managed care enrollment report provides point-in-time figures (e.g., as of July 1, 2010). In contrast, CMS generally uses MSIS to report on the number of enrollees ever in managed care during a fiscal year (although point-in-time enrollment can also be calculated from MSIS based on the monthly data it contains).

Endnotes

1 See Medicaid and CHIP Payment and Access Commission (MACPAC), *Report to the Congress on Medicaid and CHIP*, March 2012 (Washington, DC: MACPAC, 2012): 87-89. http://www.macpac.gov/reports/.

2 Table 13A is modeled after Table 1 in the March 2012 edition of MACStats (Medicaid and CHIP Payment and Access Commission (MACPAC), *Report to the Congress on Medicaid and CHIP*, March 2012 (Washington, DC: MACPAC, 2012), 87. http://www.macpac.gov/reports/). Table 1 of the March 2012 MACStats shows estimates for 2011 and is partly based on projections by the CMS Office of the Actuary that use administrative data. To produce the age breaks used in Tables 13B–D, however, numbers were calculated by MACPAC directly from the MSIS. FY 2009 is the latest year for which data are available in MSIS for all but one state.

3 MACPAC has adjusted benefit spending from MSIS to match CMS-64 totals; see the discussion later in Section 5 for details.

4 Because administrative data are grouped by month, the point-in-time number from administrative data generally appears under a few different titles—average monthly enrollment, full-year equivalent enrollment, or person-years. Average monthly enrollment takes the state-submitted monthly enrollment numbers and averages them over the 12-month period. It produces the same result as full-year equivalent enrollment or person-years, which is the sum of the monthly enrollment totals divided by 12.

5 See, for example, Centers for Medicare & Medicaid Services (CMS), Brief summaries and glossary in *Health care financing review 2010 statistical supplement* (Baltimore, MD: CMS, 2010). https://www.cms.gov/MedicareMedicaidStatSupp/LT/list.-asp.

6 In a given year, it is possible that no payments were made for an enrollee who used no Medicaid services and was not enrolled in managed care. However, if the individual was enrolled in managed care, the state would make capitated Medicaid payments to the plan on behalf of the individual, even if no health care services were used. Therefore, all managed care enrollees are now counted as beneficiaries, regardless of whether or not they have any health service use.

7 Some individuals who are counted as beneficiaries in CMS data for a particular fiscal year were not enrolled in Medicaid during that year; they are individuals who were enrolled and received services in a prior year, but for whom a lagged payment was made in the following year. These individuals usually have an "unknown" basis of eligibility in CMS data.

8 Analyses of growth in the number of Medicaid beneficiaries will sometimes refer to "enrollment growth" in a generic sense.

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

10 For a discussion of these data sources, see Medicaid and CHIP Payment and Access Commission (MACPAC), Improving Medicaid and CHIP data for policy analysis and program accountability, in *Report to the Congress on Medicaid and CHIP,* March 2011 (Washington, DC: MACPAC, 2011). http://www.macpac.gov/reports/MACPAC_ March2011_ web.pdf.

11 T. Plewes, Databases for estimating health insurance coverage for children: A workshop summary (Washington, DC: The National Academies Press, 2010), 32-37. http://www.nap.edu/catalog/13024.html.

12 Some of these amounts, including disproportionate share hospital (DSH) and other supplemental payments, are lump sums not related to service use by an individual Medicaid enrollee. Nonetheless, we refer to these CMS-64 amounts as benefit spending, and the adjustment methodology described here distributes them across Medicaid enrollees with MSIS spending in the relevant service categories (e.g., hospital). We include both types of supplemental payments in benefit spending partly because, unlike DSH, states do not reliably break out their non-DSH supplemental payments separately from their regular payments for hospital and other care in the CMS-64. If accurate reports of both DSH and non-DSH supplemental payments become available, we will consider an alternative adjustment methodology that excludes them.

13 The sum of adjusted MSIS benefit spending amounts for all service categories totals CMS-64 benefit spending, exclusive of offsetting collections from third-party liability, estate, and other recoveries. These collections, 7.3 billion in FY 2009, are not reported by type of service in the CMS-64 and are not reported at all in MSIS.

14 Centers for Medicare & Medicaid Services (CMS), *Medicaid managed care enrollment report* (Baltimore, MD: CMS). https://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MedicaidDataSourcesGenInfo/MdManCrEnrllRep.html.

15 Centers for Medicare & Medicaid Services (CMS), *Description of state programs* (Baltimore, MD: CMS). https://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MedicaidDataSourcesGenInfo/DescStateProg.html.

16 For enrollees with no paid claims during a given period (e.g., fiscal year), their MSIS data are limited to person-level information (e.g., basis of eligibility, age, sex, etc.).

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

18 See Centers for Medicare & Medicaid Services (CMS), *MSIS state anomalies/issues: All states*, January 28, 2009, (Baltimore, MD: CMS, 2009). http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MedicaidDataSourcesGenInfo/downloads//anomalies1.pdf.

Appendix

Acronym List

ADL	Activities of Daily Living
AFDC	Aid to Families with Dependent Children
AHRQ	Agency for Healthcare Research and Quality
APS	Annual Person Summary
ASPE	Assistant Secretary for Planning and Evaluation
BRFSS	Behavioral Risk Factor Surveillance System
CAHPS	Consumer Assessment of Healthcare Providers and Systems
CBO	Congressional Budget Office
CDC	Centers for Disease Control and Prevention
CHC	Community Health Center
CHIP	State Children's Health Insurance Program
CMS	Centers for Medicare & Medicaid Services
CSHCN	Children with Special Health Care Needs
DSH	Disproportionate Share Hospital
ED	Emergency Department
EMTALA	Emergency Medical Treatment and Active Labor Act
EPSDT	Early and Periodic Screening, Diagnosis, and Treatment Services
ESI	Employer-Sponsored Insurance
ESRD	End-Stage Renal Disease
FFS	Fee for Service
FPL	Federal Poverty Level
FY	Fiscal Year
FYE	Full-Year Equivalent
GAO	Government Accountability Office
GDP	Gross Domestic Product
GME	Graduate Medical Education
HCBS	Home and Community-Based Services
HCUP	Healthcare Cost and Utilization Project
HEDIS	Healthcare Effectiveness Data and Information Set
HMO	Health Maintenance Organization
HPSA	Health Professional Shortage Area
ICF-ID	Intermediate Care Facility for Persons with Intellectual Disabilities

IOM	Institute of Medicine
IHS	Indian Health Service
IMU	Index of Medical Underservice
LTSS	Long-Term Services and Supports
MCHB	Maternal and Child Health Bureau
MEPS	Medical Expenditure Panel Survey
MMCDCS	Medicaid Managed Care Data Collection System
MSIS	Medicaid Statistical Information System
MSP	Medicare Savings Program
MUA	Medically Underserved Area
MUP	Medically Underserved Population
NAMCS	National Ambulatory Medical Care Survey
NEDS	Nationwide Emergency Department Sample
NHIS	National Health Interview Survey
NHSC	National Health Service Corps
NIS	Nationwide Inpatient Sample
OB/GYN	Obstetrician/Gynecologist
OIG	Office of the Inspector General
PACE	Program of All-Inclusive Care for the Elderly
PAPH	Prepaid Ambulatory Health Plans
PCCM	Primary Care Case Management
PHP	Prepaid Health Plan
PIHP	Prepaid Inpatient Health Plan
SBHC	School-Based Health Center
SEDD	State Emergency Department Database
SSA	Social Security Act
SSDI	Social Security Disability Insurance
SSI	Supplemental Security Income
UDS	Uniform Data System
USC	Usual Source of Care

Authorizing Language from the Social Security Act (42 U.S.C. 1396)

MEDICAID AND CHIP PAYMENT AND ACCESS COMMISSION

(a) ESTABLISHMENT.—There is hereby established the Medicaid and CHIP Payment and Access Commission (in this section referred to as 'MACPAC').

(b) DUTIES.—

(1) REVIEW OF ACCESS POLICIES FOR ALL STATES AND ANNUAL REPORTS.—MACPAC shall—

(A) review policies of the Medicaid program established under this title (in this section referred to as 'Medicaid') and the State Children's Health Insurance Program established under title XXI (in this section referred to as 'CHIP') affecting access to covered items and services, including topics described in paragraph (2);

(B) make recommendations to Congress, the Secretary, and States concerning such access policies;

(C) by not later than March 15 of each year (beginning with 2010), submit a report to Congress containing the results of such reviews and MACPAC's recommendations concerning such policies; and

(D) by not later than June 15 of each year (beginning with 2010), submit a report to Congress containing an examination of issues affecting Medicaid and CHIP, including the implications of changes in health care delivery in the United States and in the market for health care services on such programs.

(2) SPECIFIC TOPICS TO BE REVIEWED.—Specifically, MACPAC shall review and assess the following:

(A) MEDICAID AND CHIP PAYMENT POLICIES.—Payment policies under Medicaid and CHIP, including—

(i) the factors affecting expenditures for the efficient provision of items and services in different sectors, including the process for updating payments to medical, dental, and health professionals, hospitals, residential and long-term care providers, providers of home and community based services, Federally-qualified health centers and rural health clinics, managed care entities, and providers of other covered items and services;

(ii) payment methodologies; and

(iii) the relationship of such factors and methodologies to access and quality of care for Medicaid and CHIP beneficiaries (including how such factors and methodologies enable such beneficiaries to obtain the services for which they are eligible, affect provider supply, and affect providers that serve a disproportionate share of low-income and other vulnerable populations).

(B) ELIGIBILITY POLICIES.—Medicaid and CHIP eligibility policies, including a determination of the degree to which Federal and State policies provide health care coverage to needy populations.

(C) ENROLLMENT AND RETENTION PROCESSES.—Medicaid and CHIP enrollment and retention processes, including a determination of the degree to which Federal and State policies encourage the enrollment of individuals who are eligible for such programs and screen out individuals who are ineligible, while minimizing the share of program expenses devoted to such processes.

(D) COVERAGE POLICIES.—Medicaid and CHIP benefit and coverage policies, including a determination of the degree to which Federal and State policies provide access to the services enrollees require to improve and maintain their health and functional status.

(E) QUALITY OF CARE.—Medicaid and CHIP policies as they relate to the quality of care provided under those programs, including a determination of the degree to which Federal and State policies achieve their stated goals and interact with similar goals established by other purchasers of health care services.

(F) INTERACTION OF MEDICAID AND CHIP PAYMENT POLICIES WITH HEALTH CARE DELIVERY GENERALLY.—The effect of Medicaid and CHIP payment policies on access to items and services for children and other Medicaid and CHIP populations other than under this title or title XXI and the implications of changes in health care delivery in the United States and in the general market for health care items and services on Medicaid and CHIP.

(G) INTERACTIONS WITH MEDICARE AND MEDICAID.— Consistent with paragraph (11), the interaction of policies under Medicaid and the Medicare program under title XVIII, including with respect to how such interactions affect access to services, payments, and dual eligible individuals.

(H) OTHER ACCESS POLICIES.—The effect of other Medicaid and CHIP policies on access to covered items and services, including policies relating to transportation and language barriers and preventive, acute, and long-term services and supports.

(3) RECOMMENDATIONS AND REPORTS OF STATE-SPECIFIC DATA.—MACPAC shall—

(A) review national and State-specific Medicaid and CHIP data; and

(B) submit reports and recommendations to Congress, the Secretary, and States based on such reviews.

(4) CREATION OF EARLY-WARNING SYSTEM.—MACPAC shall create an early-warning system to identify provider shortage areas, as well as other factors that adversely affect, or have the potential to adversely affect, access to care by, or the health care status of, Medicaid and CHIP beneficiaries. MACPAC shall include in the annual report required under paragraph (1)(D) a description of all such areas or problems identified with respect to the period addressed in the report.

(5) COMMENTS ON CERTAIN SECRETARIAL REPORTS AND REGULATIONS.—

(A) CERTAIN SECRETARIAL REPORTS.—If the Secretary submits to Congress (or a committee of Congress) a report that is required by law and that relates to access policies, including with respect to payment policies, under Medicaid or CHIP, the Secretary shall transmit a copy of the report to MACPAC. MACPAC shall review the report and, not later than 6 months after the date of submittal of the Secretary's report to Congress, shall submit to the appropriate committees of Congress and the Secretary written comments on such report. Such comments may include such recommendations as MACPAC deems appropriate.

(B) REGULATIONS.—MACPAC shall review Medicaid and CHIP regulations and may comment through submission of a report to the appropriate committees of Congress and the Secretary, on any such regulations that affect access, quality, or efficiency of health care.

(6) AGENDA AND ADDITIONAL REVIEWS.—MACPAC shall consult periodically with the chairmen and ranking minority members of the appropriate committees of Congress regarding MACPAC's agenda and progress towards achieving the agenda. MACPAC may conduct additional reviews, and submit additional reports to the appropriate committees of Congress, from time to time on such topics relating to the program under this title or title XXI as may be requested by such chairmen and members and as MACPAC deems appropriate.

(7) AVAILABILITY OF REPORTS.—MACPAC shall transmit to the Secretary a copy of each report submitted under this subsection and shall make such reports available to the public.

(8) APPROPRIATE COMMITTEE OF CONGRESS.—For purposes of this section, the term 'appropriate committees of Congress' means the Committee on Energy and Commerce of the House of Representatives and the Committee on Finance of the Senate.

(9) VOTING AND REPORTING REQUIREMENTS.—With respect to each recommendation contained in a report submitted under paragraph (1), each member of MACPAC shall vote on the recommendation, and MACPAC shall include, by member, the results of that vote in the report containing the recommendation.

(10) EXAMINATION OF BUDGET CONSEQUENCES.—Before making any recommendations, MACPAC shall examine the budget consequences of such recommendations, directly or through consultation with appropriate expert entities, and shall submit with any recommendations, a report on the Federal and State-specific budget consequences of the recommendations.

(11) CONSULTATION AND COORDINATION WITH MEDPAC.—

(A) IN GENERAL.—MACPAC shall consult with the Medicare Payment Advisory Commission (in this paragraph referred to as 'MedPAC') established under section 1805 in carrying out its duties under this section, as appropriate and particularly with respect to the issues specified in paragraph (2) as they relate to those Medicaid beneficiaries who are dually eligible for Medicaid and the Medicare program under title XVIII, adult Medicaid beneficiaries (who are not dually eligible for Medicare), and beneficiaries under Medicare. Responsibility for analysis of and recommendations to change Medicare policy regarding Medicare beneficiaries, including Medicare beneficiaries who are dually eligible for Medicare and Medicaid, shall rest with MedPAC.

(B) INFORMATION SHARING.—MACPAC and MedPAC shall have access to deliberations and records of the other such entity, respectively, upon the request of the other such entity.

(12) CONSULTATION WITH STATES.—MACPAC shall regularly consult with States in carrying out its duties under this section, including with respect to developing processes for carrying out such duties, and shall ensure that input from States is taken into account and represented in MACPAC's recommendations and reports.

(13) COORDINATE AND CONSULT WITH THE FEDERAL COORDINATED HEALTH CARE OFFICE.—MACPAC shall coordinate and consult with the Federal Coordinated Health Care Office established under section 2081 of the Patient Protection and Affordable Care Act before making any recommendations regarding dual eligible individuals.

(14) PROGRAMMATIC OVERSIGHT VESTED IN THE SECRETARY.—MACPAC's authority to make recommendations in accordance with this section shall not affect, or be considered to duplicate, the Secretary's authority to carry out Federal responsibilities with respect to Medicaid and CHIP.

(c) MEMBERSHIP.—

(1) NUMBER AND APPOINTMENT.—MACPAC shall be composed of 17 members appointed by the Comptroller General of the United States.

(2) QUALIFICATIONS.—

(A) IN GENERAL.—The membership of MACPAC shall include individuals who have had direct experience as enrollees or parents or caregivers of enrollees in Medicaid or CHIP and individuals with national recognition for their expertise in Federal safety net health programs, health finance and economics, actuarial science, health plans and integrated delivery systems, reimbursement for health care, health information technology, and other providers of health services, public health, and other related fields, who provide a mix of different professions, broad geographic representation, and a balance between urban and rural representation.

(B) INCLUSION.—The membership of MACPAC shall include (but not be limited to) physicians, dentists, and other health professionals, employers, third-party payers, and individuals with expertise in the delivery of health services. Such membership shall also include representatives of children, pregnant women, the elderly, individuals with disabilities, caregivers, and dual eligible individuals, current or former representatives of State agencies responsible for administering Medicaid, and current or former representatives of State agencies responsible for administering CHIP.

(C) MAJORITY NONPROVIDERS.—Individuals who are directly involved in the provision, or management of the delivery, of items and services covered under Medicaid or CHIP shall not constitute a majority of the membership of MACPAC.

(D) ETHICAL DISCLOSURE.—The Comptroller General of the United States shall establish a system for public disclosure by members of MACPAC of financial and other potential conflicts of interest relating to such members. Members of MACPAC shall be treated as employees of Congress for purposes of applying title I of the Ethics in Government Act of 1978 (Public Law 95–521).

(3) TERMS.—

(A) IN GENERAL.—The terms of members of MACPAC shall be for 3 years except that the Comptroller General of the United States shall designate staggered terms for the members first appointed.

(B) VACANCIES.—Any member appointed to fill a vacancy occurring before the expiration of the term for which the member's predecessor was appointed shall be appointed only for the remainder of that term. A member may serve after the expiration of that member's term until a successor has taken office. A vacancy in MACPAC shall be filled in the manner in which the original appointment was made.

(4) COMPENSATION.—While serving on the business of MACPAC (including travel time), a member of MACPAC shall be entitled to compensation at the per diem equivalent of the rate provided for level IV of the Executive Schedule under section 5315 of title 5, United States Code; and while so serving away from home and the member's regular place of business, a member may be allowed travel expenses, as authorized by the Chairman of MACPAC. Physicians serving as personnel of MACPAC may be provided a physician comparability allowance by MACPAC in the same manner as Government physicians may be provided such an allowance by an agency under section 5948 of title 5, United States Code, and for such purpose subsection (i) of such section shall apply to MACPAC in the same manner as it applies to the Tennessee Valley Authority. For purposes of pay (other than pay of members of MACPAC) and employment benefits, rights, and privileges, all personnel of MACPAC shall be treated as if they were employees of the United States Senate.

(5) CHAIRMAN; VICE CHAIRMAN.—The Comptroller General of the United States shall designate a member of MACPAC, at the time of appointment of the member as Chairman and a member as Vice Chairman for that term of appointment, except that in the case of vacancy of the Chairmanship or Vice Chairmanship, the Comptroller General of the United States may designate another member for the remainder of that member's term.

(6) MEETINGS.—MACPAC shall meet at the call of the Chairman.

(d) DIRECTOR AND STAFF; EXPERTS AND CONSULTANTS.—Subject to such review as the Comptroller General of the United States deems necessary to assure the efficient administration of MACPAC, MACPAC may—

(1) employ and fix the compensation of an Executive Director (subject to the approval of the Comptroller General of the United States) and such other personnel as may be necessary to carry out its duties (without regard to the provisions of title 5, United States Code, governing appointments in the competitive service);

(2) seek such assistance and support as may be required in the performance of its duties from appropriate Federal and State departments and agencies;

(3) enter into contracts or make other arrangements, as may be necessary for the conduct of the work of MACPAC (without regard to section 3709 of the Revised Statutes (41 U.S.C. 5));

(4) make advance, progress, and other payments which relate to the work of MACPAC;

(5) provide transportation and subsistence for persons serving without compensation; and

(6) prescribe such rules and regulations as it deems necessary with respect to the internal organization and operation of MACPAC.

(e) POWERS.—

(1) OBTAINING OFFICIAL DATA.—MACPAC may secure directly from any department or agency of the United States and, as a condition for receiving payments under sections 1903(a) and 2105(a), from any State agency responsible for administering Medicaid or CHIP, information necessary to enable it to carry out this section. Upon request of the Chairman, the head of that department or agency shall furnish that information to MACPAC on an agreed upon schedule.

(2) DATA COLLECTION.—In order to carry out its functions, MACPAC shall—

(A) utilize existing information, both published and unpublished, where possible, collected and assessed either by its own staff or under other arrangements made in accordance with this section;

(B) carry out, or award grants or contracts for, original research and experimentation, where existing information is inadequate; and

(C) adopt procedures allowing any interested party to submit information for MACPAC's use in making reports and recommendations.

(3) ACCESS OF GAO TO INFORMATION.—The Comptroller General of the United States shall have unrestricted access to all deliberations, records, and nonproprietary data of MACPAC, immediately upon request.

(4) PERIODIC AUDIT.—MACPAC shall be subject to periodic audit by the Comptroller General of the United States.

(f) FUNDING.—

(1) REQUEST FOR APPROPRIATIONS.—MACPAC shall submit requests for appropriations (other than for fiscal year 2010) in the same manner as the Comptroller General of the United States submits requests for appropriations, but amounts appropriated for MACPAC shall be separate from amounts appropriated for the Comptroller General of the United States.

(2) AUTHORIZATION.—There are authorized to be appropriated such sums as may be necessary to carry out the provisions of this section.

(3) FUNDING FOR FISCAL YEAR 2010.—

(A) IN GENERAL.—Out of any funds in the Treasury not otherwise appropriated, there is appropriated to MACPAC to carry out the provisions of this section for fiscal year 2010, $9,000,000.

(B) TRANSFER OF FUNDS.—Notwithstanding section 2104(a)(13), from the amounts appropriated in such section for fiscal year 2010, $2,000,000 is hereby transferred and made available in such fiscal year to MACPAC to carry out the provisions of this section.

(4) AVAILABILITY.—Amounts made available under paragraphs (2) and (3) to MACPAC to carry out the provisions of this section shall remain available until expended.

Public Meetings of the Medicaid and CHIP Payment and Access Commission on Access to Care and MACStats

September 2010-May 2012

The Commission is statutorily charged with examining policies and other factors affecting access to care for Medicaid and CHIP enrollees, and has established access to care as a key analytic priority. Based on presentations by MACPAC staff, federal and state officials, and other experts during its public meetings, the Commissioners discussed key policy questions related to and developed an analytic foundation for future work on understanding and improving access to care in Medicaid and CHIP. The Commission also reviewed national and state-specific data for MACStats, which compiles data from several sources into one comprehensive reference guide for policymakers covering key issues in Medicaid and CHIP.

The Commission's deliberations in public meetings have resulted in a body of work that has laid the foundation for our analysis of access to care for Medicaid and CHIP enrollees. These topics, highlighted in our previous Reports to the Congress, include:

- developing a conceptual framework to examine issues in access to care in the March 2011 *Report to the Congress on Medicaid and CHIP*;
- reviewing access monitoring approaches and requirements in Medicaid managed care in the June 2011 *Report to the Congress: The Evolution of Managed Care in Medicaid*; and
- analyzing national survey data to compare access to care measures for children in Medicaid and CHIP to that of children who have employer-sponsored insurance (ESI) or are uninsured in the March 2012 *Report to the Congress on Medicaid and CHIP*.

The Commission's public meetings in the spring of 2012 focused on the topics presented in this Report. As described below, the public meetings in April and May 2012 explored factors involved in monitoring access to care in Medicaid and CHIP and provided an overview of our analysis of national survey results on access to care for adults age 19 to 64 enrolled in Medicaid. The spring 2012 meetings also featured discussions on the organization of and elements included in the June 2012 MACStats.

The following table summarizes the issues and data in this Report that were addressed during the Commission's public meetings.

Public Meeting Dates	Public Meeting Topics Related to the June 2012 Report
September 23–24, 2010	Initial review: Access for Medicaid and CHIP enrollees
October 28–29, 2010	Access to care and development of an early warning system
	Taking stock: Assessing access to care for non-elderly adults under Medicaid
December 9–10, 2010	Advancing children's access to dental services
	Measuring access to care: Definitions and survey data
	Developing a framework for an early warning system on access
February 25, 2011	*Chapter Review*: Assessing access to care in Medicaid and CHIP
April 14, 2011	MACPAC's survey of states' methods for examining access to care: Preliminary findings
September 22–23, 2011	Assessing value in Medicaid
January 19, 2012	*Chapter Review*: Access to care for children enrolled in Medicaid and CHIP
	Overview of MACStats
February 16, 2012	*Chapter Review,* continued: Access to care for children enrolled in Medicaid and CHIP
	Update on MACStats
April 19, 2012	*Chapter Review*: Access to care for non-elderly adults
	Chapter Review: Data for measuring access to care for Medicaid and CHIP
	Review of MACStats, June 2012
May 22, 2012	Access and value: Issues for Medicaid as a purchaser
	Chapter Review, continued: Access to care for non-elderly adults
	Chapter Review, continued: Data for measuring access to care for Medicaid and CHIP
	Summary of activities and recommendations of the HRSA Negotiated Rulemaking Committee on Medically Underserved Areas (MUAs) and Health Professional Shortage Areas (HPSAs)
	Review of MACStats, June 2012 continued

To access additional information on the Commission's public meeting agendas, transcripts and presentations, refer to http://www.macpac.gov/home/meetings.

Commission Members and Terms

Diane Rowland, Sc.D., Chair
Washington, DC

David Sundwall, M.D., Vice Chair
Salt Lake City, UT

Term Expires
December 2012

Donna Checkett, M.P.A., M.S.W.
Hartford, CT

Patricia Gabow, M.D.
Denver, CO

Mark Hoyt, F.S.A., M.A.A.A.
Desert Hills, AZ

Patricia Riley, M.S.
Brunswick, ME

Diane Rowland, Sc.D.
Washington, DC

Steven Waldren, M.D., M.S.
Kansas City, MO

Term Expires
December 2013

Sharon Carte, M.H.S.
South Charleston, WV

Andrea Cohen, J.D.
New York, NY

Herman Gray, M.D., M.B.A.
West Bloomfield, MI

Norma Martínez Rogers, Ph.D., R.N., F.A.A.N.
San Antonio, TX

Sara Rosenbaum, J.D.
Alexandria, VA

Term Expires
December 2014

Richard Chambers
Irvine, CA

Burton Edelstein, D.D.S., M.P.H.
New York, NY

Denise Henning, C.N.M., M.S.N.
Ft. Myers, FL

Judith Moore
Annapolis, MD

Robin Smith
Awendaw, SC

David Sundwall, M.D.
Salt Lake City, UT

Biographies of Commissioners

Sharon L. Carte, M.H.S. is executive director of the West Virginia Children's Health Insurance Program. From 1992 to 1998, Ms. Carte served as the deputy commissioner for the Bureau for Medical Services overseeing West Virginia's Medicaid program. Prior to that she was administrator of skilled and intermediate care nursing facilities and before that a coordinator of human resources development in the West Virginia Department of Health. Ms. Carte has also worked with senior centers and aging programs throughout the State of West Virginia and on policies related to behavioral health and chronic care for children with mental illness. She received her master of health science from The Johns Hopkins University.

Richard Chambers is president of Molina Healthcare of California, a health plan serving 360,000 Medicaid and CHIP members in five counties in California. Nationally, Molina Healthcare arranges for the delivery of health care services or offers health information management solutions for nearly 4.2 million individuals and families who receive their care through Medicaid, CHIP, Medicare Advantage, and other government-funded programs in 15 states. Before joining Molina Healthcare in 2012, Mr. Chambers was CEO for nine years at CalOptima, a County Organized Health System providing health coverage to 425,000 low-income residents in Orange County, California through Medicaid, CHIP, and Medicare Advantage Special Needs Plan programs. Prior to CalOptima, Mr. Chambers spent over 27 years working for the Centers for Medicare & Medicaid Services (CMS). He served as the director of the Family and Children's Health Programs Group, responsible for national policy and operational direction of Medicaid and CHIP. While at CMS, Mr. Chambers also served as associate regional administrator for Medicaid in the San Francisco Regional Office and director of the Office of Intergovernmental Affairs in the Washington, DC office. He received his bachelor's degree from the University of Virginia.

Donna Checkett, M.P.A., M.S.W. is vice president of state government relations at Aetna. Prior to that, she was the chief executive officer of Missouri Care, a managed Medicaid health plan owned by University of Missouri-Columbia Health Care, one of the largest safety net hospital systems in the state. For eight years Ms. Checkett served as the director of the Missouri Division of Medical Services (Medicaid), during which time she was the chair of the National Association of State Medicaid Directors and a member of the National Governors Association Medicaid Improvements Working Group. She served as chair of the Advisory Board for the Center for Health Care Strategies, a non-profit health policy resource center dedicated to improving health care quality for low-income children and adults. Ms. Checkett also served as chair of the National Advisory Committee for Covering Kids, a Robert Wood Johnson Foundation program fostering outreach and eligibility simplification efforts for Medicaid and CHIP beneficiaries. She received her master of public administration from the University of Missouri-Columbia and a master of social work from the University of Texas at Austin.

Andrea Cohen, J.D. is the director of health services in the New York City Office of the Mayor, where she coordinates and develops

strategies to improve public health and health care services for New Yorkers. She serves on the board of the Primary Care Development Corporation and represents the deputy mayor for Health and Human Services on the Board of the Health and Hospitals Corporation, the largest public hospital system in the country. From 2005 to 2009, Ms. Cohen was counsel with Manatt, Phelps & Phillips, LLP, where she advised clients on issues relating to Medicare, Medicaid and other public health insurance programs. Prior professional positions include senior policy counsel at the Medicare Rights Center, health and oversight counsel for the U.S. Senate Committee on Finance, and attorney with the U.S. Department of Justice. She received her law degree from Columbia University School of Law.

Burton L. Edelstein, D.D.S., M.P.H. is a board certified pediatric dentist and professor of dentistry and health policy and management at Columbia University. He is founding president of the Children's Dental Health Project, a national non-profit Washington DC-based policy organization that promotes equity in children's oral health. Dr. Edelstein practiced pediatric dentistry in Connecticut and taught at the Harvard School of Dental Medicine for 21 years prior to serving as a 1996-97 Robert Wood Johnson Foundation health policy fellow in the office of U.S. Senate leader Tom Daschle with primary responsibility for the State Children's Health Insurance Program (S-CHIP). Dr. Edelstein worked with the U.S. Department of Health and Human Services on its oral health initiatives from 1998 to 2001, chaired the U.S. Surgeon General's Workshop on Children and Oral Health, and authored the child section of *Oral Health in America: A Report of the Surgeon General*. His research focuses on children's oral health promotion and access to dental care with a particular emphasis on Medicaid and CHIP populations. He received his degree in dentistry from the State University of New York at Buffalo School of Dentistry, his master of public health from Harvard University School of Public Health, and completed his clinical training at Children's Hospital Boston.

Patricia Gabow, M.D. is chief executive officer of the Denver Health and Hospital Authority (retiring September 4, 2012), an integrated public safety net health care system that is the state's largest provider of care to Medicaid and uninsured patients. Dr. Gabow is a member of the Commonwealth Fund's Commission on a High-Performing Health System. Previously she served as chair of the National Association of Public Hospitals, as well as on an Institute of Medicine committee that addressed the future viability of safety net providers. Dr. Gabow joined Denver Health in 1973 as chief of the Renal Division and is a professor of medicine in the Division of Renal Diseases at the University of Colorado Denver School of Medicine. She received her medical degree from the University of Pennsylvania.

Herman Gray, M.D., M.B.A. is president of Children's Hospital of Michigan (CHM) and senior vice president of the Detroit Medical Center. At CHM, Dr. Gray served previously as pediatrics vice chief for Education, director of the Pediatric Residency Program, chief of staff and then chief operating officer. He also served as associate dean for Graduate Medical Education (GME) and vice president for GME at Wayne State University School of Medicine and the Detroit Medical Center, respectively. Dr. Gray has also served as the chief medical consultant for the Michigan Department of Public Health Division of Children's Special Health Care Services and as vice president and medical director of clinical affairs for Blue Care Network. During the 1980s, he pursued private medical practice in Detroit. Dr. Gray serves on the board of trustees of the National Association of Children's Hospitals (NACHRI) and the board of directors of the Child Health

Corporation of America (CHCA), now merged and known as Children's Hospital Association. He received his medical degree from the University of Michigan in Ann Arbor, and a master of business administration from the University of Tennessee.

Denise Henning, C.N.M., M.S.N. is clinical director for women's health at Collier Health Services, a federally qualified health center in Immokalee, Florida. A practicing nurse-midwife, Ms. Henning provides prenatal and gynecological care to a service population that is predominantly either uninsured or covered by Medicaid. From 2003 to 2008, she was director of clinical operations for Women's Health Services at the Family Health Centers of Southwest Florida, where she supervised the midwifery and other clinical staff. Prior to this, Ms. Henning served as a certified nurse-midwife in several locations in Florida and as a labor and delivery nurse in a Level III teaching hospital. She is a former president of the Midwifery Business Network and chair of the business section of the American College of Nurse-Midwives. She received her master of science in nurse-midwifery from the University of Florida in Jacksonville and her bachelor of science in nursing from the University of Florida in Gainesville. She also holds a degree in business management from Nova University in Fort Lauderdale, Florida.

Mark Hoyt, F.S.A., M.A.A.A. was the national practice leader of the Government Human Services Consulting group of Mercer Health & Benefits (H&B), LLC (prior to his retirement in 2012). This group helps states purchase health services for their Medicaid and CHIP programs and has worked with over 30 states. He joined Mercer in 1980 and has worked on government health care projects since 1987, including developing strategies for statewide health reform, evaluating the impact of different managed care approaches, and overseeing program design and rate analysis for Medicaid and CHIP programs. Mr. Hoyt is a fellow in the Society of Actuaries and a member of the American Academy of Actuaries. He received a master of arts in mathematics from the University of California at Berkeley.

Judith Moore is an independent consultant specializing in policy related to health, vulnerable populations, and social safety net issues. Ms. Moore's expertise in Medicaid, Medicare, long-term services and supports, and other state and federal programs flows from her career as a federal senior executive who served in the legislative and executive branches of government. At the Health Care Financing Administration (now the Centers for Medicare & Medicaid Services), Ms. Moore served as director of the Medicaid program and of the Office of Legislation and Congressional Affairs. Her federal service was followed by more than a decade as co-director and senior fellow at George Washington University's National Health Policy Forum, a non-partisan education program serving federal legislative and regulatory health staff. In addition to other papers and research, she is co-author with David G. Smith of a political history of Medicaid: *Medicaid Politics and Policy*.

Trish Riley, M.S. is the first distinguished visiting fellow and lecturer in state health policy at George Washington University, following her tenure as director of the Maine Governor's Office of Health Policy and Finance. She was a principal architect of the Dirigo Health Reform Act of 2003, which was enacted to increase access, reduce costs, and improve quality of health care in Maine. Ms. Riley previously served as executive director of the National Academy for State Health Policy and as president of its Corporate Board. Under four Maine governors, she held appointed positions including executive director of the Maine Committee on Aging; director of the Bureau of Maine's Elderly; associate deputy commissioner

of health and medical services; and director of the Bureau of Medical Services, responsible for the Medicaid program, and health planning and licensure. Ms. Riley served on Maine's Commission on Children's Health, which planned the SCHIP program. She is a member of the Kaiser Commission on Medicaid and the Uninsured and has served as a member of the Institute of Medicine's Subcommittee on Creating an External Environment for Quality and its Subcommittee on Maximizing the Value of Health. Ms. Riley has also served as a member of the board of directors of the National Committee on Quality Assurance. She received her master of science in community development from the University of Maine.

Norma Martínez Rogers, Ph.D., R.N., F.A.A.N. is a professor of family nursing at the University of Texas (UT) Health Science Center at San Antonio, where she has served on the faculty since 1996. Dr. Martínez Rogers has held clinical and administrative positions in psychiatric nursing and at psychiatric hospitals, including the William Beaumont Army Medical Center in Fort Bliss during Operation Desert Storm. She has initiated a number of programs at the UT Health Science Center in San Antonio including a support group for women transitioning from prison back into society and the Martínez Street Women's Center, a non-profit organization designed to provide support and educational services to women and teenage girls. Dr. Martínez Rogers is a fellow of the American Academy of Nursing and is the former president of the National Association of Hispanic Nurses. She received a master of science in psychiatric nursing from the UT Health Science Center at San Antonio and her doctorate in cultural foundations in education from the UT at Austin.

Sara Rosenbaum, J.D. is founding chair of the Department of Health Policy and the Harold and Jane Hirsh Professor of Health Law and Policy at the George Washington (GW) University School of Public Health and Health Services. She is also professor of health care sciences at GW's School of Medicine and Health Sciences, is a member of the faculty of GW's School of Law, and directs the Hirsh Health Law and Policy Program. Professor Rosenbaum's research has focused on how the law intersects with the nation's health care and public health systems with a particular emphasis on insurance coverage, managed care, the health care safety net, health care quality, and civil rights. She also has served on the boards of numerous national organizations including AcademyHealth and is on many advisory boards. Professor Rosenbaum is a member of the Centers for Disease Control and Prevention's (CDC) Advisory Committee on Immunization Practices and also serves on the CDC Director's Advisory Committee. She has advised the Congress and presidential administrations since 1977 and served on the staff of the White House Domestic Policy Council during the Clinton Administration. Professor Rosenbaum is the leading author of *Law and the American Health Care System*, published by Foundation Press (2012). She received her law degree from Boston University School of Law.

Diane Rowland, Sc.D. has served as chair of MACPAC since December 2009. She is the executive vice president of the Henry J. Kaiser Family Foundation and the executive director of the Kaiser Commission on Medicaid and the Uninsured. She is also an adjunct professor in the Department of Health Policy and Management at the Bloomberg School of Public Health of The Johns Hopkins University. Dr. Rowland has directed the Kaiser Commission since 1991 and has overseen the Foundation's health policy work since 1993. She is a noted authority on health policy, Medicare and Medicaid, and health care for low-income and disadvantaged populations and frequently testifies as an expert witness before the U.S. Congress on health policy issues. A nationally recognized expert with a distinguished career in

public policy and research, focusing on health insurance coverage, access to care, and health care financing for low-income, elderly, and disabled populations, Dr. Rowland has published widely on these subjects. She is an elected member of the Institute of Medicine, a founding member of the National Academy for Social Insurance, past president and fellow of the Association for Health Services Research (now AcademyHealth), and a member of the Board of Grantmakers in Health. Dr. Rowland holds a bachelor's degree from Wellesley College, a master of public administration from the University of California at Los Angeles, and a doctor of science in health policy and management from The Johns Hopkins University.

Robin Smith and her husband Doug have been foster and adoptive parents for many children covered by Medicaid, including many children with special needs. Her experience seeking care for these children has included working with an interdisciplinary Medicaid program called the Medically Fragile Children's Program, a national model partnership between the Medical University of South Carolina Children's Hospital, South Carolina Medicaid, and the South Carolina Department of Social Services. Ms. Smith serves on the Family Advisory Committee for the Children's Hospital at the Medical University of South Carolina. She has testified at congressional briefings and presented at the 2007 International Conference of Family Centered Care and at Grand Rounds for medical students and residents at the Medical University of South Carolina.

David Sundwall, M.D. serves as vice chair of MACPAC. He is a clinical professor of public health at the University of Utah School of Medicine, Division of Public Health, where he has been a faculty member since 1978. He served as executive director of the Utah Department of Health and commissioner of health for the State of Utah from 2005 through 2010. He currently serves on numerous government and community boards and advisory groups in his home state, including as chair of the Utah State Controlled Substance Advisory Committee. Dr. Sundwall was president of the Association of State and Territorial Health Officials from 2007 to 2008. He has chaired or served on several committees of the Institute of Medicine (IOM) and is currently on the IOM Committee on Integration of Primary Care and Public Health, and the Standing Committee on Health Threats Resilience. Prior to returning to Utah in 2005, he was president of the American Clinical Laboratory Association and before that was vice president and medical director of American Healthcare Systems. Dr. Sundwall's federal government experience includes serving as administrator of the Health Resources and Services Administration, assistant surgeon general in the Commissioned Corps of the U.S. Public Health Service, and director of the Health and Human Resources Staff of the Senate Labor and Human Resources Committee. He received his medical degree from the University of Utah School of Medicine, and completed his residency in the Harvard Family Medicine Program. He is a licensed physician, board certified in Internal Medicine and Family Practice, and volunteers in a public health clinic one-half day each week.

Steven Waldren, M.D., M.S. is director of the Center for Health Information Technology of the American Academy of Family Physicians. He also serves as vice chair of the American Society for Testing Materials' E31 Health Information Standards Committee. Dr. Waldren was a past co-chair of the Physicians Electronic Health Record Coalition (PEHRC), a group of more than 20 professional medical associations addressing issues around health IT, and past co-chair of the Ambulatory Functionality Workgroup of the

Certification Commission for Health IT (CCHIT). He received his medical degree from the University of Kansas School of Medicine. While completing a post-doctoral National Library of Medicine medical informatics fellowship, he completed a master of science in health care informatics from the University of Missouri, Columbia.

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