

GAO

Report to the Chairman, Committee on
Finance, U.S. Senate

August 2009

**MEDICAID
PREVENTIVE
SERVICES**

**Concerted Efforts
Needed to Ensure
Beneficiaries Receive
Services**



GAO

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Highlights of [GAO-09-578](#), a report to the Chairman, Committee on Finance, U.S. Senate

Why GAO Did This Study

Medicaid, a federal-state program that finances health care for certain low-income populations, can play a critical role in the provision of preventive services, which help prevent, diagnose, and manage health conditions. GAO examined available data to assess (1) the extent to which Medicaid children and adults have certain health conditions and receive certain preventive services, (2) for Medicaid children, state monitoring and promotion of the provision of preventive services, (3) for Medicaid adults, state coverage of preventive services, and (4) federal oversight by the Centers for Medicare & Medicaid Services (CMS). GAO analyzed data from nationally representative surveys: the National Health and Nutrition Examination Survey (NHANES), which includes physical examinations of participants, and the Medical Expenditure Panel Survey (MEPS). GAO also surveyed state Medicaid directors and interviewed federal officials.

What GAO Recommends

GAO recommends that CMS (1) ensure that state Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) programs are regularly reviewed, and (2) expedite its efforts to provide guidance to states on coverage of obesity-related services for Medicaid children, and consider the need to provide similar guidance regarding coverage of obesity screening and counseling, and other recommended services, for adults. CMS concurred with GAO's recommendations.

View [GAO-09-578](#) or [key components](#). For more information, contact Alicia Puente Cackley at (202) 512-7114 or cackleya@gao.gov.

MEDICAID PREVENTIVE SERVICES

Concerted Efforts Needed to Ensure Beneficiaries Receive Services

What GAO Found

Nationally representative data suggest that a large proportion of children and adults in Medicaid have certain health conditions, particularly obesity, that can be identified or managed by preventive services, and adults' receipt of preventive services varies widely. For Medicaid children, NHANES data from 1999 through 2006 suggest that 18 percent of children aged 2 through 20 were obese, 4 percent of children aged 8 through 20 had high blood pressure, and 10 percent of children aged 6 through 20 had high cholesterol. Furthermore, MEPS data from 2003 through 2006 suggest that many Medicaid children were not receiving well-child check ups. For Medicaid adults aged 21 through 64, NHANES data suggest that more than half were obese or had diabetes, high cholesterol, high blood pressure, or a combination. MEPS data suggest that receipt of preventive services varied widely by service: receipt of some services, such as blood pressure tests, was high, but receipt of several other services was low. MEPS data also suggest that a lower percentage of Medicaid adults received preventive services compared to privately insured adults.

For children in Medicaid, who generally are entitled to coverage of comprehensive health screenings, including well-child check ups, as part of the federally required EPSDT benefit, most but not all states reported to GAO that they monitored or set goals related to children's utilization of preventive services and had undertaken initiatives to promote their provision. Nine states reported that they did not monitor children's utilization of specific preventive services. Forty-seven states reported having multiple initiatives to improve the provision of preventive services to children.

For adults in Medicaid, for whom states' Medicaid coverage of preventive services is generally not required, most states reported to GAO that they covered most but not all of eight recommended preventive services that GAO reviewed. Nearly all state Medicaid programs, 49 and 48 respectively, reported covering cervical cancer screening and mammography, and three-quarters or more states reported covering four other preventive services. Two additional recommended services—intensive counseling to address obesity or to address high cholesterol—were reported as covered by fewer than one-third of states.

For children in Medicaid, CMS oversees the provision of preventive services through state EPSDT reports and reviews of EPSDT programs, but gaps in oversight remain; for adults, oversight is more limited. For children, state reports showed that, on average, 58 percent of Medicaid children who were eligible for an EPSDT service in 2007 received one; far below the federal goal of 80 percent. CMS reviewed only 11 state EPSDT programs between April 2001 and June 2009. Few states reporting low rates of service provision were reviewed. CMS guidance to states may also have gaps: a 2006 study raised concerns that providers may not be aware of coverage of obesity-related services for Medicaid children. CMS has recognized the need for but has not yet begun drafting guidance on such coverage. For adults, CMS has provided some related guidance to states, but not on the reviewed preventive services.

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Abbreviations

ACIP	Advisory Committee on Immunization Practices
AHRQ	Agency for Healthcare Research and Quality
BMI	body mass index
CDC	Centers for Disease Control and Prevention
CMS	Centers for Medicare & Medicaid Services
EPSDT	Early and Periodic Screening, Diagnostic, and Treatment
FFS	fee-for-service
HHS	Department of Health and Human Services
MCO	managed care organization
MEPS	Medical Expenditure Panel Survey
mg/dL	milligrams per deciliter
mmHg	millimeters of mercury
NHANES	National Health and Nutrition Examination Survey
NHIS	National Health Interview Survey
OBRA 89	Omnibus Budget Reconciliation Act of 1989
CHIP	State Children's Health Insurance Program
SMDL	State Medicaid Director Letter
USPSTF	United States Preventive Services Task Force

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United States Government Accountability Office
Washington, DC 20548

August 14, 2009

The Honorable Max Baucus
Chairman
Committee on Finance
United States Senate

Dear Mr. Chairman:

As one of the nation's largest health insurers, Medicaid—a joint federal and state program that finances health care coverage for certain low-income individuals and families—can play a critical role in helping ensure that the nation's children and adults receive preventive services. Preventive services can prevent health conditions from occurring, or screen for or diagnose existing health conditions. For example, body mass index (BMI) measurements are used to screen for obesity, and mammograms for breast cancer. Preventive services also include services to manage diagnosed health conditions and prevent certain conditions from worsening, for example, weight-reduction counseling to help manage obesity.

Medicaid, overseen at the federal level by the Centers for Medicare & Medicaid Services (CMS), an agency within the Department of Health and Human Services (HHS), provided health coverage for over 60 million low-income individuals in 2008. CMS oversees state Medicaid programs in part by providing guidance on federal requirements, approving state Medicaid plans, and reviewing program operations. For managed care, whereby states contract with managed care organizations to serve Medicaid beneficiaries, CMS's oversight includes reviewing and approving states' managed care contracts.¹ For eligible children in Medicaid under age 21, preventive services are generally addressed through Medicaid's Early and Periodic Screening, Diagnostic and Treatment (EPSDT) benefit. Under federal law, the EPSDT benefit generally entitles children in Medicaid to

¹States may provide Medicaid services, including preventive services, to children and adults through different service delivery and financing systems such as fee-for-service and managed care. In a traditional fee-for-service delivery system, the Medicaid program reimburses providers directly and on a retrospective basis for each service delivered. Under a capitated managed care model, states contract with a managed care organization and prospectively pay the organization a fixed monthly fee per patient to provide or arrange for most health services. Managed care delivery systems are subject to specific federal requirements related to Medicaid enrollees and services.

receive coverage of periodic screening services—often termed well-child check ups—that include a comprehensive health and developmental history, a comprehensive physical exam, appropriate immunizations, laboratory tests, and health education.² For adults aged 21 and older in Medicaid, coverage of preventive services is generally not required.³

Ensuring that children and adults in the United States receive preventive services is a federal priority. For example, CMS has a yearly goal that each state provide EPSDT well-child check ups to at least 80 percent of the Medicaid children in the state who should receive one, based on the state's periodicity schedule.⁴ As part of its Healthy People 2010 initiative, HHS has also established health goals for the nation, including increasing the proportion of children and adults who receive several types of preventive services, for example, cholesterol tests. In addition, HHS sponsors the United States Preventive Services Task Force (USPSTF), which evaluates a broad range of preventive services for specific age and risk groups and makes recommendations that those that are clinically effective should be

²For purposes of this report we refer to these EPSDT screening services as an EPSDT well-child check up. States are also required to cover other EPSDT services, defined as vision services, dental services, hearing services, and services necessary to correct or improve health conditions discovered through screenings, regardless of whether these services are typically covered by the state's Medicaid plan for other beneficiaries. 42 U.S.C. § 1396d(r). In this report, we collectively refer to EPSDT well-child check ups and these other services as EPSDT services. In 2001, we found problems with children not receiving EPSDT services; see *Medicaid: Stronger Efforts Needed to Ensure Children's Access to Health Screening Services*, GAO-01-749 (Washington, D.C.: July 13, 2001). A list of related GAO products can be found at the end of this report.

³Although states are generally not required to cover preventive services for adult Medicaid beneficiaries, according to CMS officials there are circumstances when states must cover medically necessary preventive services for adult Medicaid beneficiaries who have been diagnosed with or show symptoms of a disease.

⁴State Medicaid programs must provide EPSDT services at intervals that meet reasonable standards of medical and dental practice as determined by the state and as medically necessary. Accordingly, states adopt their own periodicity schedules, which include age-specific timetables that identify when EPSDT well-child check ups and other services should occur. CMS's 80 percent goal includes only children who should receive an initial or periodic screening service, termed well-child check up for purposes of this report, in a given year; therefore, it incorporates the fact that the interval of well-child check ups for some children may be greater than a year.

incorporated routinely into primary health care for specific populations.⁵ Certain preventive services, including USPSTF-recommended services—such as colorectal cancer screening, mammograms, and diabetes screening—are covered by the Medicare program, the federal health program for individuals age 65 and over.⁶

Because of the importance of preventive services and the role Medicaid can play in providing them, you asked for information about preventive services for children and adults in the Medicaid program. This report examines

1. the extent to which children and adults in Medicaid have certain health conditions that can be identified or managed by preventive services, and the extent to which they receive such services;
2. for children in Medicaid, for whom coverage of EPSDT services is generally required, the extent to which state Medicaid programs monitor and promote the provision of preventive services;
3. for adults in Medicaid, for whom coverage of preventive services is generally not required, the extent to which state Medicaid programs cover recommended preventive services; and
4. the extent to which CMS oversees the provision of preventive services for children and adults in Medicaid.

⁵The USPSTF considers evidence from studies that assess the effects of preventive services on health outcomes, and recommends that health care providers offer or provide services for which (1) there is high certainty that the net benefit is substantial (“A” recommendation) or (2) there is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial (“B” recommendation). An analysis guided by the National Commission on Prevention Priorities of the cost effectiveness of 25 USPSTF recommended preventive services concluded that many are cost effective, and some are cost saving. See Michael V. Maciosek, Ashley B. Coffield, Nichol M. Edwards, Thomas J. Flottemesch, Michael J. Goodman, Leif I. Solberg, “Priorities among Effective Clinical Preventive Services: Results of a Systematic Review and Analysis,” *American Journal of Preventive Medicine*, vol. 31, no. 1 (2006).

⁶Medicare covers defined preventive services such as colorectal cancer screening tests, screening mammography, and diabetes screening tests, and more recently, the Medicare Improvements for Patients and Providers Act of 2008 authorized the Secretary of HHS to expand Medicare coverage to additional preventive services recommended by the USPSTF, under certain circumstances. Pub. L. No. 110-275, § 101, 122 Stat. 2494, 2496-97 (2008) (codified, as amended, at 42 U.S.C. § 1395x(s)(2)(BB)).

To provide information on health conditions and receipt of certain preventive services, we analyzed data from different nationally representative surveys that focus on each respective area.

- To examine health conditions, we analyzed data from HHS's National Health and Nutrition Examination Survey (NHANES), conducted by the Centers for Disease Control and Prevention (CDC). NHANES directly measures health conditions through physical examinations and laboratory tests, and interviews participants about topics such as insurance coverage and prior diagnoses of health conditions. We used data from 1999 through 2006 (the most recent available). We grouped NHANES data from surveys conducted from 1999 through 2006 in order to include a sufficient number of survey participants to reliably assess health conditions in the Medicaid population. For children,⁷ we estimated the prevalence of certain health conditions that can be identified or managed as part of EPSDT services and were prevalent enough to examine reliably: high blood pressure, high cholesterol, and obesity.⁸ For adults,⁹ we estimated the prevalence of certain health conditions that can be identified or managed by USPSTF

⁷Our figures for Medicaid children include children enrolled in the State Children's Health Insurance Program (CHIP), because NHANES data from 1999 through 2004 contain a single category that combines Medicaid and CHIP beneficiaries (NHANES data for 2005 through 2006 contain separate categories for Medicaid and CHIP beneficiaries, but we grouped them for comparability with the earlier survey years). CHIP provides health care coverage to children in low-income families who are not eligible for traditional Medicaid programs. States may implement CHIP programs by expanding their existing Medicaid programs, establishing separate child health programs, or a combination of both. States with Medicaid expansion programs must provide to CHIP beneficiaries all benefits that are available to the traditional Medicaid population. CHIP enrollment in fiscal year 2006 was 6.6 million children. Of the total Medicaid and CHIP population of children, about 16 percent were enrolled in CHIP during the 1999 through 2006 period.

⁸Diabetes was not prevalent enough among children to examine reliably using NHANES data. We excluded children's oral health from our scope because of recent related work; see *Medicaid: Extent of Dental Disease in Children Has Not Decreased, and Millions Are Estimated to Have Untreated Tooth Decay*, [GAO-08-1121](#) (Washington, D.C.: September 23, 2008). Our scope also excluded certain immunizations, blood lead levels, and tobacco exposure and use.

⁹Our figures for Medicaid adults could also include some adults enrolled in CHIP (in 2007, GAO reported that in June 2006, about 349,000 adults were enrolled in CHIP; see *State Children's Health Insurance Program: Program Structure, Enrollment and Expenditure Experiences, and Outreach Approaches for States That Cover Adults*, [GAO-08-50](#) (Washington, D.C.: November 26, 2007)). Our figures for adults do not include adults enrolled in both Medicare and Medicaid, and are limited to adults aged 21 through 64.

recommended preventive services¹⁰ and were prevalent enough to examine reliably: high blood pressure, high cholesterol, obesity, and diabetes.¹¹ For both adults and children, we analyzed data for the Medicaid and privately insured populations.

- To examine receipt of services, we analyzed available data from the Medical Expenditure Panel Survey (MEPS), administered by HHS's Agency for Healthcare Research and Quality (AHRQ), which interviews participants about reasons for medical visits and use of specific health care services. We used data from 2003 through 2006 (the most recent available).¹² For children,¹³ we used available MEPS data from interviews with a parent or other adult in the child's household to estimate receipt of well-child check ups and certain other services that could occur during EPSDT well-child check ups: blood pressure tests, weight and height measurement, and diet or exercise counseling. For adults, we used MEPS

¹⁰The USPSTF assesses scientific evidence regarding the effectiveness of a broad range of preventive services to address clinical categories such as cancer, heart and vascular diseases, infectious diseases, injury and violence, and metabolic, nutritional, and endocrine conditions. USPSTF recommendations for adult preventive services that were in effect as of March 2009 included blood pressure tests for all adults; cholesterol tests for men aged 35 and older and adults aged 20 and older with risk factors for coronary heart disease; obesity screening for all adults, including intensive counseling and behavioral interventions to promote sustained weight loss for obese adults; intensive diet counseling for adults with high cholesterol; diabetes screening for adults with high blood pressure; cervical cancer screening for sexually active women; mammography for women aged 40 and older; and colorectal cancer screening for adults aged 50 through 75. The USPSTF also recognizes the importance of immunizations in primary disease prevention, but does not review new evidence on immunizations in order not to duplicate the work of the CDC's Advisory Committee on Immunization Practices (ACIP). ACIP recommends influenza immunization for adults aged 50 and older. For purposes of this report, the term recommended preventive services refers to USPSTF and ACIP recommended services.

¹¹Other conditions, such as sexually transmitted diseases, were not prevalent enough to examine reliably among adults in Medicaid using NHANES data.

¹²The 2003 through 2006 period for the MEPS data differed from the 1999 through 2006 period for the NHANES data. NHANES includes a smaller number of participants than MEPS, and it was necessary to group data from NHANES surveys conducted during 1999 through 2006 in order to include a sufficient number of survey participants to assess reliably health conditions in the Medicaid population. It was not possible to use the same time frame for the MEPS analysis, because MEPS did not include certain questions we examined prior to 2001.

¹³Similar to NHANES, the Medicaid category in the MEPS data included children enrolled in CHIP. Of the total Medicaid and CHIP population, about 18 percent were enrolled in CHIP during the 2003 through 2006 period.

data to estimate receipt of seven recommended preventive services:¹⁴ blood pressure tests, cholesterol tests, cervical cancer screening,¹⁵ mammography, colorectal cancer screening, diet and exercise counseling, and influenza immunizations.¹⁶ In addition, to estimate receipt of diabetes screening, a recommended preventive service for which MEPS data were not available, we analyzed data from a related HHS survey, the 2006 National Health Interview Survey (NHIS).¹⁷ For both adults and children, we analyzed data for the Medicaid and privately insured populations.¹⁸

To assess state Medicaid programs' monitoring and promotion of the provision of preventive services to children, we surveyed 51 state Medicaid directors (in 50 states and the District of Columbia).¹⁹ The survey asked about states' monitoring of children's utilization of specific preventive services in their fee-for-service and managed care programs, goals for children's utilization of specific services and whether or not they were meeting these goals, and recent initiatives states had undertaken to promote preventive services. All 51 state Medicaid directors responded to the survey.

¹⁴USPSTF and ACIP recommendations for the services we analyzed were in place as of the survey years used in our MEPS analysis. We limited our analyses to the age and risk groups that USPSTF and ACIP recommended should receive the services.

¹⁵In this report, we use the term cervical cancer screening to refer to a Pap test, also called a Pap smear.

¹⁶Our scope did not include smoking cessation services. Some of the questions we analyzed did not fully measure USPSTF-recommended preventive services, but provide information related to them. For example, the USPSTF recommends that obese adults receive intensive obesity counseling, whereas MEPS participants were asked if they received any type of diet or exercise advice from a doctor or health care professional. See appendix II for further discussion of the extent to which the available measures capture the USPSTF recommendations.

¹⁷MEPS interviews from 2003 through 2006 included a section on diabetes, but did not include a question on screening tests for diabetes. The USPSTF recommendation for diabetes testing was in place as of 2003.

¹⁸Individuals were categorized based on their health insurance status at one point in time, and health insurance status was not necessarily constant during the time periods over which we examined their receipt of services. Our analysis shows whether individuals enrolled in Medicaid and private insurance at a given point of time were in need of preventive services. When we compared our analysis of well-child check ups to an analysis that only included children who were consistently enrolled in Medicaid and private insurance during the entire period we examined, we did not find significant differences in results.

¹⁹For purposes of this report, we refer to the District of Columbia as a state.

To determine the extent to which state Medicaid programs cover recommended preventive services for adults, we surveyed state Medicaid directors about whether the state Medicaid program covered eight recommended preventive services:²⁰ cholesterol tests, cervical cancer screening, mammography, colorectal cancer screening, intensive counseling to manage obesity, intensive counseling to manage high cholesterol, influenza immunizations, and diabetes screening. We also asked about coverage of well-adult check ups and health risk assessments, which provide an opportunity for beneficiaries to receive some recommended preventive services such as blood pressure tests and obesity screening.²¹ To examine the extent to which state Medicaid programs delineate coverage of specific preventive services through their contracts with managed care organizations, we obtained and reviewed sections of contracts describing what services were covered for the largest Medicaid managed care organizations from up to two states in each of the 10 CMS regions and interviewed an expert on Medicaid managed care contracts.²² We did not evaluate these Medicaid managed care arrangements to determine whether managed care organizations were covering services for Medicaid enrollees. We limited our review to contract provisions we identified to provide a description of such provisions.

To examine CMS oversight of the provision of preventive services for children and adults in Medicaid, we interviewed and obtained related documentation from CMS officials, including officials in CMS's 10 regional offices, about their oversight activities and initiatives related to the preventive services in our review. We reviewed data from 2000 through 2007 reported by state Medicaid programs to CMS on the provision of EPSDT well-child check ups in their programs, CMS reports summarizing results of their EPSDT program reviews (conducted between April 2001 and June 2009), and State Medicaid Director letters and other guidance issued by CMS related to preventive services. We also surveyed state Medicaid directors about the support states receive, or would like, from CMS related to coverage or oversight of preventive services. Activities

²⁰On our survey, we asked about recommended preventive services for which related national data were available.

²¹According to CMS and state officials, obesity screening and blood pressure tests are often not billed separately from well-adult check ups or health risks assessments.

²²One CMS region had only one state with a managed care contract, and we excluded one contract from another state from our review because the contract was no longer in effect.

related to dental services in Medicaid were not included in the scope of this report due to related work conducted in 2008.²³

To assess the reliability of NHANES, MEPS, and NHIS data, we spoke with knowledgeable agency officials, reviewed related documentation, and compared our results to published data. To establish the reliability of our survey data, we spoke with knowledgeable state and federal agency officials in developing the survey, pretested the survey questions, and followed up with state Medicaid officials to achieve a 100 percent response rate and, in some cases, to confirm certain responses. We determined these data sources to be reliable for the purposes of this report. Appendixes I, II, and III contain more information on our NHANES analysis, our MEPS and NHIS analyses, and our survey of state Medicaid directors.

We conducted our work from May 2008 through August 2009 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Results in Brief

National survey data suggest that a large proportion of children and adults in Medicaid have certain health conditions, particularly obesity, that can be identified or managed by preventive services, and that adults' receipt of preventive services varies widely depending on the service. According to estimates based on analyses of NHANES, MEPS, and NHIS data,

- **Medicaid children under age 21 are at risk of having certain health conditions and many are not receiving well-child check ups.** NHANES examination data from 1999 through 2006 suggest that nearly one in five Medicaid children aged 2 through 20 (an estimated 18 percent) were obese, and about half of these children, or their parents, reported that they had not previously been diagnosed as overweight. Compared to privately insured children, a higher percentage of Medicaid children were obese. Other health conditions of concern were less common than obesity but still prevalent: an estimated 4 percent of Medicaid children aged 8

²³See [GAO-08-1121](#).

through 20 had high blood pressure, and an estimated 10 percent of Medicaid children aged 6 through 20 had high cholesterol. Furthermore, MEPS data from 2003 through 2006 suggest that Medicaid children often do not receive well-child check ups—an estimated 41 percent of children in Medicaid did not receive a well-child check up during a 2-year period.

- **Medicaid adults are also an at-risk population—more than half have one or more of the health conditions reviewed—and their receipt of preventive services varies widely depending on the service.** NHANES data from 1999 through 2006 suggest that nearly 6 in 10 Medicaid adults aged 21 through 64 (an estimated 57 percent) were obese or had high blood pressure, high cholesterol, diabetes, or a combination of these health conditions; Medicaid adults also had higher rates of obesity and diabetes than adults with private health coverage. With regard to the receipt of preventive services, national data showed mixed results. MEPS data from 2003 through 2006 suggest that Medicaid adults' reported rates of receipt of recommended preventive services varied substantially by service: for example, an estimated 93 percent of Medicaid adults received a blood pressure test during the 2 years prior to the survey, while an estimated 41 percent of Medicaid adults of the age for whom a colorectal cancer screening was recommended ever received one. Compared to adults with private insurance, a lower percentage of adults covered by Medicaid received preventive services.

For children in Medicaid, who generally are entitled to coverage of EPSDT services, most states reported in our survey that they monitored and set goals for children's utilization of preventive services, and had undertaken initiatives to promote the provision of preventive services to children. Nine states reported that they did not monitor children's utilization of specific preventive services such as well-child check ups. States more frequently monitored and set goals for utilization of services for children receiving services from managed care organizations than for children in fee-for-service. Most states reported implementing, since 2004, multiple initiatives to improve the provision of preventive services.

For adults in Medicaid, for whom coverage of preventive services is generally not required, most state Medicaid programs reported covering some but not all of the preventive services we asked about on our survey. Of the eight recommended preventive services we asked about, the services that were most commonly reported as covered for adults were cervical cancer screenings and mammograms, which were covered by 49 and 48 states, respectively. Four other services were reported as covered by three-quarters or more of the states. The two remaining recommended

preventive services were covered by a minority of states: less than one-third reported covering intensive counseling to manage obesity and intensive counseling to manage high cholesterol. Thirty-nine states reported covering well-adult check ups or health risk assessments for adults, which provide an opportunity for delivering recommended preventive services such as blood pressure tests and obesity screenings.

For children in Medicaid, CMS oversees the provision of services by collecting and publishing state EPSDT reports and conducting occasional reviews of state programs, but gaps in oversight remain. For adults in Medicaid, CMS oversight is more limited. For children,

- CMS collects reports from states on the provision of EPSDT services; reports from fiscal year 2000 through 2007 show that most states are not achieving CMS's yearly goal that each state provide EPSDT well-child check ups to at least 80 percent of the Medicaid children in the state who should receive one, based on the state's periodicity schedule. State reports for 2007 showed that, on average, 58 percent of Medicaid children received at least one EPSDT well-child check up for which they were eligible; rates in individual states varied from 25 to 79 percent.
- CMS also oversees states' EPSDT programs through occasional reviews of individual state programs, but conducts few such reviews. CMS's reviews examine different aspects of these programs, including how states ensure that beneficiaries have access to and information about EPSDT well-child check ups and other services. The reviews have identified problems with service delivery and other aspects of EPSDT programs, and have required corrective action or recommended specific improvements. CMS conducted only 11 EPSDT program reviews between April 2001 and June 2009, including few reviews of programs with low reported rates of provision of EPSDT services. CMS does not have formal criteria or time frames for reviewing individual EPSDT programs. Instead, according to CMS officials, EPSDT reviews are performed at the discretion of CMS regional offices.
- CMS provides other guidance to states on EPSDT, such as through the published *State Medicaid Manual*, and officials have recognized the need for—but not yet begun drafting—additional guidance on EPSDT coverage of obesity screening and services to manage childhood obesity. A 2006 study raised concerns that Medicaid providers may not be aware of to what extent obesity services were covered or reimbursed under EPSDT, and that states' provider manuals did not often explain this coverage. In response, CMS officials said they intend to develop new guidance for states on this topic, but as of the time of our review had not done so.

For adults, CMS has recognized the value of preventive services by providing some related guidance to states. However, the guidance has not included the recommended preventive services that we examined.

To improve the extent to which children in Medicaid receive EPSDT services for which they are eligible, we are recommending that CMS ensure that state EPSDT programs are regularly reviewed. To support states' efforts to cover appropriate preventive services, we are recommending that CMS expedite its efforts to provide guidance to states on coverage of obesity-related services for Medicaid children, and consider the need to provide similar guidance regarding coverage of obesity screening and counseling, and other recommended preventive services, for adults.

In commenting on a draft of this report, CMS concurred with both of our recommendations, and commented that the agency recognizes the need for and the value of preventive services. In response to our recommendation that CMS expedite its effort to provide guidance on coverage of obesity-related services for Medicaid children, CMS committed to providing this guidance by the end of 2009. CMS also commented that it will remind states of the importance of ensuring that children receive a comprehensive well-child check up and of the importance of providing preventive services to adults. We incorporated technical comments from CMS as appropriate.

Background

The term preventive services refers to a range of services aimed at preventing and diagnosing serious health conditions among adults and children, as well as managing health conditions through early treatment to prevent them from worsening. Generally, preventive services are intended for the following three purposes:

- **Prevent a health condition from occurring at all.** Immunizations to prevent diseases such as influenza or pneumonia qualify as this first type of preventive service, called primary prevention.
- **Prevent or slow a condition's progression to a more significant health condition by detecting a disease in its early stages.** Mammograms to detect breast cancer and other screening tests to detect disease early are examples of this second type of preventive service, called secondary prevention.

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- **Prevent or slow a condition’s progression to a more significant health condition by minimizing the consequences of a disease.** Services that help management of existing health conditions, such as diet or exercise counseling to manage obesity or medication to manage high blood pressure, are examples of this third type of preventive service, called tertiary prevention.

Preventive services can help prevent or manage a number of serious health conditions, such as heart disease, diabetes, obesity, and cancer. For example, heart disease and stroke are leading causes of death and disability in the United States, and the risk of developing these conditions can be substantially reduced if high blood pressure and cholesterol—which can develop in children as well as adults—are detected early and managed through diet, exercise, medication, or a combination. Similarly, diabetes is a leading cause of blindness, renal disease, and amputation, and also contributes to heart disease. Early diagnosis and management of diabetes, by controlling levels of blood glucose, blood pressure, and cholesterol, can reduce the risk of these and other diabetes complications. Finally, the importance of obesity as a health problem for both children and adults in the United States is increasingly apparent. Obesity is associated with an increased risk of many other serious conditions, including heart disease, stroke, diabetes, and several types of cancer. Overweight and obese children are at risk of health problems during their youth, such as diabetes, and are more likely than other children to become obese adults. Intensive counseling about diet, exercise, or both can promote sustained weight loss for obese adults.

The federal government has established national health objectives and goals to monitor the health of the U.S. population, and several reflect the importance of preventive services. Healthy People 2010, coordinated by the Office of Disease Prevention and Health Promotion within HHS, is a statement of national health objectives designed to identify the most significant preventable threats to health and to establish national goals to reduce these threats to certain target levels. Some of the national goals established through Healthy People 2010 include

- reducing the proportion of children and adults who are obese,
- reducing the proportion of adults with high blood pressure and high blood cholesterol,
- reducing the overall rate of diabetes and increasing the proportion of adults with diabetes whose condition has been diagnosed, and

-
- increasing the proportion of children and adults who receive recommended preventive screening tests and immunizations.

Recent reviews of progress toward these goals, however, in some cases show no progress or even movement away from certain goals, underscoring the importance of continued attention to prevention.

State Medicaid Programs Must Cover Comprehensive Health Check Ups for Children

Under federal law, state Medicaid programs generally must cover EPSDT services for children under age 21.²⁴ A key component of EPSDT services is that it entitles children to coverage of well-child check ups, which may target health conditions for which growing children are at risk, such as obesity. An EPSDT well-child check up must include a comprehensive health and developmental history, a comprehensive unclothed physical exam, appropriate immunizations and laboratory tests, and health education.²⁵ EPSDT well-child check ups may be a vehicle to provide preventive services to children, such as measurement of height and weight, nutrition assessment and counseling, immunizations, blood pressure screening, and cholesterol and other appropriate laboratory tests.

State Medicaid programs must provide EPSDT services at intervals which meet reasonable standards of medical and dental practice as determined by the state and as medically necessary to determine the existence of a suspected illness or condition.²⁶ Accordingly, states either develop their own periodicity schedules, that is, age-specific timetables that identify when EPSDT well-child check ups and other EPSDT services should occur, or they may adopt a nationally recognized schedule, such as that of the American Academy of Pediatrics, which recommends well-child check ups once each year or more frequently, depending on age. State periodicity schedules for fiscal year 2006 generally specified multiple well-child check

²⁴42 U.S.C. §§ 1396a(a)(10)(A), 1396d(a)(4)(B). Absent additional CMS approval, state Medicaid programs must cover EPSDT services for individuals under age 21 who are eligible for Medicaid under categorically needy categories.

²⁵EPSDT services, in addition to well-child check ups, include: vision services, including diagnosis and treatment for vision defects such as eyeglasses; dental services, including relief of pain and infections, restoration of teeth, and maintenance of dental health; hearing services, including diagnosis, and treatment for defects in hearing such as hearing aids; and services necessary to correct or improve health conditions discovered through screenings, regardless of whether these services are typically covered by the state's Medicaid plan for other beneficiaries. See 42 U.S.C. § 1396d(r).

²⁶42 U.S.C. §§ 1396d(a)(4)(B), 1396d(r).

ups per year for children aged 0 through 2, one well-child check up per year for children aged 3 through 5, and a well-child check up every 1 to 2 years for children aged 6 through 20.

The Omnibus Budget Reconciliation Act of 1989 (OBRA 89) required the Secretary of HHS to set annual goals for children’s receipt of EPSDT services,²⁷ and CMS established a yearly goal that each state provide EPSDT well-child check ups to at least 80 percent of the Medicaid children in the state who should receive one, based on the state’s periodicity schedule. Under the authority of OBRA 89, CMS also requires that states submit annual EPSDT reports known as the CMS 416.²⁸ Along with other information, the CMS 416 captures the information used to measure progress toward the 80 percent goal. On the CMS 416, this information is termed the EPSDT participant ratio.

State Medicaid Programs Are Not Required to Cover Preventive Services for Adults

For Medicaid adults, Medicaid programs generally are not required to cover preventive services. States operate their Medicaid programs within broad federal requirements which generally require states to cover certain mandatory benefit categories, such as “physician services” and provide states the choice to cover a range of additional optional benefit categories, thereby creating programs that may differ from state to state. As federal Medicaid law does not define preventive services or include these services under a mandatory benefit category, states can opt to cover various preventive services for adults under different categories. For example, states may choose to cover certain preventive services as part of “preventive, diagnostic, and screening services,” an optional benefit category under Medicaid. They may also choose to cover other specific preventive services such as cholesterol tests under other mandatory or other optional benefit categories. CMS officials said they do not track the specific preventive services covered for adults by each state Medicaid program.

²⁷Pub. L. No. 101-239, § 6403, 103 Stat. 2106, 2262-64 (1989) (codified, as amended, at 42 U.S.C. § 1396d(r)(5)).

²⁸Beginning in 1990, OBRA 89 required state Medicaid programs to annually report to the Secretary of HHS information on EPSDT services including the number of children provided EPSDT screenings, the number of children referred for corrective treatment as a result of the screenings, the number of children receiving dental services, and the states’ results in meeting annual goals for children’s receipt of EPSDT services established by HHS. Pub. L. No. 101-239, § 6403, 103 Stat. 2106, 2262-64 (1989) (codified, as amended, at 42 U.S.C. § 1396a(a)(43)).

National Surveys Show That Certain Health Conditions Are Prevalent among Children and Adults in Medicaid, and Receipt of Recommended Preventive Services Varies Widely

National survey data suggest that children in Medicaid under age 21 are at risk of certain health conditions, particularly obesity, that can be identified or managed by preventive services, and many are not receiving well-child check ups. The same surveys suggest that Medicaid adults are also an at-risk population—nearly 60 percent were estimated to have at least one health condition we reviewed that can be identified or managed by preventive services—and their receipt of preventive services varied widely depending on the service.

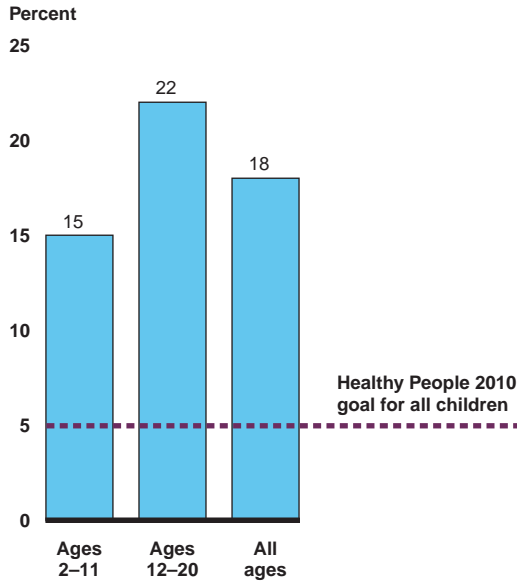
For Medicaid Children, Obesity Is a Health Condition of Great Concern: Nearly One in Five Examined Were Obese

Obesity is a serious health concern for children enrolled in Medicaid.²⁹ NHANES examinations conducted from 1999 through 2006 suggest that nearly one in five children in Medicaid aged 2 through 20 (an estimated 18 percent) were obese. These rates of obesity are well above the Healthy People 2010 target goal of reducing to 5 percent the proportion of children nationwide who are obese or overweight (see fig. 1). Furthermore, about half (an estimated 54 percent) of the Medicaid children who were obese, or their parents, reported that the child had not previously been diagnosed as overweight.³⁰ Among privately insured children, an estimated 14 percent were obese.

²⁹Obesity in children aged 2 through 19 was defined as having a BMI equal to or greater than 95th percentile of age and sex-specific BMI, based on CDC growth charts for the United States. Obesity in children age 20 was defined as having a BMI greater than or equal to 30. Girls who were pregnant were not included in the analysis.

³⁰See appendix I for more information on how NHANES collected this information.

Figure 1: Estimated Percentage of Children in Medicaid Aged 2 through 20 Who Were Obese Compared to the National Goal for 2010



Source: GAO analysis of 1999 through 2006 NHANES data and Healthy People 2010 target goals.

Note: The NHANES data for children in Medicaid also include children in CHIP, which we estimate to be about 16 percent of the total during 1999 through 2006. The Healthy People 2010 target goal is for 5 percent or less of all children to be overweight or obese.

The NHANES examinations also revealed that some children in Medicaid have other potentially serious health conditions that can be identified and managed by preventive services. Among Medicaid children aged 8 through 20 years, an estimated 4 percent had high blood pressure. Among Medicaid children aged 6 through 20 years, an estimated 10 percent had high

cholesterol.³¹ These rates were generally similar to estimates for privately insured children.

Among Medicaid Children, Almost Half Did Not Receive a Well-Child Check Up during a 2-Year Period

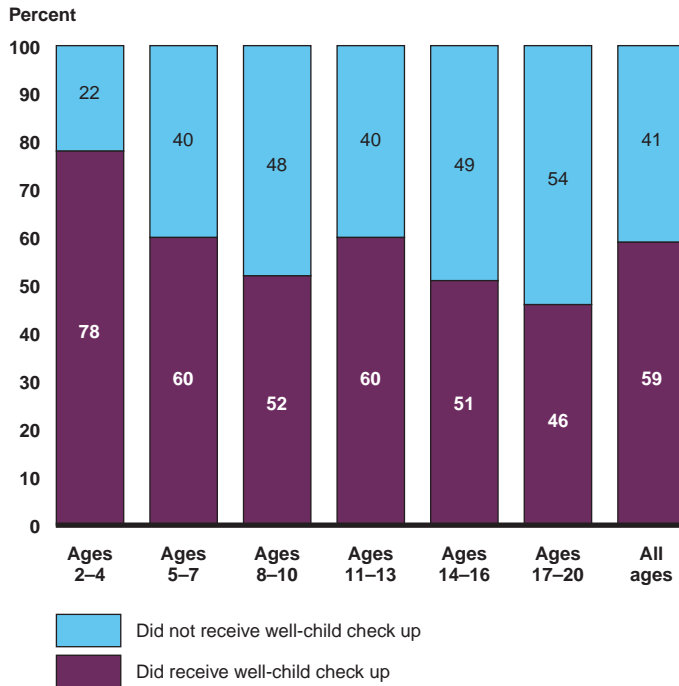
MEPS data from 2003 through 2006 suggest that many children in Medicaid do not regularly receive well-child check ups. Children in Medicaid are generally eligible for a well-child check up at least once every 1 to 2 years,³² but an estimated 41 percent of children in Medicaid aged 2 through 20 had not received a well-child check up during the previous 2-year period.³³ This proportion varied by the children's age: for example, an estimated 22 percent of children in Medicaid aged 2 through 4, 40 percent of children in Medicaid aged 5 through 7, and 48 percent of children in Medicaid aged 8 through 10 had not received a well-child check up during the previous 2 year period (see fig. 2). In comparison, the estimated proportions of privately insured children who had received a well-child check up were generally similar.

³¹These age ranges differ because NHANES surveys did not examine blood pressure in children younger than 8 or cholesterol in children younger than 6 during all survey years we analyzed (prior to the 2005-2006 survey, cholesterol was examined in children aged 3 and older). NHANES measured blood pressure up to four times during its physical examination. For our analysis, we calculated the average of the blood pressure measurements and defined high blood pressure for children aged 8 through 17 as equal to or greater than 95th percentile of age, height, and sex-specific average systolic or diastolic blood pressure, based on blood pressure tables from HHS's National Heart, Lung, and Blood Institute; for children aged 18 through 20, we defined high blood pressure as having an average systolic blood pressure of 140 millimeters of mercury (mmHg) or higher, or having an average diastolic blood pressure of 90 mmHg or higher. High total blood cholesterol for children aged 6 through 20 was defined as greater than or equal to 200 milligrams per deciliter (mg/dL). NHANES interviews did not determine whether children younger than 16 had been previously diagnosed with high blood pressure or whether children younger than 20 had been previously diagnosed with high cholesterol.

³²State ESPDT periodicity schedules for fiscal year 2006 generally included multiple well-child check ups per year for children aged 0 through 2, one well-child check up per year for children aged 3 through 5, and a well-child check up every 1 to 2 years for children aged 6 through 20. Five state periodicity schedules specified an interval greater than 2 years for some children aged 6 through 20.

³³This measure of well-child check ups was not restricted to EPSDT well-child check ups. See appendix II for more information on how well-child check ups were measured.

Figure 2: Estimated Percentage of Children in Medicaid Who Did and Did Not Receive a Well-Child Check Up during a 2-Year Period, by Age



Source: GAO analysis of 2003 through 2006 MEPS data.

Note: The MEPS data for children in Medicaid also include children in CHIP, which we estimate to be about 18 percent of the total during 2003 through 2006. MEPS collects information for each person in the household based on information provided by one adult member of the household.

Similarly, our analysis of MEPS data also showed that, for children in Medicaid, reported rates of receipt of certain specific preventive services that could occur during a well-child check up were correspondingly low. For example, an estimated 37 percent of children in Medicaid aged 2 through 20 had not had a blood pressure test, and an estimated 48 percent of children in Medicaid aged 2 through 17 had not received diet or exercise advice from a health care professional during the 2 years prior to the survey.³⁴ The data suggest, however, that most children in Medicaid aged 2 through 17—an estimated 88 percent—had their height and weight measured by a health care professional during the 2 years prior to the

³⁴MEPS did not collect comparable information on diet or exercise advice or height and weight measurement for individuals older than 17.

survey.³⁵ The estimated rates of receipt of blood pressure tests, height and weight measurement, and diet or exercise advice were generally similar for children in Medicaid and privately insured children.

Among Medicaid Adults, Nearly 6 in 10 Had One or More Health Conditions that Could Be Identified or Managed by Preventive Services

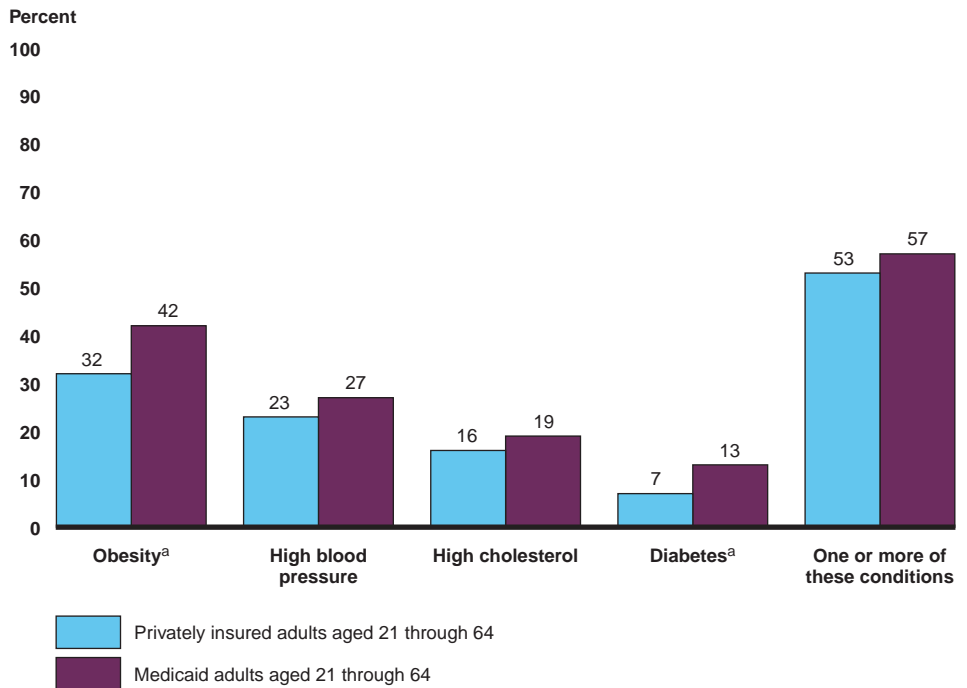
NHANES data suggest that a majority of adults in Medicaid aged 21 through 64 have at least one potentially serious health condition. An estimated 57 percent of Medicaid adults had obesity, diabetes, high cholesterol, high blood pressure, or a combination of these conditions.³⁶ Obesity was the most common of these health conditions; an estimated 42 percent of adults in Medicaid aged 21 through 64 were obese (see fig. 3).

As with children in Medicaid, the rate of obesity among adults aged 21 through 64 in Medicaid was well above national goals—the estimated 42 percent rate of obesity among Medicaid adults was nearly three times higher than the Healthy People 2010 target goal of 15 percent. The estimated rate of obesity among adults in Medicaid was also somewhat higher than the estimated rate among privately insured adults, which was 32 percent. Adults in Medicaid were almost twice as likely to have diabetes compared to privately insured adults: 13 percent of examined adults in Medicaid were estimated to have diabetes, compared to 7 percent of privately insured adults. Estimated rates of high blood pressure and high cholesterol were similar between both health insurance groups (see fig. 3).

³⁵MEPS asked about height and weight measurement separately, so the two measurements may not have been done at the same time (as necessary to calculate BMI to screen for obesity). It is unclear why a larger proportion of children reportedly had their height and weight measured compared to the proportions who received well-child check ups or other specific preventive services, but it is possible that height and weight measurement could be more likely to occur during sick visits to the doctor or at school.

³⁶NHANES measured blood pressure up to four times during its physical examination. For our analysis, we calculated the average of the blood pressure measurements and applied CDC's definition of high blood pressure: a patient's having an average systolic blood pressure of 140 mmHg or higher, or having an average diastolic blood pressure of 90 mmHg or higher. Following CDC, we additionally included adults taking blood pressure lowering medication in this category. We also used CDC definitions for the other health conditions we analyzed. Obesity for adults was defined as BMI greater than or equal to 30 (pregnant women were not included in the obesity figures). High total blood cholesterol for adults was defined as 240 mg/dL or more. Diabetes for adults was defined as fasting plasma glucose of 126 mg/dL or more or having been previously diagnosed with diabetes.

Figure 3: Estimated Prevalence of Certain Health Conditions among Adults Aged 21 through 64, by Health Insurance Status



Source: GAO analysis of 1999 through 2006 NHANES data.

Note: We also estimated the prevalence of these health conditions after adjusting for age differences between these two health insurance groups. After adjusting for age, the prevalence differences between the two insurance groups widened by a few percentage points for each health condition we analyzed—the percentage of privately insured adults with each condition was about 1 to 2 percentage points lower, and the percentage of Medicaid adults with each condition was about 1 to 4 percentage points higher.

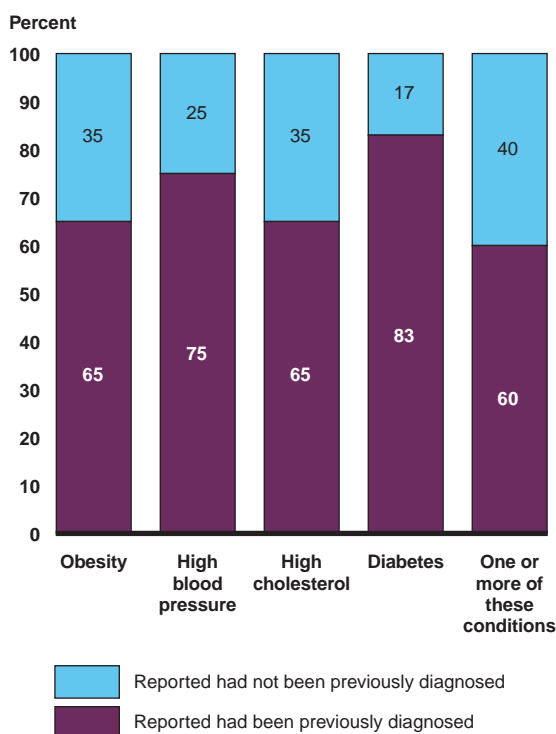
^aDifferences in rates of obesity and diabetes between health insurance groups were statistically significant at the 95 percent confidence level.

The NHANES interview data also suggest that a large proportion of adults in Medicaid found to have these health conditions may not have been aware of them prior to participation in the NHANES examination. An estimated 40 percent of adults in Medicaid found to have one or more of the health conditions we reviewed had at least one condition that they reported had not been previously diagnosed.³⁷ The percentage of adults in

³⁷Adults were asked during the NHANES interview if they had ever been told by a health care professional that they were overweight, or had high blood pressure, high cholesterol, or diabetes.

Medicaid who reported that their health condition had not been previously diagnosed varied by condition: for example, an estimated 17 percent of adults in Medicaid with diabetes reported that this condition had not been previously diagnosed, while an estimated 35 percent of those with high cholesterol reported that this condition had not been previously diagnosed (see fig. 4). These estimates were similar to those of privately insured adults.

Figure 4: Estimated Percentage of Adults Aged 21 through 64 in Medicaid with Health Conditions Who Reported Their Conditions Had or Had Not Been Diagnosed



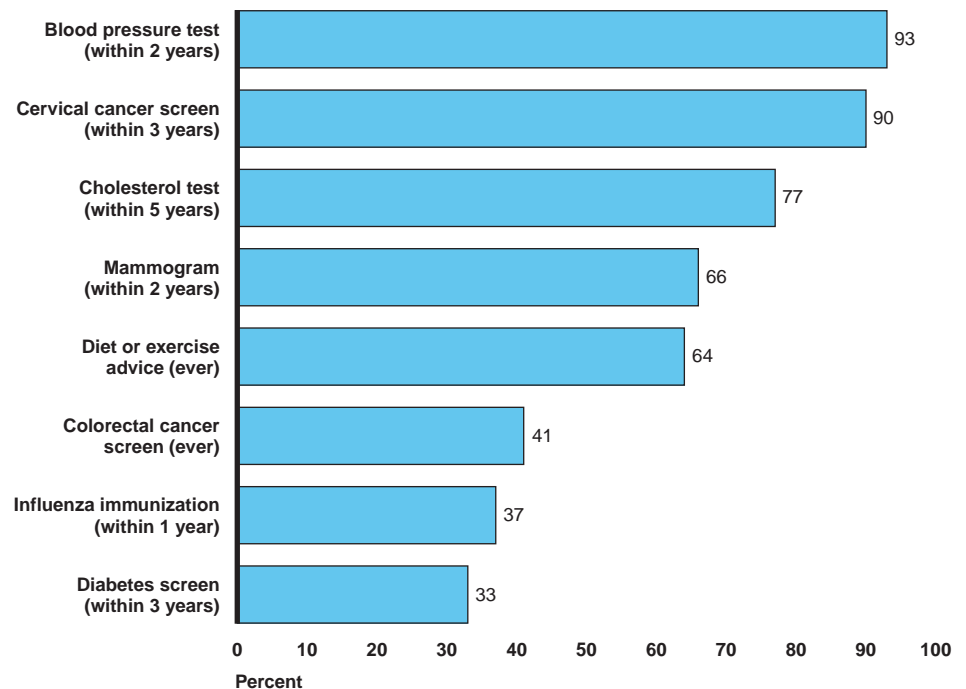
Source: GAO analysis of 1999 through 2006 NHANES data.

Medicaid Adults' Receipt of Recommended Preventive Services Varied Widely by Service

MEPS data suggest that Medicaid adults' receipt of recommended preventive services varied widely by service. For example, an estimated 93 percent of adults in Medicaid aged 21 through 64 received a blood pressure test during the 2 years prior to the survey. Similarly, an estimated 90 percent of women in Medicaid aged 21 through 64 received a cervical cancer screening during the 3 years prior to the survey. However, estimated rates of receipt were lower for other important recommended

preventive services. For example, only an estimated 41 percent of adults in Medicaid aged 50 through 64 had ever received a colorectal cancer screening test.³⁸ Similarly, estimates based on NHIS data suggest that only 33 percent of adults in Medicaid aged 21 through 64 with high blood pressure³⁹ had received a screening test for diabetes within the past 3 years⁴⁰ (see fig. 5).

Figure 5: Estimated Receipt of Certain Recommended Preventive Services among Adults in Medicaid



Source: GAO analysis of 2003 through 2006 MEPS data and 2006 NHIS data.

³⁸Colorectal cancer screening tests included sigmoidoscopy, colonoscopy, or stool tests.

³⁹As of March 2009, USPSTF recommended screening only adults with high blood pressure for diabetes.

⁴⁰Diabetes screening questions were not included in MEPS from 2003 through 2006, but were included in the 2006 NHIS; adults who had not previously been diagnosed with diabetes were asked if they had been tested for high blood sugar or diabetes in the past 3 years.

Notes: Analyses were restricted to those adults aged 21 through 64 that fit the age, gender, or health risk factor criteria for each recommended service (for example, analysis of receipt of mammograms was restricted to women aged 40 through 64; see appendix II for more information). Results for all services except diabetes screening were based on 2003 through 2006 MEPS data; the result for diabetes screening was based on 2006 NHIS data.

As compared to the privately insured adult population, MEPS and NHIS data show that a lower percentage of adults in Medicaid received certain recommended preventive services, in particular, mammograms, cholesterol tests, diabetes screening, or colorectal cancer screening, within recommended time frames. Medicaid and privately insured adults were estimated to be about equally likely to receive recommended blood pressure tests, diet or exercise advice, and influenza immunizations within recommended time frames.

For Children in Medicaid, Most State Medicaid Programs Reported Monitoring and Promoting the Provision of Preventive Services

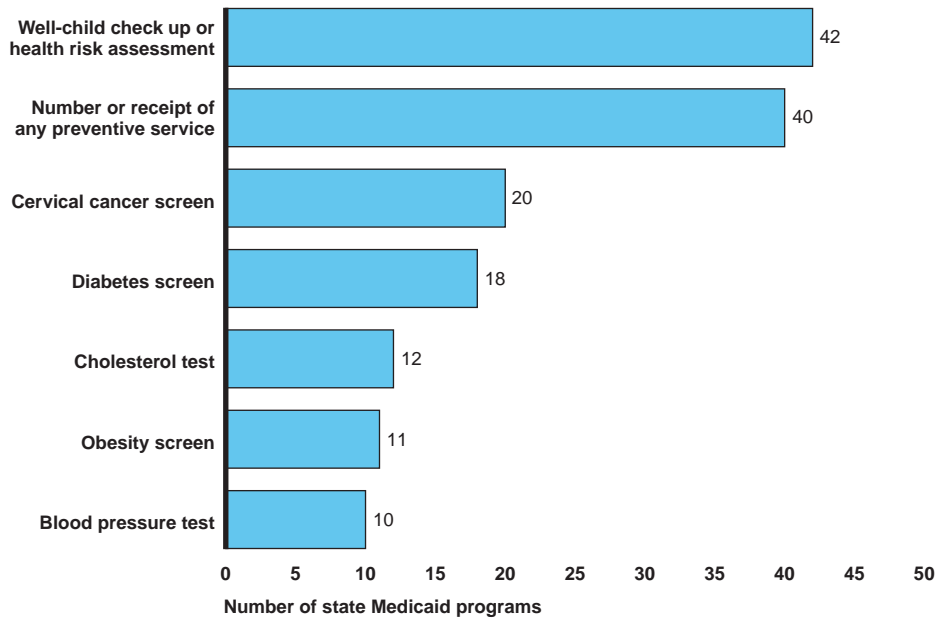
Most state Medicaid programs reported on our survey that they monitored and set goals for children's utilization of certain preventive services. Most states also reported undertaking multiple initiatives since 2004 to promote preventive services.

Most State Medicaid Programs Reported Monitoring and Setting Goals for Medicaid Children's Utilization of Preventive Services

In response to our survey, most of the 51 state Medicaid programs reported that they monitored utilization of one or more preventive services by children in Medicaid. For example, when asked whether they monitored children's utilization of Medicaid well-child check ups or health risk assessments, 42 states reported doing so.⁴¹ States less frequently reported monitoring utilization of specific services that could be provided during these well-child check ups, such as blood pressure tests or obesity screenings (see fig. 6).

⁴¹States are required to collect data and report to CMS on EPSDT services such as well-child check ups, but according to officials states are not required to use these data as part of any monitoring efforts.

Figure 6: Number of State Medicaid Programs Reporting that They Monitored Children’s Utilization of Specific Preventive Services



Source: GAO analysis of survey of state Medicaid directors, conducted between October 2008 and February 2009.

When asked the reasons why they were not conducting more monitoring of children’s utilization of preventive services in Medicaid (beyond federally required monitoring through the CMS 416), the top two reasons states chose were “administrative burden” and “technology challenges.”

In addition to monitoring specific preventive services, about two-thirds of state Medicaid programs reported that the state had established its own target goals or benchmarks for children’s utilization of preventive services, in addition to the CMS goal that each state provide EPSDT well-child check ups to at least 80 percent of Medicaid children in a state who should receive one, based on the state’s periodicity schedule.⁴² For example, 33 states reported they had established utilization goals of their own, separate from CMS’s 80 percent goal, for children’s well-child check ups. Twenty-six states reported goals for the total number of any preventive services received, and 12 states reported utilization goals for at least one

⁴²The survey asked if state Medicaid programs had established utilization goals other than the federal 80 percent goal, but did not ask what the specific utilization goals were.

specific preventive service such as obesity screening, diabetes screening, blood pressure tests, cholesterol tests, or cervical cancer screening. States that had established goals often reported, however, that not all of their goals were being met. For example, of the states with a goal for children's utilization of well-child check ups, 42 percent reported that the goal was not being met. The top two reasons states cited as reasons they believed they were not meeting utilization goals were beneficiaries missing appointments and beneficiaries or their families not being concerned about receiving preventive services. A few states also mentioned difficulties with tracking service utilization.

Although most state Medicaid programs reported monitoring and setting goals for children's utilization of preventive services, these efforts differ by type of service delivery system; programs more often monitor or set goals for services provided to children in managed care than for services provided to children in fee-for-service delivery systems.⁴³ For example, of the 37 states reporting that at least some children in Medicaid were enrolled in managed care, 33 (89 percent) reported monitoring well-child check ups provided through managed care organizations. In contrast, of the 47 programs reporting that at least some children received services through a fee-for-service delivery system, 26 (55 percent) reported monitoring utilization of well-child check ups provided by fee-for-service providers.⁴⁴ Similarly, goals for children's utilization of preventive services were most often targeted to managed care organizations. For example, 25 of 37 states with children enrolled in Medicaid managed care organizations (68 percent) reported having established goals for the managed care organizations' provision of well-child check ups, compared to 16 of 47 Medicaid programs (34 percent) with children in fee-for-service.

⁴³The survey defined managed care to include capitated managed care arrangements only. Administrative arrangements such as Primary Care Case Management, Disease Management, and Administrative Services Organizations were defined as fee-for-service.

⁴⁴Of the 51 state Medicaid programs, 4 reported exclusively using managed care to provide services to children and 14 reported exclusively using a fee-for-service system to provide services to children. The remaining 33 reported using a combination of managed care and fee-for-service delivery systems to provide services to Medicaid children in the state.

Most State Medicaid Programs Reported Multiple Initiatives Aimed at Improving Provision of Preventive Services for Children in Medicaid and Viewed Certain Initiatives as Successful

Most state Medicaid programs (47), reported conducting multiple initiatives since 2004 to improve providers' provision of preventive services to children in Medicaid, most commonly

- educating pediatric providers about coverage of preventive services (42 states),
- increasing payment rates for pediatric providers for office visits or specific preventive services (37 states),
- streamlining payment processing (29 states), and
- starting a provider advisory panel (29 states).

States that had implemented one or more of the above four initiatives often viewed them as successful. About half of the states implementing them reported that the initiative had resulted in some improvement or major improvement. Most of the other half reported that they did not know the extent of improvement; only a few states reported that any of the initiatives had not resulted in improvement.⁴⁵

State Medicaid programs also reported conducting several types of initiatives directed at Medicaid beneficiaries, such as encouraging children's use of preventive services through direct mail or telephone outreach, and many also reported initiatives specifically targeted at reducing obesity in Medicaid children. For example, 37 states reported initiatives to educate providers to conduct obesity screening or counseling for Medicaid children, and 12 states reported implementing family-based childhood obesity prevention programs.

⁴⁵Three programs reported that increasing payment rates for pediatric providers had not resulted in improvement; two reported that starting a provider advisory panel had not resulted in improvement; and one reported that streamlining payment processing had not resulted in improvement. No programs reported that educating providers about coverage had not resulted in improvement.

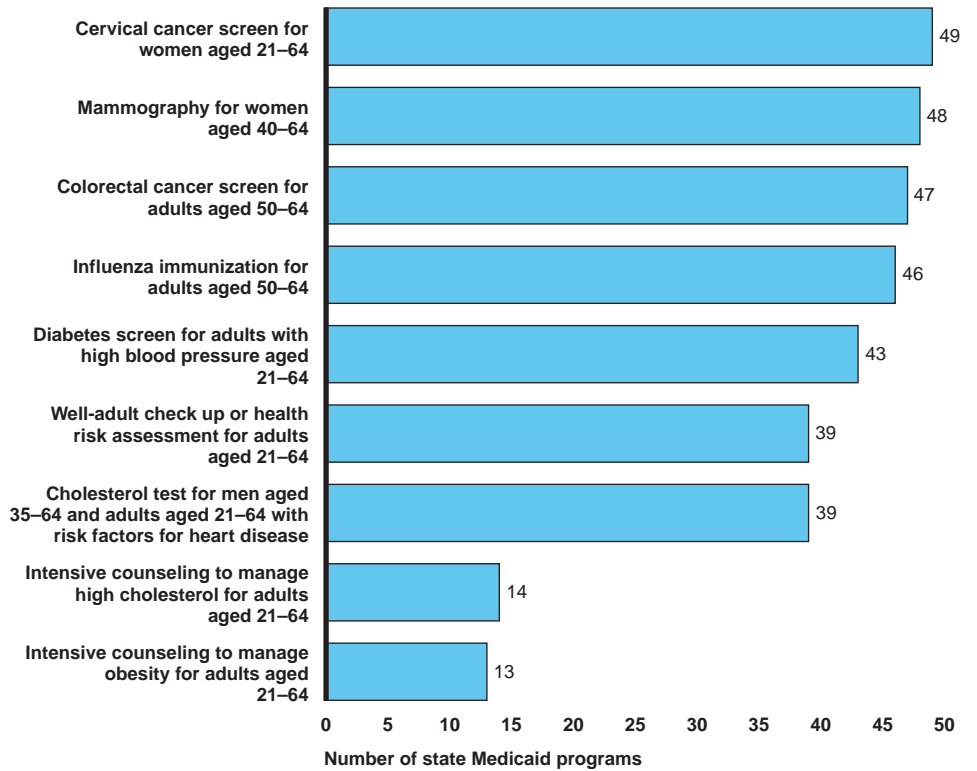
For Adults, Most State Medicaid Programs Reported Covering Some but Not All Recommended Preventive Services

Most state Medicaid programs reported that they choose to cover some but not all of the preventive services we asked about on our survey. Of the eight recommended services we asked about, the services that were most commonly reported as covered for adults were cervical cancer screenings and mammograms, which were covered by 49 and 48 states, respectively.⁴⁶ Four additional preventive services were reported as covered for adults by three-quarters or more of the 51 states. These four services were diabetes screenings, cholesterol tests, colorectal cancer screenings, and influenza immunizations. The remaining two recommended services—intensive counseling for adults with obesity and intensive counseling for adults with high cholesterol—were reported as covered for adults by less than one-third of states. Thirteen states (25 percent) reported covering intensive counseling for obese adults and 14 states (27 percent) reported covering intensive counseling for adults with high cholesterol (see fig. 7).⁴⁷ Thirty-nine states reported covering well-adult check ups or health risk assessments for adults, which provide an opportunity for delivering other recommended preventive services such as blood pressure tests and obesity screenings. (See appendix III for more detailed survey results.)

⁴⁶Some state Medicaid programs reported that certain preventive services were not covered under their fee-for-service program but were covered by the states' Medicaid managed care organization(s)—services covered under managed care but not fee-for-service are not included in this discussion, but are noted in table 8 in appendix III.

⁴⁷Seventeen other states that did not report covering intensive counseling for obese adults did report covering other services that, while not explicitly recommended by the USPSTF, are aimed at managing obesity—such as obesity medication or nutrition assessment and counseling. A minority of states reported additional efforts specifically aimed at addressing adult obesity. For example, 15 states reported promoting weight reduction programs for adult beneficiaries, and 17 reported educating providers to conduct obesity counseling for adults in Medicaid as needed. Thirty states that did not report covering intensive counseling for adults with high cholesterol reported covering medication or a nutrition assessment and counseling for adults with high cholesterol.

Figure 7: Number of State Medicaid Programs that Reported Covering Certain Recommended Preventive Services for Adults and Health Risk Assessments or Well-Adult Check Ups



Source: GAO analysis of survey of state Medicaid directors, conducted between October 2008 and February 2009.

Notes: Well-adult check ups or health risk assessments for adults, while not explicitly recommended by the USPSTF, provide an opportunity for delivering recommended preventive services such as blood pressure tests and obesity screenings. Figure numbers do not include states that reported that a service was covered under managed care but not under fee-for-service.

In examining a selected, non-generalizable sample of 18 state Medicaid programs' Medicaid managed care contracts, we found wide variation in the extent to which the contracts delineated coverage expectations for specific preventive services.⁴⁸ As we have previously reported, specific and comprehensive contract language helps ensure that managed care organizations know their responsibilities and can be held accountable for

⁴⁸We did not evaluate these Medicaid managed care arrangements to determine whether managed care organizations were covering services for Medicaid enrollees. We limited our review to the contract provisions we identified to provide a description of such provisions.

delivering services.⁴⁹ According to one expert on Medicaid managed care contracts, state Medicaid programs run the risk that managed care organizations may not cover certain services the program intends to cover if Medicaid managed care contracts lack specific and comprehensive contract language related to covered services. Three of the contracts did not specifically refer to any of the preventive services that state Medicaid programs reported were required to be covered by managed care organizations in those states. By contrast, two contracts specifically referred to all of the preventive services that the state reported covering.

CMS Oversight of the Provision of Preventive Services Primarily Focuses on Children's Services, and Gaps in Oversight Remain

CMS oversight is primarily focused on children's receipt of EPSDT services, and consists largely of collecting state EPSDT reports. CMS has conducted few reviews of EPSDT programs, including those that CMS 416 reports indicate have low participant ratios—the information used to assess progress toward CMS's goal that each state provide EPSDT well-child check ups to at least 80 percent of the Medicaid children in the state who should receive one, based on the state's periodicity schedule. For adults in Medicaid, CMS has issued some guidance related to preventive services and shared some best practices.

For Children in Medicaid, CMS Oversight Focuses Largely on Collecting State EPSDT Reports; CMS Reviews Few EPSDT Programs, Including Those with Low Participant Ratios

CMS oversight of preventive services for children in Medicaid centers on the annual collection of the required CMS 416 report from each state Medicaid program on the provision of EPSDT services for children in Medicaid. We reported in 2001 that CMS 416 reports were often not timely or accurate,⁵⁰ but since that time, CMS officials told us they had taken steps to improve the underlying data, and state and national health association officials concurred that the data has improved. For example, we reported in 2001 that underlying data for the CMS 416 may not be accurate in part because of incomplete data on service utilization by children in managed care. In 2007, we reported that officials from several states and national health associations stated that, although the CMS 416 was limited in its usefulness for oversight, the quality and completeness of the underlying data that states used to prepare the CMS 416, including the

⁴⁹See [GAO-01-749](#).

⁵⁰See [GAO-01-749](#).

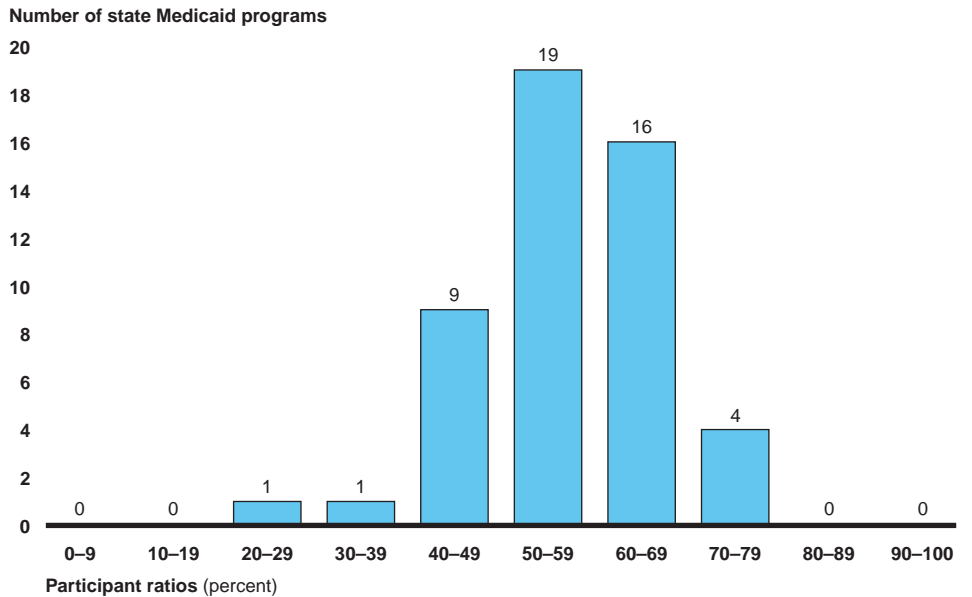
data collected from managed care organizations, had improved since 2001.⁵¹

State Medicaid programs' CMS 416 reports continue to show gaps in the provision of EPSDT services to Medicaid children. CMS uses the participant ratio from the CMS 416 to measure progress toward CMS's goal that each state provide EPSDT well-child check ups to at least 80 percent of the Medicaid children in the state who should receive one, based on the state's periodicity schedule. By contrast, in fiscal year 2007, the national average participant ratio among 51 states reporting on the CMS 416 was 58 percent, and no state reported a ratio of 80 percent or more.⁵² Individual states reported ratios ranging from 25 to 79 percent, and 11 states had ratios under 50 percent (see fig. 8). Participant ratios from fiscal years 2000 through 2006 are generally consistent with those in fiscal year 2007, though there is some variation between years. For example, in fiscal year 2006, 2 states reported participant ratios greater than 80 percent, and 15 states reported ratios under 50 percent.

⁵¹See *Medicaid: Concerns Remain about Sufficiency of Data for Oversight of Children's Dental Services*, GAO-07-826T (Washington, D.C.: May 2, 2007).

⁵²One state reported a ratio of greater than 100 percent, which would imply that more children received a check up than were expected to receive a check up. We did not include this state's ratio in this discussion; according to CMS officials, ratios greater than 100 percent could not be correct.

Figure 8: Variation in State Medicaid Programs' Fiscal Year 2007 Participant Ratios



Source: GAO analysis of 2007 CMS 416 reports.

Notes: The participant ratio reflects the percentage of children who received at least one EPSDT well-child check up or service that they should have received during the year—CMS's goal for the participant ratio is 80 percent. Only 50 states are shown because 1 state reported a participant ratio of greater than 100 percent; as noted earlier, CMS officials told us that this ratio cannot be correct.

Although the completeness and accuracy of the CMS 416 data may have improved in recent years, according to agency officials, the CMS 416 is still limited for oversight purposes. For example, the form does not differentiate between the delivery of services for children in managed care and fee-for-service programs or illuminate possible factors contributing to low receipt of services. We reported in 2007 that many officials from national health associations told us the CMS 416 did not provide enough information to allow CMS to assess the effectiveness of states' EPSDT programs. One official who works with many state Medicaid agencies told us that states do not generally use the CMS 416 to inform their monitoring and quality improvement activities.

In addition to collecting the CMS 416, CMS officials also oversee the provision of preventive services to children in Medicaid through occasional reviews of individual state EPSDT programs, which are conducted by CMS regional offices; we previously reported such reviews were helpful in illuminating policy and process concerns as well as

innovative practices of states.⁵³ The reviews look at how states meet statutory requirements—such as ensuring that all eligible Medicaid beneficiaries under 21 are informed of and have access to EPSDT services⁵⁴—and are conducted with the intent of identifying deficiencies and providing recommendations and guidance to states to help improve their programs. For example, one review assessed a state’s performance in ensuring that managed care organizations and providers understood the benefits available under EPSDT and their respective responsibilities for providing these services. Another review investigated whether a state had developed an appropriate periodicity schedule and examined coordination of children’s care in the context of a managed care service delivery system. CMS’s EPSDT reviews have also examined data collection and reporting—for example, one review examined the extent to which a state collected CMS 416 data in accordance with instructions and used the data to measure progress and define areas for improvement.

EPSDT program reviews can and have resulted in recommendations and corrective action plans intended to improve the provision of EPSDT services. The reviews have also highlighted best practices that could be emulated by other state Medicaid programs.

- Recommendations—which are, according to CMS officials, implemented at a state’s discretion—have included actions such as assessing potential impediments to timely access to EPSDT services, ensuring that providers are aware of how to access current data in order to monitor their efforts, and developing a state standard for timely access to services. For example, one review found that providers seemed confused about the health plans’ requirements for prior authorization and specialty referrals; CMS recommended that the state assess whether the providers’ understanding of prior authorization procedures was impeding timely access to EPSDT services and, if so, ensure that training was provided to correct the misunderstanding.

⁵³See [GAO-01-749](#).

⁵⁴Under federal law, state Medicaid programs must inform all eligible Medicaid beneficiaries under age 21 of the availability of EPSDT services and the need for age-appropriate immunizations. State Medicaid programs also must provide EPSDT screening services when requested and arrange for necessary corrective treatment for conditions identified during screenings. 42 U.S.C. § 1396a(a)(43).

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- Corrective action plans—upon which states must act, according to CMS officials—have included requirements for states to improve the process of informing beneficiaries, providers, and community partners about the support services available through Medicaid and how to access them, to develop an appropriate methodology to report data for the CMS 416, and to identify and implement strategies to increase vaccination of children against pneumonia.
 - Best practices that reviews have identified have included a statewide EPSDT outreach effort to ensure that beneficiaries are aware of the availability of Medicaid services, a dance program that addresses childhood obesity, and the provision of Medicaid instructions and written materials in a patient’s primary language.

With the exception of reviews specifically focused on dental services, CMS conducted only 11 EPSDT program reviews between April 2001 and June 2009, and few states with low participant ratios had been reviewed.⁵⁵ For example, eight states reported participant ratios below 50 percent on all of their annual CMS 416 reports from fiscal years 2000 through 2007. Of those eight states, six had not had their EPSDT programs reviewed by CMS between April 2001 and June 2009.⁵⁶ Although CMS has developed an EPSDT review guide to promote consistency, according to CMS officials there is no CMS directive or requirement for the CMS regional offices to perform these reviews, and CMS has not established criteria or a schedule for performing regular reviews.

CMS oversight of preventive services for children in Medicaid also includes providing policy guidance to state Medicaid programs, such as through its *State Medicaid Manual* and other guidance; for example, CMS officials reported that they intend to draft guidance for states on coverage of obesity services as part of EPSDT services, but as of the time of our review had not done so. A 2006 study raised concerns that Medicaid

⁵⁵In 2007 through 2008, CMS conducted 17 reviews that were specifically focused on EPSDT dental services for children. These reviews have resulted in numerous recommendations to states, with regard to issues such as providing information about the importance and availability of dental services, reimbursing pediatricians and other non-dentists who provide oral health services, and establishing incentives to encourage dental students to practice in areas of need.

⁵⁶Similarly, 30 states reported participant ratios below 50 percent on at least one of their CMS 416 reports for fiscal years 2000 through 2007; 6 of these 30 had their EPSDT program reviewed.

providers may not be aware to what extent obesity services were covered or reimbursed under EPSDT, and that states' provider manuals did not often explain this coverage. For example, the study found that state Medicaid manuals did not specifically discuss coverage of nutritional counseling, and that states may not have been correctly compensating providers whose practices emphasized appropriate obesity interventions. The study recommended that states take several steps, including clarifying the proper coding and payment procedures for obesity prevention and treatment services.⁵⁷ As of the time of our review, CMS officials told us that they intend to draft policy guidance to address these concerns and that the guidance would suggest methods for reporting and charging for obesity-related services, but that they had not yet begun drafting this guidance.

For Adults in Medicaid, CMS Has Recognized the Value of Preventive Services and Provided Oversight by Issuing Some Related Guidance for State Medicaid Programs

Unlike CMS's oversight of children's EPSDT services, CMS is not required to collect utilization data from states on adults' receipt of services and—according to officials—does not conduct program reviews as it does for EPSDT services for children in Medicaid. CMS has, however, issued guidance for state Medicaid programs through State Medicaid Director Letters (SMDL) on topics relevant to adult preventive services.⁵⁸ For example, one letter issued in 2004 provided guidance on how states could cover certain services, known as disease management services, to manage chronic health conditions such as diabetes in their Medicaid programs and discussed how new disease management models could be implemented by states. As of March 2009, CMS had not issued similar coverage guidance on other recommended preventive services we reviewed for adults, such as obesity screening and intensive counseling.

Although CMS has issued some guidance through SMDLs, several state Medicaid programs expressed that additional guidance could be helpful. In response to an open-ended survey question on support state Medicaid programs would like from CMS related to preventive services, 12 states reported they would like more technical assistance and guidance from

⁵⁷See "Policy Brief: Strategies for Improving Access to Comprehensive Obesity Prevention and Treatment Services for Medicaid-Enrolled Children." Sara Wilensky, Ramona Wittington, and Sara Rosenbaum. School of Public Health and Health Services, Department of Health Policy, George Washington University, October 2006.

⁵⁸Through the SMDLs, CMS provides states with guidance and clarification on current information pertaining to Medicaid policy, Medicaid data issues, and CHIP issues.

CMS. For example, one state reported that the state would like clarification of restrictions to coverage of preventive services and another reported it would like advice on how to monitor improvements in utilization of preventive services. In addition, four states expressed interest in CMS sharing best practices of other states. As of March 2009, there were 24 promising practices for Medicaid and CHIP on the CMS Web site; 8 of these pertained to preventive services for adults.

Conclusions

The prevalence of obesity and other health conditions among Medicaid beneficiaries nationally suggests that more can and should be done to ensure this vulnerable population receives recommended preventive services. Although Medicaid children generally are entitled to coverage of EPSDT services that may identify and address health conditions such as obesity, both national survey data and states' 416 reports to CMS suggest that children's receipt of EPSDT services is well below national goals. Further, providers may not understand that services to screen for and manage obesity are covered under EPSDT. State-specific reviews of EPSDT programs have helped identify needed improvements but too few have been done. For adults, states' coverage of preventive services generally is not required, but USPSTF recommends certain preventive services for specific ages and risk groups, and such services can be covered by Medicaid if states choose to do so. National survey examination data suggest that the provision of recommended services could benefit adults in Medicaid, as 6 in 10 adults in Medicaid have one or more potentially preventable health conditions.

States and CMS have acted in recent years to improve the provision and monitoring of preventive services for the Medicaid population. CMS intends to develop policy guidance for obesity services for Medicaid children under EPSDT, though as of the time of our review, had not done so. However, gaps in provision of services remain. An estimated 41 percent of Medicaid children aged 2 through 20 participating in a nationally representative survey had not received a well-child check up during a 2-year period, and receipt of recommended preventive services in the adult Medicaid population varied widely, depending on the service. Improved access to preventive services for Medicaid beneficiaries will take a concerted effort by the federal government and states.

Recommendations for Executive Action

To improve the provision of preventive services to the Medicaid population, we recommend that the Administrator of CMS take the following two actions:

- Ensure that state EPSDT programs are regularly reviewed to identify gaps in provision of EPSDT services to children and to identify needed improvements.
- Expedite current efforts to provide policy guidance on coverage of obesity-related services for Medicaid children, and consider the need to provide similar guidance regarding coverage of obesity screening and counseling, and other recommended preventive services, for adults.

Agency Comments

We provided a draft of this report to HHS for comment, and CMS responded on behalf of HHS. (See app. IV.) CMS concurred with both of our recommendations, and commented that the agency recognizes the need for and the value of preventive services, and will remind states of the importance of ensuring that children receive a comprehensive well-child check up, and of the importance of providing preventive services to adults.

- CMS agreed with our recommendation that the agency ensure state EPSDT programs are regularly reviewed. CMS committed to establishing a training program and protocol for the state reviews and technical assistance by the end of the year and also commented that it intends to conduct related efforts, including developing a comprehensive work plan to establish a regular schedule for reviewing state policy and implementation efforts and reviewing and revising the CMS 416.
- CMS also agreed with our recommendation that the agency expedite efforts to provide guidance to states on coverage of obesity-related services for Medicaid children, and consider the need to provide similar guidance regarding coverage of obesity screening and counseling, and other recommended preventive services, for adults. CMS committed to providing guidance on obesity-related services for children through an SMDL by the end of the calendar year. CMS also highlighted the agency's involvement in several initiatives related to childhood obesity at the national level and the agency's support of the development of new Healthcare Effectiveness Data and Information Set measures that address obesity.

CMS also provided technical comments, which we incorporated as appropriate.

As agreed with your office, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies of this report to the Secretary of HHS and other interested parties. In addition, the report will be available at no charge on GAO's Web site at <http://www.gao.gov>. If you or your staff members have any questions about this report, please contact me at (202) 512-7114 or cackleya@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff members who made major contributions to this report are listed in appendix V.

Sincerely yours,

A handwritten signature in black ink that reads "Alicia Puente Cackley". The signature is written in a cursive, flowing style.

Alicia Puente Cackley
Director, Health Care

Appendix I: NHANES Analysis

The National Health and Nutrition Examination Survey (NHANES), conducted multiple times since the early 1960s by the Department of Health and Human Services's (HHS) National Center for Health Statistics of the Centers for Disease Control and Prevention (CDC), is designed to provide nationally representative estimates of the health and nutrition status of the noninstitutionalized civilian population of the United States. NHANES provides information on civilians of all ages. Prior to 1999, three periodic surveys were conducted. Since 1999, NHANES has been conducted annually. For this study, we examined data from 1999 through 2006 on children aged 2 through 20 and adults aged 21 through 64. We grouped NHANES data from 1999 through 2006 in order to include a sufficient number of survey participants to provide a reliable basis for assessing the extent of health conditions in the Medicaid population. To assess the reliability of NHANES data, we interviewed knowledgeable officials, reviewed relevant documentation, and compared the results of our analyses to published data. We determined that the NHANES data were sufficiently reliable for the purposes of our engagement.

Our analysis of NHANES data focused on physical examinations and laboratory tests for a variety of health conditions. As part of an overall physical examination of survey participants, trained medical personnel generally obtain a blood sample and administer laboratory tests such as measurement of total blood cholesterol and glucose levels, obtain height and weight measurements, and conduct three or four blood pressure readings. To analyze these data, we considered two categories of survey participants based on their health insurance status at the time of the survey, as reported during the interview section of the survey: Medicaid beneficiaries and the privately insured.⁵⁹ We do not present results for the uninsured, those with other forms of government health insurance, such as Medicare (we excluded adults enrolled in both Medicare and Medicaid), and those who provided no information on their health insurance status. For the 1999 through 2004 period, the NHANES Medicaid category for children includes some children enrolled in the State Children's Health Insurance Program (CHIP). In the 2005 through 2006 NHANES data, children enrolled in CHIP can be differentiated from children enrolled in Medicaid, but we grouped these children together for consistency with the previous time period. We estimate that about 84 percent of these children

⁵⁹Health insurance status of children was reported by an adult in the household. Survey participants who reported both Medicaid and private insurance were included in the private insurance category. Survey participants who reported both Medicaid and Medicare insurance coverage were not included in the analysis.

were enrolled in Medicaid with the remainder enrolled in CHIP between 1999 and 2006.⁶⁰

For children, we used the NHANES data to estimate the percentage who were obese, the percentage with high blood pressure, the percentage with high blood cholesterol, and the percentage of obese children who had not been diagnosed as overweight (see tables 1 and 2).

- **Obesity.** NHANES data included measures of the height and weight of children aged 2 through 20. Obesity in children aged 2 through 19 was defined as having a body mass index (BMI) equal to or greater than 95th percentile of age and sex-specific BMI, based on CDC growth charts for the United States; obesity in children age 20 was defined as having a BMI of 30 or higher. Girls who were pregnant were not included in the obesity analysis. Children or their parents were also asked if the child had been diagnosed as overweight prior to participating in the survey.⁶¹
- **High Blood Pressure.** NHANES data included up to four blood pressure readings for children aged 8 through 20. We calculated average systolic

⁶⁰The NHANES category for adults could also include some adults enrolled in CHIP. In 2007, GAO reported that in June 2006, there were 349,000 adults enrolled in CHIP. See GAO, *State Children's Health Insurance Program: Program Structure, Enrollment and Expenditure Experiences, and Outreach Approaches for States That Cover Adults*, GAO-08-50 (Washington, D.C.: Nov. 26, 2007).

⁶¹Parents of overweight children aged 2 through 11 years were asked, "Has a doctor or health professional ever told you that [child] was overweight?" Parents of those aged 12 through 15 years were asked, "Has a doctor or health professional ever told [child] that he/she was overweight?" Those aged 16 through 20 years were asked, "Has a doctor or health professional ever told you that you were overweight?" Information was not collected from children under age 16 or their parents regarding whether they had been told by a health care professional about the child's high blood pressure. Information was not collected from children under age 20 or their parents regarding whether they had been told by a health care professional about the child's high cholesterol.

and diastolic blood pressure based on the second, third, and fourth readings.⁶² High blood pressure in children aged 8 through 17 was defined as equal to or greater than 95th percentile of age, height, and sex-specific average systolic or diastolic blood pressure, based on blood pressure tables from HHS's National Heart, Lung, and Blood Institute. High blood pressure in children aged 18 through 20 was defined as having an average systolic blood pressure reading of 140 millimeters of mercury (mmHg) or higher, or having an average diastolic blood pressure of 90 mmHg or higher.

- **High Blood Cholesterol.** NHANES data included measures of total blood cholesterol in children aged 6 through 20.⁶³ High total blood cholesterol in children aged 6 through 20 was defined as greater than or equal to 200 milligrams per deciliter (mg/dL).

For adults aged 21 through 64, we used NHANES data to estimate the percentage who were obese, the percentage with high blood pressure, the percentage with high blood cholesterol, the percentage with diabetes, and the percentage with a combination of these conditions. We used CDC definitions of these health conditions. Of adults with each of these conditions, we also estimated the percentage who reported that their condition had not been diagnosed by a health care professional prior to the survey (see tables 3 and 4).

- **Obesity.** NHANES examinations of adults included height and weight measurements. Obesity for adults was defined as having a BMI of 30 or higher (pregnant women were not included in the obesity analysis).
- **High Blood Pressure.** NHANES examinations of adults included up to four blood pressure readings. Average systolic and diastolic blood

⁶²The systolic and diastolic blood pressure averages were calculated as described in the NHANES documentation: If only one blood pressure reading was obtained, that reading is the average. If there is more than one blood pressure reading, the first reading is always excluded from the average. If only two blood pressure readings were obtained, the second blood pressure reading is the average. If all diastolic readings were zero, then the average would be zero. Exception: If there is one diastolic reading of zero and one (or more) with a number above zero, the diastolic reading with zero is not used to calculate the diastolic average. If two out of three diastolic readings are zero, the one diastolic reading that is not zero is used to calculate the diastolic average.

⁶³NHANES surveys examined cholesterol in children aged 3 and older prior to the 2005 survey and in children aged 6 and older in 2006. We therefore only used data for children aged 6 through 20 in our analysis.

pressure readings were calculated as described for children (see footnote 62). High blood pressure for adults was defined as having an average systolic blood pressure reading of 140 mmHg or higher, having an average diastolic blood pressure reading of 90 mmHg or higher, or taking blood pressure lowering medication.

- **High Blood Cholesterol.** NHANES laboratory tests for adults included measurement of blood cholesterol. High total blood cholesterol for adults was defined as 240 mg/dL or more.
- **Diabetes.** A subsample of NHANES participants, those whose examination was scheduled in the morning, were asked to fast prior to having their blood drawn. Laboratory tests for this subsample of NHANES participants included measurement of fasting plasma glucose. Diabetes for adults was defined as fasting plasma glucose of 126 mg/dL or more, or having previously been diagnosed with diabetes.

For all estimated percentages for children and adults, we calculated a lower and upper bound at the 95 percent confidence level (there is a 95 percent probability that the actual percentage falls within the lower and upper bounds), of beneficiaries in each of the two insurance categories using raw data and the appropriate sampling weights and survey design variables. We used the standard errors of the estimates to calculate whether any differences between the two insurance groups were statistically significant at the 95 percent confidence level.⁶⁴

⁶⁴For adults, we also estimated the percentages after adjusting for age differences between the two health insurance groups. After adjusting for age, the prevalence differences between the two insurance groups widened by a few percentage points for each health condition we analyzed—the percentage of privately insured adults with each condition was about 1 to 2 percentage points lower, and the percentage of Medicaid adults with each condition was about 1 to 4 percentage points higher.

Table 1: Estimated Percentage of Children Aged 2 through 20 with Certain Health Conditions, by Health Insurance Status

	Percentage	95 percent confidence interval	
		Lower bound	Upper bound
Obesity: all children (2-20)			
Private insurance	14.23 ^a	12.88	15.59
Medicaid	17.77 ^a	15.63	19.90
Obesity: children 2-11			
Private insurance	12.62 ^a	10.99	14.25
Medicaid	15.47 ^a	13.15	17.79
Obesity: children 12-20			
Private insurance	15.84 ^a	14.13	17.55
Medicaid	22.08 ^a	18.62	25.53
High blood pressure: all children (8-20)			
Private insurance	3.05	2.42	3.68
Medicaid	4.38	2.81	5.96
High blood pressure: children 8-11			
Private insurance	3.40	2.23	4.56
Medicaid	5.48	2.77	8.19
High blood pressure: children 12-20			
Private insurance	2.90	2.18	3.62
Medicaid	3.63	2.17	5.09
High blood cholesterol: all children (6-20)			
Private insurance	10.91	9.82	12.00
Medicaid	9.80	8.02	11.57
High blood cholesterol: children 6-11			
Private insurance	11.13	9.36	12.89
Medicaid	10.06	7.11	13.00
High blood cholesterol: children 12-20			
Private insurance	10.78	9.17	12.39
Medicaid	9.54	7.71	11.37

Source: GAO analysis of 1999 through 2006 NHANES data.

Notes: The Medicaid category included some children enrolled in CHIP. Of the total Medicaid and CHIP population of children, about 16 percent were enrolled in CHIP during the 1999 through 2006 period. Obesity for children aged 2 through 19 was defined as having a BMI equal to or greater than 95th percentile of age and sex-specific BMI, based on CDC growth charts for the United States. Obesity for children aged 20 was defined as having a BMI of 30 or higher. Girls who were pregnant were not included in the obesity analysis. NHANES measured blood pressure up to four times during its physical examination. For our analysis, we calculated the average of the blood pressure measurements and defined high blood pressure in children aged 8 through 17 as equal to or greater than 95th percentile of age, height, and sex-specific average systolic or diastolic blood pressure, based on blood pressure tables from HHS's National Heart, Lung, and Blood Institute. For children aged 18 through 20 we defined high blood pressure as having an average systolic blood pressure reading of 140 mmHg or higher or having an average diastolic blood pressure of 90 mmHg or higher. Blood pressure was not measured in children younger than age 8. High blood cholesterol in children aged 6 through 20 was defined as equal to or greater than 200 mg/dL. Blood cholesterol was not measured in children younger than age 6 in the 2004 through 2005 NHANES or in children younger than age 3 in the 1999 through 2004 NHANES.

^aThe difference between the percentage for children covered by Medicaid compared to the percentage for children covered by private insurance is statistically significant at the 95 percent confidence level.

Table 2: Estimated Percentage of Obese Children Aged 2 through 20 Who Had Not Been Previously Diagnosed as Overweight, by Health Insurance Status

	Percentage	95 percent confidence interval	
		Lower bound	Upper bound
All children (2-20)			
Private insurance	65.39 ^a	61.49	69.30
Medicaid	54.18 ^a	48.09	60.26
Children 2-11			
Private insurance	76.02 ^a	71.32	80.72
Medicaid	58.44 ^a	50.95	65.93
Children 12-20			
Private insurance	56.97	51.79	62.15
Medicaid	48.57	39.16	57.99

Source: GAO analysis of 1999 through 2006 NHANES data.

Notes: The Medicaid category included some children enrolled in CHIP. Of the total Medicaid and CHIP population of children, about 16 percent were enrolled in CHIP during the 1999 through 2006 period. Parents of children aged 2 through 11 years were asked, "Has a doctor or health professional ever told you that [child] was overweight?" Parents of those aged 12 through 15 years were asked, "Has a doctor or health professional ever told [child] that he/she was overweight?" Those aged 16 through 20 years were asked, "Has a doctor or health professional ever told you that you were overweight?" Obesity for children aged 2 through 19 was defined as having a BMI equal to or greater than 95th percentile of age and sex-specific BMI, based on CDC growth charts for the United States. Obesity for children age 20 was defined as having a BMI of 30 or higher. Girls who were pregnant were not included in the analysis.

^aThe difference between the percentage for children covered by Medicaid compared to the percentage for children covered by private insurance is statistically significant at the 95 percent confidence level.

Table 3: Estimated Percentage of Adults Aged 21 through 64 with Certain Health Conditions, by Health Insurance Status

	Percentage	95 percent confidence interval	
		Lower bound	Upper bound
Obesity			
Private insurance	31.95 ^a	30.18	33.72
Medicaid	41.96 ^a	36.99	46.93
High blood pressure			
Private insurance	23.21	21.84	24.57
Medicaid	26.68	22.78	30.58
High blood cholesterol			
Private insurance	16.31	15.19	17.42
Medicaid	18.87	15.14	22.60
Diabetes			
Private insurance	7.28 ^a	6.13	8.43
Medicaid	12.62 ^a	8.43	16.82
One or more of the above conditions			
Private insurance	52.91	50.56	55.26
Medicaid	57.00	49.67	64.33

Source: GAO analysis of 1999 through 2006 NHANES data.

Notes: Obesity for adults was defined as BMI of 30 or higher (pregnant women were not included in the obesity analysis). NHANES measured blood pressure up to four times during its physical examination. For our analysis, we calculated the average of the blood pressure measurements and applied CDC’s definition of high blood pressure for adults as having an average systolic blood pressure reading of 140 mmHg or higher, or having an average diastolic blood pressure reading of 90 mmHg or higher. Following CDC, we additionally included adults taking blood pressure lowering medication in this category. We also used CDC’s definitions of the other health conditions examined. High total blood cholesterol for adults was defined as 240 mg/dL or more. Diabetes for adults was defined as fasting plasma glucose of 126 mg/dL or more, or previously diagnosed with diabetes. Examination sampling weights were used for analyses of obesity, blood pressure, and blood cholesterol. Diabetes subsample weights were used for analyses of diabetes and one or more conditions. We also estimated the prevalence of these health conditions after adjusting for age differences between these two health insurance groups. After adjusting for age, the prevalence differences between the two insurance groups widened by a few percentage points for each health condition we analyzed—the percentage of privately insured adults with each condition was about 1 to 2 percentage points lower, and the percentage of Medicaid adults with each condition was about 1 to 4 percentage points higher.

^aThe difference between the percentage for adults covered by Medicaid compared to the percentage for adults covered by private insurance is statistically significant at the 95 percent confidence level.

Table 4: Of Adults Aged 21 through 64 Found to Have Health Conditions: Estimated Percentage Who Had Not Been Diagnosed by a Health Care Professional, by Health Insurance Status

	Percentage	95 percent confidence interval	
		Lower bound	Upper bound
Obesity			
Private insurance	30.18	28.39	31.97
Medicaid	34.90	28.00	41.79
High blood pressure			
Private insurance	26.31	23.50	29.11
Medicaid	24.60	15.14	34.05
High blood cholesterol			
Private insurance	36.36	32.75	39.97
Medicaid	34.64	23.77	45.51
Diabetes			
Private insurance	23.71	17.56	29.86
Medicaid	16.71	6.50	26.91
One or more of the above conditions			
Private insurance	35.49	32.97	38.02
Medicaid	39.60	32.57	46.63

Source: GAO analysis of 1999 through 2006 NHANES data.

Notes: Obesity for adults was defined as BMI of 30 or higher (pregnant women were not included in the obesity analysis). NHANES measured blood pressure up to four times during its physical examination. For our analysis, we calculated the average of the blood pressure measurements and applied CDC's definition of high blood pressure for adults as having an average systolic blood pressure reading of 140 mmHg or higher, or having an average diastolic blood pressure reading of 90 mmHg or higher. Following CDC, we additionally included adults taking blood pressure lowering medication in this category. We also used CDC's definitions of the other health conditions examined. High total blood cholesterol for adults was defined as 240 mg/dL or more. Diabetes for adults was defined as fasting plasma glucose of 126 mg/dL or more, or previously diagnosed with diabetes. Adults were asked if they had ever been told by a health care professional that they were overweight or had high blood pressure, high cholesterol, or diabetes. Examination sampling weights were used for analyses of obesity, blood pressure, and blood cholesterol. Diabetes subsample weights were used for analyses of diabetes and one or more conditions. No differences between health insurance groups were statistically significant at the 95 percent confidence level.

Appendix II: MEPS and NHIS Analyses

The Medical Expenditure Panel Survey (MEPS), administered by the Department of Health and Human Services's (HHS) Agency for Healthcare Research and Quality (AHRQ), collects data on the use of specific health services. We analyzed results from the MEPS household component, which collects data from a sample of families and individuals in selected communities across the United States, drawn from a nationally representative subsample of households that participated in the prior year's National Health Interview Survey (NHIS, a survey conducted by the National Center for Health Statistics at the Centers for Disease Control and Prevention (CDC)). We pooled MEPS data from multiple years to yield sample sizes large enough to generate reliable estimates for the Medicaid subpopulation. Our analysis was based on data from surveys conducted in 2003 through 2006, the most recent data available. We supplemented our MEPS analysis with analysis of data from the 2006 NHIS survey, which covered a question of interest that was not available in MEPS. It was possible to use one year of the NHIS data because the sample size is larger than MEPS. To determine the reliability of the MEPS and NHIS data, we spoke with knowledgeable agency officials and reviewed related documentation and compared our results to published data. We determined that the MEPS and NHIS data were sufficiently reliable for the purposes of our engagement.

The MEPS household interviews feature several rounds of interviewing covering 2 full calendar years. MEPS is continuously fielded; each year a new sample of households is introduced into the study. MEPS collects information for each person in the household based on information provided by one adult member of the household. This information includes demographic characteristics, self-reported health conditions, reasons for medical visits, use of medical services including preventive services, and health insurance coverage. We analyzed responses to MEPS questions about children's medical visits and children's and adults' receipt of preventive services. NHIS collects information about demographic characteristics, health conditions, use of medical services, and health insurance coverage. We analyzed responses to an NHIS question on adults' receipt of a diabetes screening test.⁶⁵ As with the National Health and Nutrition Examination Survey (NHANES) data described in appendix I, we analyzed results for children under age 21⁶⁶ and adults aged 21 through 64,

⁶⁵MEPS interviews from 2003 through 2006 included a section on diabetes, but did not include a question on screening tests for diabetes.

⁶⁶Information was not always available on receipt of services for children younger than 2 or older than 17.

divided into two categories on the basis of their health insurance status. Unless noted, we used age and insurance status variables that were measured during the same interview as the questions about preventive services.⁶⁷ Similar to NHANES, the Medicaid category in MEPS included children enrolled in the State Children's Health Insurance Program (CHIP). We estimate that 82 percent were enrolled in Medicaid with the remainder enrolled in CHIP between 2003 and 2006. Our NHIS analysis was limited to adults.

For children, we analyzed data for several different MEPS questions to examine children's receipt of well-child check ups and specific preventive services (see tables 5 and 6).

- **Well-Child Check Up.** The MEPS survey included questions about office based and outpatient medical visits for children aged 0 through 20. We considered a medical visit to be a well-child check up if the visit was in person and if the respondent reported that the reason for the visit was either: a well-child check up, a general examination, or shots and immunizations. Using sampling weights, for each health insurance category, we estimated the percentage of children aged 2 through 20 at the end of the survey's 2-year period who had received one or more well-child check ups during the survey's 2-year period. We used insurance status variables that were measured at the end of the survey's 2-year period. We used MEPS longitudinal weights to facilitate this analysis of medical visits that occurred during the 2-year survey period. The pooled 2-year survey periods analyzed were 2003 through 2004, 2004 through 2005, and 2005 through 2006.
- **Blood Pressure Test.** MEPS included questions about whether children aged 2 through 20 had their blood pressure measured by a doctor or health care professional, and if so, how long ago.⁶⁸ Using sampling weights, we

⁶⁷Individuals were categorized based on their health insurance status at one point in time, and health insurance status was not necessarily constant during the time periods over which we examined their receipt of services. Our analysis shows whether individuals enrolled in Medicaid and private insurance at a given point of time were in need of preventive services. When we compared our analysis of well-child check ups to an analysis that only included children who were consistently enrolled in Medicaid and private insurance during the entire period we examined, we did not find significant differences in results.

⁶⁸Separate questions were asked for children 2 through 17 and individuals aged 18 and older. We combined responses for children aged 2 through 17 with responses for those aged 18 through 20.

estimated the percentage of children in each health insurance category that had their blood pressure measured during the 2 years prior to the question being asked.

- **Diet or Exercise Advice.** MEPS included questions about whether children aged 2 through 17 had (1) received advice about eating healthy from a doctor or health care professional, and if so, how long ago, and (2) received advice about exercise, sports, or physically active hobbies from a doctor or health care professional, and if so, how long ago. Using sampling weights, we estimated the percentage of children in each health insurance category that had received advice about either a healthy diet or exercise, during the 2 years prior to the question being asked.
- **Height and Weight Measurement.** MEPS included questions about whether children aged 0 through 17 had (1) had their height measured by a doctor or health care professional, and if so how long ago; and (2) had their weight measured by a doctor or health care professional, and if so, how long ago. Using sampling weights, we estimated the percentage of children in each health insurance category that had both their height and their weight measured during the two years prior to the question being asked. Height and weight were not necessarily measured at the same time, and these measurements did not necessarily take place in the context of a body mass index (BMI) calculation or obesity screening.

For adults aged 21 through 64, we analyzed data for several different MEPS questions that related to receipt of recommended preventive services⁶⁹ (see table 7). It was not possible to determine whether respondents received these services for screening purposes, as recommended by the United States Preventive Services Task Force

⁶⁹The United States Preventive Services Task Force (USPSTF) assesses scientific evidence regarding the effectiveness of a broad range of preventive services to address clinical categories such as cancer, heart and vascular diseases, infectious diseases, injury and violence, and metabolic, nutritional, and endocrine conditions. USPSTF recommendations for adult preventive services that were in effect as of March 2009 included: blood pressure tests for all adults; cholesterol tests for men aged 35 and older and adults aged 20 and older with risk factors for coronary heart disease; obesity screening for all adults, including intensive counseling and behavioral interventions to promote sustained weight loss for obese adults; intensive diet counseling for adults with high cholesterol; diabetes screening for adults with high blood pressure; cervical cancer screening for sexually active women; mammography for women aged 40 and older; and colorectal cancer screening for adults aged 50 through 75. The USPSTF also recognizes the importance of immunizations in primary disease prevention, but does not review new evidence on immunizations in order not to duplicate the work of the CDC's Advisory Committee on Immunization Practices (ACIP). ACIP recommends influenza immunization for adults aged 50 and older.

(USPSTF), as opposed to receiving them for purposes of diagnosing a suspected health condition. Nevertheless, the estimates are useful in indicating the maximum percentages of adults who may have received certain recommended preventive services. For example, if 40 percent of adults aged 50 through 64 reported receiving a colorectal cancer screening, some may have received the screen for diagnostic purposes after experiencing symptoms of colorectal cancer. Regardless, in this example, 60 percent of adults in this age range—for whom colorectal cancer screening is recommended by the USPSTF—did not receive a colorectal cancer screening for any reason.

- **Blood Pressure Test.** MEPS included questions about whether adults had their blood pressure measured by a doctor or health care professional, and if so, how long ago. Using sampling weights, we estimated the percentage of adults aged 21 through 64 in each health insurance category who reported that they had their blood pressure measured during the 2 years prior to the question being asked.
- **Cholesterol Test.** MEPS included questions about whether adults had their cholesterol tested by a doctor or health care professional, and if so, how long ago. Using sampling weights, we estimated the percentage of adults in each health insurance category for whom a cholesterol test was recommended, who reported that they had their cholesterol tested during the five years prior to the question being asked. USPSTF recommends cholesterol tests for men aged 35 and older, and men and women aged 20 and older with health conditions that are risk factors for heart disease. We used available information about risk factors for heart disease that was self-reported by survey participants to determine whether a cholesterol test was recommended on this basis; these risk factors were diabetes, high blood pressure, or BMI greater than or equal to 30.
- **Mammogram.** MEPS included questions about whether women had a mammogram, and if so, how long ago. Using sampling weights, we estimated the percentage of women aged 40 through 64 in each health insurance category who reported that they had a mammogram during the 2 years prior to the question being asked.
- **Cervical Cancer Screening.**⁷⁰ MEPS included questions about whether women had a cervical cancer screening, and if so, how long ago. Using

⁷⁰In this report, we use the term cervical cancer screening to refer to a Pap test. MEPS questions used the term Pap test.

sampling weights, we estimated the percentage of women aged 21 through 64 in each health insurance category who had not reported having a hysterectomy and who reported that they had a cervical cancer screening during the 3 years prior to the question being asked.

- **Colorectal Cancer Screening.** MEPS included questions about whether adults had a colonoscopy, a sigmoidoscopy, or a stool test, and if so, how long ago. Using sampling weights, we estimated the percentage of adults aged 50 through 64 in each health insurance category who reported that they had ever had one of these tests.
- **Influenza Immunization.** MEPS included questions about whether adults had received a flu shot, and if so, how long ago. Using sampling weights, we estimated the percentage of adults aged 50 through 64 in each health insurance category who reported that they had a flu shot during the year prior to the question being asked.
- **Diet or Exercise Advice.** MEPS included questions about whether adults had received advice from a doctor or health care professional to (1) eat fewer high fat or high cholesterol foods, or (2) exercise more. Using sampling weights, we estimated the percentage of adults aged 21 through 64 in each health insurance category, whose self reported height and weight corresponded to a BMI of 30 or higher, who reported that they had ever received either diet or exercise advice. This type of advice does not fulfill the USPSTF recommendation that obese adults receive sustained intensive obesity counseling, but it provides an indicator of the maximum proportion of adults who could have received such counseling.
- **Diabetes Screening.** MEPS interviews from 2003 through 2006 did not ask about adults' receipt of diabetes screening tests, but the 2006 NHIS did; adults who had not previously been diagnosed with diabetes were asked if they had been tested for high blood sugar or diabetes in the last 3 years. Using NHIS sampling weights, we estimated the percentage of adults aged 21 through 64 in each health insurance category, who reported having high blood pressure and who reported that they had received a screening test for diabetes during the 3 years prior to answering the question. USPSTF recommends diabetes screening for adults with high blood pressure.

For all estimated percentages for children and adults, we calculated a lower and upper bound at the 95 percent confidence level using the appropriate sampling weights and survey design variables. We used the standard errors of the estimates to calculate if any differences between the

insurance groups were statistically significant at the 95 percent confidence level.

Table 5: Estimated Percentage of Children Who Received a Well-Child Check Up During a 2-Year Period, by Health Insurance Status

	Percentage	95 percent confidence interval	
		Lower bound	Upper bound
All children (2–20)			
Private insurance	63.66	60.65	66.67
Medicaid	59.25	55.50	63.01
Children 2-4			
Private insurance	86.65 ^a	82.63	90.67
Medicaid	77.54 ^a	71.45	83.64
Children 5-7			
Private insurance	70.02 ^a	64.52	75.51
Medicaid	59.81 ^a	53.15	66.48
Children 8-10			
Private insurance	53.03	46.52	59.53
Medicaid	52.02	44.43	59.61
Children 11-13			
Private insurance	59.99	53.03	66.95
Medicaid	59.63	51.35	67.92
Children 14-16			
Private insurance	65.17	58.53	71.82
Medicaid	51.49	44.30	58.68
Children 17-20			
Private insurance	53.06	47.18	58.95
Medicaid	45.92	37.15	54.68

Source: GAO analysis of 2003 through 2006 MEPS data.

Notes: The Medicaid category included some children enrolled in CHIP. Of the total Medicaid and CHIP population of children, about 18 percent were enrolled in CHIP during the 2003 through 2006 period. Age ranges refer to children’s ages at the end of the 2-year period analyzed. The pooled set of 2-year periods analyzed were calendar years 2003 through 2004, 2004 through 2005, and 2005 through 2006. Medical visits were considered well-child check ups if the reason given for the visit was either a well-child check up, a general examination, or shots and immunizations.

^aThe difference between the percentage for children covered by Medicaid compared to the percentage for children covered by private insurance is statistically significant at the 95 percent confidence level.

Table 6: Estimated Percentage of Children Who Received Certain Preventive Services, by Health Insurance Status

	Percentage	95 percent confidence interval	
		Lower bound	Upper bound
Blood pressure test, within 2 years			
<i>Children aged 2-20</i>			
Private insurance	68.48 ^a	66.97	69.99
Medicaid	63.03 ^a	61.33	64.72
Diet or exercise advice, within 2 years			
<i>Children aged 2-17</i>			
Private insurance	53.95	52.16	55.74
Medicaid	52.27	50.59	53.94
Height and weight measured, within 2 years			
<i>Children aged 2-17</i>			
Private insurance	90.36 ^a	89.23	91.50
Medicaid	88.16 ^a	87.05	89.28

Source: GAO analysis of 2003 through 2006 MEPS data.

Note: The Medicaid category included some children enrolled in CHIP. Of the total Medicaid and CHIP population of children, about 18 percent were enrolled in CHIP during the 2003 through 2006 period.

^aThe difference between the percentage for children covered by Medicaid compared to the percentage for children covered by private insurance is statistically significant at the 95 percent confidence level.

Table 7: Estimated Percentage of Adults Who Received Certain Preventive Services, by Health Insurance Status

	Percentage	95 percent confidence interval	
		Lower bound	Upper bound
Blood pressure test, within 2 years			
<i>Men and women aged 21-64</i>			
Private insurance	92.58	92.19	92.97
Medicaid	92.79	91.67	93.91
Cholesterol test, within 5 years			
<i>Men aged 35-64; men and women aged 21-64 with risk factors for heart disease^a</i>			
Private insurance	85.34 ^d	84.57	86.11
Medicaid	76.89 ^d	74.96	78.82
Cervical cancer screen, within 3 years^b			
<i>Women aged 21-64, no hysterectomy</i>			
Private insurance	92.18 ^d	91.55	92.80
Medicaid	90.22 ^d	88.59	91.85
Mammogram, within 2 years			
<i>Women aged 40-64</i>			
Private insurance	80.09 ^d	79.09	81.10
Medicaid	65.87 ^d	62.52	69.21
Colorectal cancer screen, ever			
<i>Men and women aged 50-64</i>			
Private insurance	56.21 ^d	54.79	57.63
Medicaid	41.23 ^d	37.01	45.44
Influenza immunization, within 1 year			
<i>Men and women aged 50-64</i>			
Private insurance	36.66	35.45	37.87
Medicaid	37.17	33.43	40.92
Diet or exercise advice, ever			
<i>Obese men and women aged 21-64^c</i>			
Private insurance	65.65	64.51	66.79
Medicaid	63.65	60.76	66.54
Diabetes screen, within 3 years			
<i>Men and women aged 21-64 with high blood pressure, not previously diagnosed with diabetes</i>			
Private insurance	45.56 ^d	42.99	48.14
Medicaid	32.57 ^d	26.23	38.90

Source: GAO analysis of 2003 through 2006 MEPS and 2006 NHIS data.

Notes: Preventive services other than diabetes screening were examined using 2003 through 2006 MEPS data. Diabetes screening was examined using 2006 NHIS data. Populations analyzed for each preventive service were based on USPSTF recommendations as of March 2009; these recommendations had been in effect as of 2003 or earlier.

^aRisk factors for heart disease were based on available self reported health conditions of MEPS participants—high blood pressure, height and weight corresponding to a BMI of 30 or higher, and diabetes.

^bMEPS questions use the term Pap test to refer to a cervical cancer screen.

^cObesity was defined as having a BMI of 30 or higher.

^dThe difference between the percentage for adults covered by Medicaid compared to the percentage for adults covered by private insurance is statistically significant at the 95 percent confidence level.

Appendix III: State Medicaid Director Survey Results

To gather information about state Medicaid programs' coverage, oversight, and promotion of preventive services, we surveyed 51 state Medicaid directors (in the 50 states and the District of Columbia). The survey was conducted from October 29, 2008, through February 6, 2009. It included questions on the coverage of preventive services for adults, the methods used for oversight of preventive services for children and adults, including monitoring of utilization of specific services, utilization goals, including whether or not goals were being met, state promotion efforts and specific initiatives aimed at preventive services, and the federal support provided to state Medicaid programs for the provision of preventive services. Many of the survey questions asked state Medicaid directors to consider specific Medicaid populations such as children in Medicaid under age 21 or adults in Medicaid age 21 and over, or beneficiaries enrolled in managed care organizations (MCO) or fee-for-service (FFS). We developed the content of the survey based on interviews with officials from the Centers for Medicare & Medicaid Services (CMS) and state Medicaid programs, and a review of documents from CMS and external reports. Some content and changes were made after pre-testing with state Medicaid programs.

Many of our survey questions focused on specific preventive services. For example, the survey included questions about states' coverage for adults, and monitoring for adults and children, of several specific preventive services including well-child and well-adult check ups, health risk assessments, diabetes screening, cholesterol tests, cervical cancer screening, mammography, colorectal cancer screening, and influenza immunization.⁷¹ We asked about these specific preventive services because they were related to recommended preventive services and to the services we examined in our analysis of Medical Expenditure Panel Survey (MEPS) and National Health Interview Survey (NHIS) data (see appendix II). We did not ask about coverage of services for children because the children's Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) benefit is required to be covered under Medicaid.

To establish the reliability of our survey data, we spoke with knowledgeable agency officials in developing the survey, pre-tested the survey questions, and followed up with state Medicaid officials to achieve a 100 percent response rate. Survey responses were submitted electronically. In a few cases, when states gave responses that were

⁷¹Monitoring questions regarding certain preventive services (for example, colorectal cancer screening) were not applicable for children.

unclear or signaled the question was not completed, we followed up with states to clarify their responses in order to ensure that their responses contained the most accurate and current information available. We determined that the data submitted by states were sufficiently reliable for the purposes of our engagement.

Table 8: Number of State Medicaid Programs Reporting Covering Certain Preventive Services

Service	Number of states
Cervical cancer screening for women aged 21-64 ^a	49
Mammography for women aged 40-64	48
Colorectal cancer screening for adults aged 50-64 ^a	47
Influenza vaccine for adults aged 50-64 ^b	46
Diabetes screening for adults aged 21-64 with high blood pressure ^c	43
Well-adult check up or health risk assessment for adults aged 21-64 ^d	39
Cholesterol test for men aged 35-64 and adults aged 21-64 with risk factors for heart disease ^c	39
Intensive counseling to manage high cholesterol for adults aged 21-64	14
Intensive counseling to manage obesity for adults aged 21-64	13

Source: GAO analysis of survey of state Medicaid directors, conducted between October 2008 and February 2009.

^aOne other state Medicaid program reported that this service was not covered under FFS but was covered by MCOs.

^bTwo other state Medicaid programs reported that this service was not covered under FFS but was covered by MCOs.

^cThree other state Medicaid programs reported that this service was not covered under FFS but was covered by MCOs.

^dWell-adult check ups or health risk assessments for adults, while not explicitly recommended by the USPSTF, provide an opportunity for delivering recommended preventive services such as blood pressure tests and obesity screenings. Four other state Medicaid programs reported that this service was not covered under FFS but was covered by MCOs.

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Table 9: Number of State Medicaid Programs Reporting Covering Services to Manage Identified Health Conditions

Service	Nutrition assessment and counseling	Condition-specific intensive counseling	Medication	Equipment for monitoring and control	Other	None of these are covered
High blood pressure	16 (31%)	14 (27%)	42 (82%)	16 (31%)	6 (12%)	5 (10%)
High cholesterol	17 (33%)	14 (27%)	42 (82%)	4 (8%)	6 (12%)	6 (12%)
Diabetes	25 (49%)	21 (41%)	43 (84%)	35 (69%)	7 (14%)	3 (6%)
Obesity	16 (31%)	13 (25%)	17 (33%)	4 (8%)	14 (27%)	11 (22%)

Source: GAO analysis of survey of state Medicaid directors, conducted between October 2008 and February 2009.

Table 10: Information State Medicaid Programs Reported Reviewing to Monitor Utilization of Preventive Services

Type of information	Number of states reviewing information
CMS 416 reports	45 (88%)
Healthcare Effectiveness Data and Information Set (HEDIS) or HEDIS-like data	44 (86%)
External quality review reports	40 (78%)
Fee-for-service claims or encounter data	38 (75%)
Consumer Assessment of Healthcare Providers and Systems data	36 (71%)
Encounter data required to be provided by MCOs	34 (67%)
Contract deliverables of a Primary Care Case Manager or Administrative Services Organization	14 (27%)
Other ^a	12 (24%)

Source: GAO analysis of survey of state Medicaid directors, conducted between October 2008 and February 2009.

^aOther information state Medicaid programs reported reviewing to monitor utilization of preventive services included vaccine and lead screening claims and pay for performance data. One state reported that they did not review information to monitor utilization of preventive services.

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Table 11: Number of State Medicaid Programs Reporting Monitoring Utilization of Specific Services for Adults and Children in Medicaid, by Service Delivery Model

Service	Children in MCOs^a	Adults in MCOs^b	Children in FFS^c	Adults in FFS^d
Total number or receipt of any preventive service	32 (86%)	22 (59%)	26 (55%)	17 (35%)
Well-child or well-adult check up	33 (89%)	11 (41%)	26 (55%)	6 (20%)
Health risk assessment	15 (41%)	11 (65%)	9 (19%)	5 (21%)
Blood pressure test	10 (27%)	15 (44%)	1 (2%)	4 (8%)
Obesity screening	11 (30%)	6 (18%)	2 (4%)	3 (6%)
Cholesterol test	10 (27%)	21 (66%)	4 (9%)	9 (25%)
Diabetes screening	14 (38%)	24 (67%)	7 (15%)	10 (25%)
Cervical cancer screening	15 (41%)	26 (70%)	11 (23%)	15 (33%)
Influenza immunization	–	9 (26%)	–	10 (23%)
Mammography	–	24 (67%)	–	15 (33%)
Colorectal cancer screening	–	12 (33%)	–	10 (23%)

Source: GAO analysis of survey of state Medicaid directors, conducted between October 2008 and February 2009.

Notes: Children were defined as Medicaid beneficiaries under age 21. Adults were defined as Medicaid beneficiaries aged 21 through 64.

^aLimited to states that contract with MCOs to deliver services to some or all Medicaid children.

^bLimited to states that contract with MCOs to deliver services to some or all Medicaid adults and that reported covering the service.

^cLimited to states that use FFS to deliver services to some or all Medicaid children.

^dLimited to states that use FFS to deliver services to some or all Medicaid adults and that reported covering the service.

Table 12: Reasons Reported by State Medicaid Programs for Not Monitoring Utilization of Covered Preventive Services for Children, Beyond Federally Required Monitoring

Reason	Number of states that cited reason
Administrative burden	21 (41%)
Technology challenges	20 (39%)
Other ^a	17 (33%)
Data are unavailable	15 (29%)
Too expensive	9 (18%)
Not a top priority	7 (14%)

Source: GAO analysis of survey of state Medicaid directors, conducted between October 2008 and February 2009.

Note: Children were defined as Medicaid beneficiaries under age 21.

^aOther reasons state Medicaid programs reported for not monitoring utilization of preventive services included inadequate staff resources to monitor utilization of preventive services, providers are not required to submit clinical information which would be necessary to monitor utilization of preventive services, and MCOs have incomplete data or are not required to monitor utilization.

Table 13: Reasons Reported by State Medicaid Programs for Not Monitoring Utilization of Covered Preventive Services for Adults

Reason	Number of states that cited reason
Administrative burden	27 (53%)
Technology challenges	22 (43%)
Other ^a	17 (33%)
Data are unavailable	15 (29%)
Do not cover services, therefore do not monitor	12 (24%)
Not a top priority	11 (21%)
Too expensive	9 (18%)

Source: GAO analysis of survey of state Medicaid directors, conducted between October 2008 and February 2009.

Note: Adults were defined as Medicaid beneficiaries aged 21 through 64.

^aOther reasons state Medicaid programs reported for not monitoring utilization of covered preventive services for adults included inadequate staff resources to monitor utilization of preventive services and that providers are not required to submit clinical information which would be necessary to monitor utilization of preventive services.

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Table 14: Number of State Medicaid Programs Reporting Utilization Goals for Certain Preventive Services for Children, and Whether Goals Were Being Met, by Service Delivery Model

Service	MCO goals^a	MCO goals: meeting goals^b	FFS goals^c	FFS goals: meeting goals^d
Total number or receipt of any preventive service	19 (51%)	15 (79%)	11 (23%)	6 (55%)
Well-child or well-adult check up	25 (68%)	17 (68%)	16 (34%)	6 (38%)
Health risk assessment	7 (19%)	6 (86%)	5 (11%)	2 (40%)
Blood pressure test	4 (11%)	3 (75%)	3 (6%)	2 (67%)
Obesity screening	4 (11%)	3 (75%)	2 (4%)	1 (50%)
Cholesterol test	6 (16%)	5 (83%)	1 (2%)	1 (100%)
Diabetes screening	7 (19%)	5 (71%)	1 (2%)	1 (100%)
Cervical cancer screening	9 (24%)	5 (56%)	2 (4%)	0 (0%)

Source: GAO analysis of survey of state Medicaid directors, conducted between October 2008 and February 2009.

Note: Children were defined as Medicaid beneficiaries under age 21.

^aLimited to states that contract with MCOs to deliver services to some or all Medicaid children.

^bLimited to states that contract with MCOs to deliver services to some or all Medicaid children and that reported setting goals for MCOs.

^cLimited to states that use FFS for some or all Medicaid children.

^dLimited to states that use FFS for some or all Medicaid children, and that reported setting goals for FFS.

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Table 15: Number of State Medicaid Programs Reporting Utilization Goals for Certain Preventive Services for Adults, and Whether Goals Were Being Met, by Service Delivery Model

Service	MCO goals^a	MCO goals: meeting goals^b	FFS goals^c	FFS goals: meeting goals^d
Total number or receipt of any preventive service	16 (43%)	12 (75%)	2 (4%)	0 (0%)
Well-child or well-adult check up	11 (32%)	9 (82%)	2 (6%)	0 (0%)
Health risk assessment	7 (25%)	5 (71%)	2 (7%)	1 (50%)
Blood pressure test	9 (26%)	7 (78%)	1 (3%)	1 (100%)
Obesity screening	2 (6%)	2 (100%)	0 (0%)	0 (0%)
Cholesterol test	12 (38%)	9 (75%)	4 (11%)	2 (5%)
Diabetes screening	14 (39%)	10 (71%)	4 (10%)	1 (25%)
Cervical cancer screening	15 (41%)	11 (73%)	4 (9%)	0 (0%)
Influenza immunization	3 (9%)	2 (67%)	5 (12%)	4 (80%)
Mammography	16 (44%)	1 (69%)	5 (11%)	1 (20%)
Colorectal cancer screening	6 (17%)	4 (67%)	1 (2%)	0 (0%)

Source: GAO analysis of survey of state Medicaid directors, conducted between October 2008 and February 2009.

Notes: Limited to states that reported covering the service for adults. Adults were defined as Medicaid beneficiaries aged 21 through 64.

^aLimited to states that contract with MCOs to deliver services to some or all Medicaid adults.

^bLimited to states that contract with MCOs to deliver services to some or all Medicaid adults and that reported setting goals for MCOs.

^cLimited to states that use FFS for some or all Medicaid adults.

^dLimited to states that use FFS for some or all Medicaid adults, and that reported setting goals for FFS.

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Table 16: Number of State Medicaid Programs Reporting Certain Barriers to Meeting Utilization Goals

Barrier	Number of states that cited barrier
Other ^a	34 (67%)
Beneficiaries not concerned with preventive services	16 (31%)
Beneficiaries missing appointments	13 (25%)
Beneficiaries not able to get to appointments	6 (12%)
Insufficient state resources to raise payment rates to increase provider participation in Medicaid	5 (10%)
There is not an adequate number of providers in general (to serve both Medicaid and non-Medicaid populations)	3 (6 %)
There is not an adequate number of providers to serve the Medicaid population	2 (4%)
Insufficient state legislative support to provide support services that would make it easier for beneficiaries to access services	1 (2%)
Insufficient state legislative support to increase coverage of services	0 (0%)

Source: GAO analysis of survey of state Medicaid directors, conducted between October 2008 and February 2009.

^aOther reported barriers included problems with provider performance and incorrect billing by providers.

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Table 17: Initiatives State Medicaid Programs Reported Having Implemented that Pertain to Either Managed Care or Fee-For-Service Delivery Systems

Initiative	Targeted to pediatric providers	Targeted to providers of adult services	Not applicable
Increase payment rates for office visits and/or specific preventive services	37 (73%)	31 (61%)	10 (20%)
Streamline provider enrollment process	20 (39%)	20 (39%)	23 (45%)
Streamline payment processing (including electronic billing)	29 (57%)	30 (59%)	16 (31%)
Offer electronic health records	7 (14%)	7 (14%)	37 (73%)
Utilize provider pay for performance program(s)	16 (31%)	14 (27%)	27 (53%)
Utilize health plan pay for performance program(s)	20 (39%)	20 (39%)	24 (47%)
Start a provider advisory panel	29 (57%)	23 (45%)	18 (35%)
Educate providers about covered preventive services	42 (82%)	30 (59%)	9 (18%)
Hire a primary care case management vendor or an administrative services organization	15 (29%)	17 (33%)	27 (53%)
Encourage providers to perform health risk assessments	20 (39%)	16 (31%)	26 (51%)
Other initiative(s) to increase provider participation ^a	15 (29%)	11 (22%)	24 (47%)
Other initiative(s) to increase provision of preventive services ^b	19 (37%)	12 (24%)	22 (43%)

Source: GAO analysis of survey of state Medicaid directors, conducted between October 2008 and February 2009.

^aOther reported initiatives to increase provider participation included forming relationships with provider associations or sending mailings to providers and EPSDT beneficiaries regarding lead screening and well check ups.

^bOther reported initiatives to increase provision of preventive services included financial incentives for providers and MCOs that provide preventive services and pay for performance measures.

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Table 18: Number of State Medicaid Programs Reporting that Implemented Initiatives Had or Had Not Improved Provider Participation or Provision of Preventive Services

Implemented Initiative	Major improvement	Minor improvement	No improvement	Don't know
Increase payment rates for office visits and/or specific preventive services	3 (8%)	14 (37%)	4 (11%)	15 (39%)
Streamline provider enrollment process	0 (0%)	7 (35%)	2 (10%)	9 (45%)
Streamline payment processing (including electronic billing)	5 (17%)	6 (20%)	2 (7%)	11 (37%)
Offer electronic health records	0 (0%)	0 (0%)	1 (14%)	6 (86%)
Utilize provider pay for performance program(s)	2 (11%)	8 (42%)	1 (5%)	7 (37%)
Utilize health plan pay for performance program(s)	6 (29%)	5 (24%)	2 (10%)	6 (29%)
Start a provider advisory panel	3 (10%)	8 (28%)	3 (10%)	13 (45%)
Educate providers about covered preventive services	3 (7%)	16 (38%)	0 (0%)	20 (48%)
Hire a primary care case management vendor or an administrative services organization	6 (35%)	2 (12%)	1 (6%)	6 (35%)
Encourage providers to perform health risk assessments	3 (15%)	6 (30%)	1 (5%)	8 (40%)
Other initiative(s) to increase provider participation	1 (7%)	4 (27%)	0 (0%)	5 (33%)
Other initiative(s) to increase provision of preventive services	3 (15%)	2 (10%)	0 (0%)	7 (35%)

Source: GAO analysis of survey of state Medicaid directors, conducted between October 2008 and February 2009.

Note: Limited to states that reported having implemented the initiative.

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Results**

Table 19: Number of State Medicaid Programs Reporting Certain Initiatives Designed to Increase Medicaid Children’s and Adults’ Use of Preventive Services Since 2004, by Service Delivery Model

Initiative	Targeted to children in MCOs^a	Targeted to adults in MCOs^b	Targeted to children in FFS^c	Targeted to adults in FFS^d
Encourage use of preventive services through direct outreach (e.g., phone, mail)	31 (84%)	22 (59%)	32 (68%)	19 (40%)
Encourage use of preventive services through nonmonetary incentives	24 (65%)	18 (49%)	5 (11%)	4 (8%)
Encourage use of preventive services through monetary incentives	17 (46%)	16 (43%)	9 (19%)	8 (17%)
Encourage use of preventive services by reducing cost sharing	4 (11%)	4 (11%)	3 (6%)	2 (4%)
Promote medical home initiatives	25 (68%)	23 (62%)	25 (53%)	23 (48%)
Publicize or encourage/require health plans to publicize availability of preventive services for Medicaid beneficiaries	26 (70%)	22 (59%)	15 (32%)	8 (17%)
Provide case management services to follow up with beneficiaries after an initial diagnosis	25 (68%)	22 (59%)	16 (34%)	18 (38%)
Provide disease management programs	30 (81%)	32 (86%)	21 (45%)	28 (58%)
Promote healthy lifestyle choices such as exercise, nutrition, and tobacco cessation	30 (81%)	30 (81%)	23 (49%)	26 (54%)
Expand coverage of preventive services	9 (24%)	9 (24%)	7 (15%)	11 (23%)
Provide scheduling assistance	22 (59%)	17 (46%)	13 (28%)	10 (21%)
Provide childcare	1 (3%)	2 (5%)	0 (0%)	0 (0%)
Encourage doctors to provide evening appointments	18 (49%)	17 (46%)	11 (23%)	10 (21%)
Other ^e	4 (11%)	5 (14%)	0 (0%)	1 (2%)

Source: GAO analysis of survey of state Medicaid directors, conducted between October 2008 and February 2009.

Notes: Children were defined as Medicaid beneficiaries under age 21. Adults were defined as Medicaid beneficiaries aged 21 through 64.

^aLimited to states that contract with MCOs to deliver services to some or all Medicaid children.

^bLimited to states that contract with MCOs to deliver services to some or all Medicaid adults.

^cLimited to states that use FFS to deliver services to some or all Medicaid children.

^dLimited to states that use FFS to deliver services to some or all Medicaid adults.

^eOther reported initiatives included translation services, pay for performance, and child care for pregnant women.

**Appendix III: State Medicaid Director Survey
Results**

Table 20: Number of State Medicaid Programs Reporting Certain Efforts Geared Specifically Toward Diagnosing and Treating Obesity, and Complications Related to Obesity, by Service Delivery Model

Effort	Targeted to children in MCOs^a	Targeted to adults in MCOs^b	Targeted to children in FFS^c	Targeted to adults in FFS^d
Promote weight reduction programs for Medicaid beneficiaries	13 (35%)	11 (30%)	4 (9%)	3 (6%)
Promote childhood obesity programs for Medicaid beneficiaries (either within specific counties or regions or throughout the state)	23 (62%)	3 (8%)	8 (17%)	3 (6%)
Educate providers to perform obesity screenings on Medicaid beneficiaries	26 (70%)	14 (38%)	12 (26%)	7 (15%)
Educate providers to offer obesity counseling as needed to Medicaid beneficiaries	23 (62%)	13 (35%)	9 (19%)	6 (13%)
Provide reimbursement information for nutrition assessment and counseling for obese adults in documentation for providers	9 (24%)	11 (30%)	7 (15%)	10 (21%)
Provide reimbursement information for nutrition assessment and counseling for overweight children in documentation for providers	13 (35%)	7 (19%)	9 (19%)	1 (2%)
Promote family-based obesity initiatives	9 (24%)	5 (14%)	3 (6%)	3 (6%)
Other ^e	4 (11%)	2 (5%)	1 (2%)	1 (2%)

Source: GAO analysis of survey of state Medicaid directors, conducted between October 2008 and February 2009.

Notes: Children were defined as Medicaid beneficiaries under age 21. Adults were defined as Medicaid beneficiaries aged 21 through 64.

^aLimited to states that contract with MCOs to deliver services to some or all Medicaid children.

^bLimited to states that contract with MCOs to deliver services to some or all Medicaid adults.

^cLimited to states that use FFS to deliver services to some or all Medicaid children.

^dLimited to states that use FFS to deliver services to some or all Medicaid adults.

^eOther initiatives included development of body mass index performance measures and statewide public health initiatives that include, but are not limited to the Medicaid population.

Appendix IV: Comments from the Department of Health and Human Services



DEPARTMENT OF HEALTH & HUMAN SERVICES

OFFICE OF THE SECRETARY

Assistant Secretary for Legislation
Washington, DC 20201

JUL 13 2009

Alicia Puente Cackley
Director, Health Care
U.S. Government Accountability Office
441 G Street N. W.
Washington, DC 20548

Dear Ms. Cackley:

Enclosed are comments on the U.S. Government Accountability Office's (GAO) report entitled: "MEDICAID PREVENTIVE SERVICES: Concerted Efforts Needed to Ensure Beneficiaries Receive Services" (GAO-09-578).

The Department appreciates the opportunity to review this report before its publication.

Sincerely,

A handwritten signature in cursive script that reads "Barbara Pisaro Clark".

Barbara Pisaro Clark
Acting Assistant Secretary for Legislation

Attachment

**Appendix IV: Comments from the Department
of Health and Human Services**



DEPARTMENT OF HEALTH & HUMAN SERVICES

Centers for Medicare & Medicaid Services

Administrator
Washington, DC 20201

DATE: JUL 9 2009

TO: Alicia Puente Cackley
Director, Health Care
Government Accountability Office

FROM: *Charlene Frizzera*
Charlene Frizzera
Acting Administrator

SUBJECT: **Government Accountability Office (GAO) Draft Report:** Medicaid Preventive Services: Concerted Efforts Needed to Ensure Beneficiaries Receive Services (GAO-09-578)

Thank you for the opportunity to review and comment on the GAO Draft Report entitled: "Medicaid Preventive Services: Concerted Efforts Needed to Ensure Beneficiaries Receive Services" (GAO-09-578). The report was prepared at the request of Senator Max Baucus. The purpose of the report was to examine the extent to which—

- 1) Children and adults in Medicaid have certain conditions that can be identified or managed by preventive services (utilizing data from the Department of Health and Human Services' (HHS) National Health and Nutrition Examination Survey);
- 2) State Medicaid programs monitor and promote the provision of preventive services for children in Medicaid, for whom coverage of Early and Periodic Screening, Diagnostic and Treatment (EPSDT) services is generally required (utilizing survey responses from 51 State Medicaid Directors – including Washington, DC);
- 3) State Medicaid programs cover recommended preventive services for adults in Medicaid, for whom coverage of preventive services is generally not required (utilizing available data from the Medical Expenditure Panel Survey administered by the Agency for Healthcare Research and Quality); and
- 4) The Centers for Medicare & Medicaid Services (CMS) oversees the provision of preventive services for children and adults in Medicaid (through interviews of CMS officials at the Central and Regional Offices, and through review of ESPDT reports).

In the Draft Report, the GAO recommends that CMS—

- (1) Ensure that state Early and Periodic Screening, Diagnostic and Treatment (EPSDT) programs are regularly reviewed; and
- (2) Expedite its efforts to provide guidance to states on coverage of obesity-related services for Medicaid children, and consider the need to provide similar guidance regarding coverage of obesity screening and counseling, and other recommended preventive services, for adults.

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CMS Response to Recommendation 1

We concur. CMS recognizes the need for and the value of preventive services for children as well as for adults. The law is particularly strong with respect to children under the EPSDT provisions which require all Medicaid children have access to preventive services. We believe that the low well-child visit rates observed are unacceptable given the importance of preventive services for children and the requirements of the law. As noted in the report, CMS has established the goal of ensuring that each state provide EPSDT well-child check ups to at least 80 percent of Medicaid children in the State based on the State's periodicity schedule, but the data show, and our reviews confirm, that we are far from achieving that goal.

The CMS has recently conducted an internal review of policies and policy guidance, procedures and oversight efforts. We will augment this review by consulting with States, maternal and child health experts and children's advocates for the purpose of developing a comprehensive workplan to provide updated guidance and training for State Medicaid programs, to review and revise the CMS 416 reporting form, and to establish a regular schedule for reviewing State policy and implementation efforts. CMS is committed to begin releasing guidance to States through State Medicaid Director Letters and to establish a training program and protocol for the state reviews and technical assistance by the end of the year. We also intend to identify and share best practices, including current State initiatives to assure children with preventive care through a medical home and successful State efforts to reduce coverage gaps and "churning" among eligible children that can undermine efforts to assure that children receive preventive services consistent with the State's periodicity schedule.

Pursuant to the Children's Health Insurance Program Act of 2009 (CHIPRA, Public Law 111-3), CMS has also undertaken a new initiative to establish quality measures, and we believe these measures and the subsequent State reporting under this measures can enhance performance under EPSDT, including with respect to dental and obesity-related services. The new quality measures are being developed with the Agency for Health Care Quality, in consultation from other agencies within HHS, States and outside organizations with particular expertise in these matters. One consideration is whether to integrate State reporting under these measures (which is voluntary) with the mandatory reporting under EPSDT. The CHIPRA quality initiative also relates closely to initiatives to improve quality of care through reporting opportunities that will evolve through adoption and enhancement of electronic health records under the American Recovery and Reinvestment Act of 2009 (Public Law 111-5).

CMS Response to Recommendation 2

We concur. CHIPRA includes a provision for a childhood obesity demonstration program, although it did not include appropriated funding for the demonstration. HHS, under the leadership of the Surgeon General's office and with support from CMS, is developing the demonstration proposal as required under CHIPRA. CMS is pursuing a number of options to obtain funding for this important demonstration.

As mentioned in the report, CMS has recognized the need for guidance to State Medicaid programs on coverage of obesity-related services for children. CMS is committed to providing this guidance to States through a State Medicaid Directors letter by the end of this calendar year.

Page 3 - Alicia Puente Cackley

The CMS has been involved in several initiatives regarding childhood obesity at the national level. It has participated in the Surgeon General's Childhood Overweight and Obesity Prevention Council, which began in November 2007, and the Children's Obesity Action Network, which addresses issues related to payment policy and health care disparities. CMS has also supported the work of the National Committee for Quality Assurance on the development of two new Healthcare Effectiveness Data and Information Set (HEDIS) measures that address obesity. CMS will work with States to promote awareness of these new measures and encourage States to consider utilizing them as part of their Medicaid Quality Improvement Strategies.

Summary

In response to this report, CMS plans to issue a State Medicaid Director letter that will work toward ensuring that children receive preventive services through the EPSDT program, and remind States of the 80 percent goal for well-child visits. It will also remind States of the importance of ensuring that children receive a comprehensive well-child visit and the importance of providing preventive services to adults. The CMS EPSDT workgroup is also working on State guidance on EPSDT monitoring, assessment, and reporting and will continue to work on enhancing CMS assessment of EPSDT services. We hope that these efforts will help us target initiatives that will improve the quality of care for children receiving EPSDT services.

As described here, CMS has a number of initiatives underway, both short and long-term, to improve the EPSDT program, and to increase services related to obesity. This report has provided additional information useful to those planning efforts. CMS is committed to ensuring that all Medicaid children receive all appropriate services under the EPSDT program. CMS also identified and submits a few technical comments for consideration.

Appendix V: GAO Contact and Staff Acknowledgments

GAO Contact

Alicia Puente Cackley, (202) 512-7114 or cackleya@gao.gov

Staff Acknowledgments

In addition to the individual named above, Katherine M. Iritani, Acting Director; Emily Beller; Susannah Bloch; Elizabeth Deyo; Erin Henderson; Martha Kelly; Teresa Tam; and Hemi Tewarson made key contributions to this report.

Related GAO Products

Medicaid: Extent of Dental Disease in Children Has Not Decreased, and Millions Are Estimated to Have Untreated Tooth Decay. [GAO-08-1121](#). Washington, D.C.: September 23, 2008.

State Children's Health Insurance Program: Program Structure, Enrollment and Expenditure Experiences, and Outreach Approaches for States That Cover Adults. [GAO-08-50](#). Washington, D.C.: November 26, 2007.

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Childhood Obesity: Factors Affecting Physical Activity. [GAO-07-260R](#). Washington, D.C.: December 6, 2006.

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