

Department of Health and Human Services

**OFFICE OF
INSPECTOR GENERAL**

**MOST MEDICAID CHILDREN IN
NINE STATES ARE NOT
RECEIVING ALL REQUIRED
PREVENTIVE SCREENING
SERVICES**



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Inspector General

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OBJECTIVES

1. To determine the extent to which children in nine selected States received required Medicaid Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) screenings.
2. To determine the extent to which children in nine selected States received all of the required components of EPSDT medical screenings.
3. To describe nine selected States' efforts to increase EPSDT-eligible children's participation in EPSDT screenings and the completeness of EPSDT medical screenings.

BACKGROUND

Medicaid provides a comprehensive and preventive child health benefit for children under the age of 21, known as the EPSDT benefit. Services provided under the EPSDT benefit are intended to screen, diagnose, and treat children eligible for EPSDT services at early, regular intervals to avoid or minimize childhood illness. The EPSDT services cover four health-related areas: medical, vision, hearing, and dental. This study focuses on medical, vision, and hearing screenings.

Only medical screenings have components specifically required by the statute. Complete medical screenings under the EPSDT benefit must include the following five components: a comprehensive health and developmental history, a comprehensive unclothed physical examination, appropriate immunizations, appropriate laboratory tests, and health education.

We reviewed medical records in 9 States for a sample of 345 children enrolled in Medicaid in 2007. We also conducted structured interviews with State Medicaid staff responsible for the EPSDT benefit in nine States.

FINDINGS

Three out of four children did not receive all required medical, vision, and hearing screenings. In 9 States, 76 percent of children, or 2.7 million children, did not receive 1 or more of the required EPSDT medical, vision, or hearing screenings. Forty-one percent of children did not receive any required medical screenings. In addition, more than half of children did not receive any required vision or hearing screenings.

Nearly 60 percent of children who received EPSDT medical screenings lacked at least one component of a complete medical screening. Fifty-five percent, or nearly 2 million children in 9 selected States, received medical screenings. Of these 2 million children, 59 percent did not receive all five required components of a medical screening during a 1-year period. Children were missing appropriate laboratory tests most often; 38 percent of children who received medical screenings did not receive this component.

All nine States reported strategies to improve participation in EPSDT screenings and the completeness of EPSDT medical screenings.

Officials from all selected States' Medicaid agencies identified strategies to increase both the number of children who receive screenings as well as the completeness of medical screenings. Officials from all selected States identified at least one of three main strategies to improve beneficiary participation in EPSDT: direct communication to eligible families, outreach, and incentives. In addition, officials from all selected States reported strategies to increase the number of complete screenings, primarily through education and incentives for providers.

RECOMMENDATIONS

Most children are not fully benefiting from EPSDT's comprehensive screening services. Two primary factors contributed to this problem. First, children did not receive the correct number of each type of screening. Second, when children received medical screenings, they were often incomplete. These two factors taken together indicate that very few children received the correct number of complete medical screenings and the correct number of vision and hearing screenings.

In addition, while all States reported strategies to improve both the number of screenings and the completeness of medical screenings, these strategies do not appear to have the desired effect. The disconnect between States' efforts to improve the EPSDT program and the low number of children receiving required screenings is difficult to account for, but indicates that additional efforts are required.

Therefore, we recommend that CMS:

- **require States to report vision and hearing screenings,**
- **collaborate with States and providers to develop effective strategies to encourage beneficiary participation in EPSDT screenings,**

- **collaborate with States and providers to develop education and incentives for providers to encourage complete medical screenings, and**
- **identify and disseminate promising State practices for increasing children’s participation in EPSDT screenings and providers’ delivery of complete medical screenings.**

AGENCY COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE

For the first recommendation, CMS stated that it will consider how hearing and vision screenings could be included as part of revised or new data collection efforts. However, CMS indicated that it will need to assess the effect that new data collection requirements might have on States’ financial resources as well as consider the difficulty States might have in obtaining data on services that are provided outside traditional provider settings. We agree that CMS should assess the costs of any new data collection requirements for vision and hearing screenings and States’ ability to collect these data. However, we continue to think that requiring States to report vision and hearing screenings will enable CMS to better monitor participation in these screenings.

CMS concurred with our other three recommendations and indicated its commitment to improving beneficiary and provider participation in EPSDT. CMS stated that in collaboration with States and national experts, it has begun efforts to improve the provision of EPSDT services.



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BACKGROUND

Earlier studies have reported ongoing problems with Medicaid's EPSDT benefit, which includes preventive screening services for eligible children under the age of 21. A 1997 Office of Inspector General (OIG) report found that 60 percent of children in a managed care setting did not receive required screenings.¹ Also, the National Health Law Program in 2005 concluded that since its inception, the EPSDT benefit's success in screening and treating eligible children has not met expectations. For example, in 2003, only 15 percent of children under 5 years of age were reported to have received blood lead tests.² Most recently, in August 2009, the Government Accountability Office (GAO) noted low participation of children in EPSDT.³

Low-income children with public insurance are more likely to be in poor health.⁴ Research has confirmed a relationship between low-income and chronic health issues, such as depression and obesity,⁵ iron

¹ OIG, *Medicaid Managed Care and EPSDT*, OEI-05-93-00290, May 1997.

² National Health Law Program, *Children's Health Under Medicaid: A National Review of Early and Periodic Screening, Diagnosis, and Treatment 1999–2003*, May 2005.

³ GAO, *Medicaid Preventive Services: Concerted Efforts Needed to Ensure Beneficiaries Receive Services*, GAO-09-578, August 2009.

⁴ Christie Provost Peters, "EPSDT: Medicaid's Critical but Controversial Benefits Program for Children," *National Health Policy Forum*, Issue Brief No. 819, November 20, 2006. Accessed at <http://www.nhpf.org> on September 20, 2009.

⁵ Elizabeth Goodman, "The Role of Socioeconomic Status Gradients in Explaining Differences in US Adolescents' Health," *American Journal of Public Health*, Vol. 89, No. 10, October 1999. Accessed at <http://www.ajph.org> on September 11, 2009.

deficiency,⁶ and poor cognitive development.⁷ Identifying and addressing these issues through preventive screening in childhood may have greater effects on adult health than addressing them later in life.⁸

The EPSDT benefit and preventive care continue to be a priority among policymakers. In 2006, congressional committee chairmen sent a letter to the Secretary of Health & Human Services (the Secretary) to clarify which changes in Medicaid, as a result of the Deficit Reduction Act of 2005, were not intended to alter EPSDT coverage and that EPSDT remains a required Medicaid benefit.⁹

Medicaid's EPSDT Benefit

The EPSDT benefit provides a comprehensive and preventive child health program for children under the age of 21. Every State Medicaid program must offer the EPSDT benefit.

The EPSDT-eligible children include all children who are categorically eligible for Medicaid based on income guidelines established in Federal law.¹⁰ States may choose to extend EPSDT benefits to all Medicaid-eligible children under the age of 21.¹¹ In 2007, 31.5 million children were eligible for EPSDT.¹²

Services provided under the EPSDT benefit are intended to screen, diagnose, and treat children eligible for EPSDT services at early, regular intervals to avoid or minimize childhood illness. The EPSDT services cover four health-related areas: medical, vision, hearing, and

⁶ Katherine Alaimo, et al., "Food Insufficiency, Family Income, and Health in US Preschool and School-Aged Children," *American Journal of Public Health*, Vol. 91, No. 5, May 2001. Accessed at <http://www.ajph.org> on September 11, 2009.

⁷ Sanders Korenman, et al., "Long-Term Poverty and Child Development in the United States: Results from the NLSY," *Children and Youth Services Review*, Vol. 17, No. 1/2, 1995. Accessed at <http://www.sciencedirect.com> on September 11, 2009.

⁸ Jack P. Shonkoff, W. Thomas Boyce, and Bruce S. McEwen, "Neuroscience, Molecular Biology, and the Childhood Roots of Health Disparities," *JAMA*, 2009, p. 1. Accessed at <http://jama.ama-assn.org> on September 3, 2009.

⁹ "Grassley Specifies Intent of Two Medicaid Provisions in Deficit Reduction Act. U.S. Senate Committee on Finance." (Letter from Senator Charles Grassley and Representative Joe Barton to Michael O. Leavitt, Secretary, Health & Human Services.) Accessed at <http://finance.senate.gov> on October 2, 2009.

¹⁰ Social Security Act, § 1902(a)(10)(A)(i), 42 U.S.C. § 1396a(a)(10)(A)(i), and Social Security Act, § 1905(a)(4)(B), 42 U.S.C. § 1396d(a)(4)(B).

¹¹ Centers for Medicare & Medicaid Services (CMS), *State Medicaid Manual*, Pub. No. 45, ch. 5, § 5010(A).

¹² CMS, *Annual EPSDT Participation Report Form CMS-416 (National)*, 2007. Accessed at <http://www.cms.hhs.gov> on September 2, 2009.

dental.¹³ This study focuses on medical, vision, and hearing screenings.¹⁴

Medical screenings. Only medical screenings have components specifically required by the statute. Complete medical screenings under the EPSDT benefit must include the following five components:¹⁵

- a comprehensive health and developmental history (including assessment of both physical and mental health development);
- a comprehensive unclothed physical examination;
- appropriate immunizations, as established by the Advisory Committee on Immunization Practices, according to age and health history;¹⁶
- appropriate laboratory tests (including blood lead level assessment appropriate for age and risk factors); and
- health education (including anticipatory guidance).¹⁷

For a more thorough description of the five components of a medical screening, see Appendix A.

For a medical screening to be considered complete, immunization history must be reviewed and immunizations administered when appropriate. At each screening, a provider should check a child's immunization record and update when appropriate. Immunizations should be provided following the recommendations of the Advisory Committee on Immunization Practices.¹⁸

In addition, for a medical screening to be considered complete, laboratory tests (hereinafter referred to as lab tests) must be administered when appropriate. Each State establishes its own

¹³ Social Security Act, § 1905(r), 42 U.S.C. § 1396d(r). Note that where the statute refers to screening services in § 1905(r)(1), medical screenings are described. For clarity's sake, we refer to screening services as medical screenings.

¹⁴ This study will not examine dental screenings because CMS was conducting a detailed review of dental screenings and services while this study was underway.

¹⁵ Social Security Act, § 1905(r)(1)(B), 42 U.S.C. § 1396d(r)(B).

¹⁶ CMS, *Manual*, § 5123.2(C).

¹⁷ Anticipatory guidance is intended to assist in understanding what to expect in the child's development.

¹⁸ CMS, *Manual*, § 5123.2(C).

guidelines for which lab tests are required at each medical screening.¹⁹ Lab tests may include the test itself or an assessment for risk, which States often require to determine if a lab test should be performed. The only federally required lab test is a blood lead test, required at 12 and 24 months.²⁰

Vision and hearing screenings. Vision and hearing screenings may or may not be performed at the same time as a medical screening. While States may require that vision and hearing screenings occur during a medical screening,²¹ it is not a Federal requirement.²² In some cases, vision and hearing screenings, particularly for school-aged children, may be performed in settings outside a physician’s office. However, if States require vision and hearing screenings during the medical screening, they must be documented.²³

Diagnosis and treatment. In addition to including screenings, EPSDT includes other necessary health care and diagnostic and treatment services to address concerns identified during medical, vision, hearing, or dental screenings.²⁴ These include, but are not limited to, inpatient and outpatient hospital services, home health care services, case management services, eyeglasses, and hearing aids.²⁵

EPSDT Screening Schedules

Each State establishes its own periodicity schedules for each type of screening. Periodicity schedules outline the frequency of each type of screening, which varies by age. Each State must develop these schedules in consultation with recognized medical organizations involved in children’s health care.²⁶ Guidance from CMS states that screenings must be provided at “intervals which meet reasonable

¹⁹ CMS, *Manual*, § 5123.2(D). See also CMS, *Manual*, § 5123.2(A)(2) (requiring a lab test to screen for iron deficiency).

²⁰ Social Security Act, § 1905(r)(1)(B)(iv), 42 U.S.C. § 1396d(r)(1)(B)(iv), and CMS, *Manual*, § 5123.2(D)(1).

²¹ CMS, *Manual*, § 5123.2(F).

²² Social Security Act, §§ 1905(r)(2) and 1905(r)(4), 42 U.S.C. § 1396d(r)(2), and § 1396d(r)(4).

²³ CMS, *Manual*, § 5310(A).

²⁴ Social Security Act, §§ 1905(r)(2)(B), 1905(r)(3)(B), 1905(r)(4)(B), and 1905(r)(5).

²⁵ Social Security Act, §§ 1905(r)(2)(B), 1905(r)(3)(B), 1905(r)(4)(B), 1905(r)(5), and 1905(a).

²⁶ CMS, *Manual*, § 5140(A).

standards of medical practice.”²⁷ In addition, CMS requires an initial screening following enrollment in Medicaid.²⁸

State periodicity schedules for medical screenings vary in the number of medical screenings required. The American Academy of Pediatrics (AAP) recommends multiple medical screenings per year for children under age 2 and one screening per year after age 2. State requirements range from four to seven medical screenings for infants under age 1 and two to three medical screenings per year for 1- and 2-year-olds. For children 3 or older, States typically require one medical screening every 1 to 2 years.

State periodicity schedules for other screening types also vary. States generally follow AAP recommendations that vision and hearing screenings occur with the same frequency as medical screenings.

EPSDT State Requirements

CMS requires States to notify all eligible families of available services and the need for appropriate immunizations.^{29, 30} At a minimum, this must occur within 60 days after the date of the initial determination of eligibility for Medicaid and a determination of eligibility after a period of ineligibility. CMS allows flexibility in the notification methods employed by States.³¹

In addition, services provided during a screening visit must be recorded and records must be available to verify those services. CMS instructs States that providers of EPSDT services must “agree to keep records necessary to disclose the extent of services furnished and information regarding payment of claims.”³² Some States publish forms for providers to complete during EPSDT medical screenings to assist with documentation. The forms generally have a section for each of the five components; are age specific; and list development and nutrition questions, appropriate lab tests, and immunizations.

²⁷ CMS, *Manual*, § 5140(A).

²⁸ CMS, *Manual*, § 5140(C).

²⁹ Social Security Act, § 1902(a)(43)(A), 42 U.S.C. § 1396a(a)(43)(A).

³⁰ The legislation states that eligible people under the age of 21 are to be notified, but the *Manual*, § 5121(B), clarifies that States are to inform eligible families of the availability of EPSDT.

³¹ CMS, *Manual*, § 5121(A).

³² CMS, *Manual*, § 5310(A).

Further, the Omnibus Budget Reconciliation Act of 1989 (OBRA 1989) strengthened EPSDT by establishing State reporting requirements for EPSDT and mandating that the Secretary set participation goals for the States.^{33, 34} In response to OBRA 1989, the Secretary required annual reporting via the “Annual EPSDT Participation Report” Form CMS-416 (CMS-416) and established a goal of 80-percent beneficiary participation in EPSDT for each State.³⁵

The CMS-416 provides information, focused primarily on medical screenings, about beneficiary participation in EPSDT screenings. Specifically, States report the expected and total number of screenings received at an aggregate level and for seven different age groups.³⁶ CMS instructs States to use certain Current Procedural Terminology (CPT) codes as a proxy for reporting EPSDT screenings.³⁷ However a State may use a different method of counting EPSDT screenings, if one exists.³⁸ States are to report only complete medical screenings that include all five age-appropriate components.³⁹ States do not have to report on vision and hearing screenings on the CMS-416.

According to CMS-416 reports, States have continued to fall short of the 80-percent beneficiary participation goal established by the Secretary. Beneficiary participation is measured using the participant ratio, which is calculated by dividing the number of eligible children receiving at least one EPSDT medical screening by the number of eligible children who should receive at least one EPSDT medical screening. In 2007, 58 percent of those children expected to receive a medical screening received at least one across all States.⁴⁰ Participation rates in 14 States

³³ OBRA 1989, P.L. 101-239, Title VI, § 6403(b), Social Security Act, § 1902(a)(43)(D), 42 U.S.C. § 1396a(a)(43)(D).

³⁴ OBRA 1989, P.L. 101-239, Title VI, § 6403(c), Social Security Act, § 1905(r), 42 U.S.C. § 1396d.

³⁵ CMS, *Manual*, §§ 5320.2(C) and 5360(B).

³⁶ Each State uses its own periodicity schedule to determine the expected number of screenings. States are instructed to determine each child’s age based upon his or her age as of September 30. The age groups are: under 1, 1–2, 3–5, 6–9, 10–14, 15–18, and 19–20.

³⁷ The CPT codes are a numeric coding system consisting of descriptive terms that are used primarily to describe medical services and procedures furnished by physicians and other health care practitioners.

³⁸ CMS, *Instructions for the CMS Form-416: Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) Report*.

³⁹ CMS, *Manual*, § 5360(D).

⁴⁰ CMS, *Annual EPSDT Participation Report Form CMS-416 (State)*, 2007. Accessed at <http://www.cms.hhs.gov> on September 22, 2009.

were at or below 50 percent.⁴¹ In fact, only one State achieved the Secretary's goal in 2007.

METHODOLOGY

Through a review of medical records, this review determined the extent to which children enrolled in Medicaid for all of 2007 in nine selected States received required Medicaid EPSDT screenings and all of the required components of EPSDT medical screenings. In addition, this review describes nine selected States' efforts to increase beneficiary participation in EPSDT screenings and the completeness of EPSDT medical screenings. This information was collected in structured interviews with State officials responsible for the EPSDT benefit. See Appendix B for a detailed methodology.

Scope

This study assesses medical, vision, and hearing screenings for children in the nine selected States. The medical record review did not include an assessment of the quality of care or the medical necessity of the services. In addition, it did not include whether services were billed correctly; therefore, we did not estimate potential overpayments. Finally, we did not focus on the diagnostic or treatment aspects of EPSDT. Therefore, we did not determine whether children were offered appropriate followup care based on information identified in the screenings.

Sample

State selection. To determine which States to select, we used States' 2006 CMS-416 submissions. We ranked 39 States and the District of Columbia by number of EPSDT-eligible children and participant ratio and then summed the 2 rankings to create a combined score for each State. To provide us with a range of State sizes and EPSDT participation, we chose the five States with the lowest combined score and the five States with the highest combined score. The States initially selected for this study included: Arkansas, Florida, Idaho, Illinois, Missouri, North Carolina, North Dakota, Texas, Vermont, and West Virginia.

⁴¹ CMS, *Annual EPSDT Participation Report Form CMS-416 (State)*, 2007. Accessed at <http://www.cms.hhs.gov> on September 22, 2009.

Beneficiary sampling frame. We created a sampling frame of children who fit three characteristics: (1) enrolled in Medicaid for all of 2007, (2) eligible for the EPSDT benefit for all of 2007, and (3) expected to receive at least one EPSDT medical screening in their sample periods. The sample period is a 14-month period based on a child's birthday and, therefore, is different for each child. The sample period is described in more detail below.

To create the sampling frame, we used Medicaid eligibility data from the selected States and States' periodicity schedules. We used the eligibility data to exclude children who were not enrolled in Medicaid or not eligible for the EPSDT benefit for all of 2007. We also used the eligibility data to determine the age of each EPSDT-eligible child. Once we determined children's ages, we used States' periodicity schedules to exclude any child not expected to receive an EPSDT medical screening at that age. We combined all of the remaining children from the 10 originally selected States into 1 sampling frame.

Beneficiary sample. After creating the sampling frame of children expected to receive EPSDT medical screenings, we selected a stratified random sample of 360 children. We stratified by age and delivery model (fee-for-service or managed care). After selecting our sample, we excluded 11 children because of ongoing provider investigations by OIG or State Medicaid Fraud Control Units.⁴² Because of these exclusions, North Dakota was no longer represented in the sample because the only sampled child from the State had a provider under investigation. As a result, nine States were included in our review. We dropped an additional four children because further research deemed them ineligible for EPSDT. The final sample consisted of 345 children.

Data Collection

Medical record request. For the sample of 345 children, we asked States to furnish provider contact information for providers that billed EPSDT-related codes during the child's sample period.⁴³

For 82 sampled children, who were expected to receive medical screenings every other year based on their ages and their States'

⁴² A State Medicaid Fraud Control Unit is a State government entity, annually certified by the Department of Health & Human Services, that conducts a statewide program for the investigation and prosecution of health care providers that defraud the Medicaid program.

⁴³ Providers were typically physicians. However, providers in one State included school districts because they billed Medicaid for vision and hearing screenings.

I N T R O D U C T I O N

periodicity schedules, we used a 26-month sample period. For all sampled children, the sample periods included at least 6 months of 2007. Collectively, the sample periods for all sampled children are referred to as the study period.

For the 345 children, States reported that 98 children did not have any providers that billed EPSDT-related CPT codes during their sample periods. We considered these children to be missing all EPSDT screenings. For the remaining 247 children, we requested, by mail, complete medical records from each provider.

For the 247 children for whom we requested medical records, we received responses from all providers. However, for 14 children, we did not receive enough information to determine whether they received screenings. We retained these children in the sample and classified their records as having insufficient documentation.

Structured interviews. We interviewed State Medicaid staff responsible for oversight of the EPSDT benefit from the nine selected States via telephone. We inquired specifically about activities that the States used to encourage beneficiary participation in EPSDT and complete EPSDT medical screenings in 2007. In addition, we asked about any barriers to increasing beneficiary participation or complete EPSDT medical screenings that States encountered. These interviews took place during November and December 2008.

Data Analysis

To determine the extent to which children received EPSDT services, each child was assigned to one of four OIG staff reviewers who reviewed medical records to determine whether a child received all, some, or none of the required EPSDT screenings. We also reviewed medical records to determine what types of screenings were received (medical, vision, or hearing) and whether all five components of a medical screening occurred. Reviewers used State periodicity schedules to determine the types and numbers of screenings children were required to receive.

We used the results of our review, including the 98 children with no EPSDT-related billing, to calculate the percentage of children missing all, some, or none of the required screenings. We also did an analysis by type of screening received. We considered a child to have received a medical screening even if the screening did not include all five components. Among the subpopulation of children who received medical screenings, we also calculated the percentage of children missing each of the five required components of a medical screening.

I N T R O D U C T I O N

To describe State efforts to increase EPSDT participation and completeness of medical screenings, we analyzed all State interviews and categorized the responses by topic (e.g., education, incentive, barrier) and by the intended target of the effort (provider or eligible family). We counted the number of States with responses in each category.

Unless otherwise noted, we projected the results from our review to the population of children in nine selected States who were enrolled in Medicaid and the EPSDT benefit for all of 2007 and who were expected to receive at least one EPSDT medical screening based on age. See Appendix C for a list of 95-percent confidence intervals for all statistical projections.

Data Limitations

Because we did not stratify the sample by State, we were not able to calculate participation for individual States. Therefore, we were unable to assess whether State efforts to increase children's participation in EPSDT had an effect. In addition, the results of this study cannot be extrapolated nationally. Because of this and other methodological differences, the results of this study cannot be directly compared to the CMS-416 data.

We did not verify children's enrollment status for the times in their sample period that fell outside 2007 (all children had at least 6 months of their sample period in 2007). In these cases, we could have counted a screening as missing, when, in fact, it should not have been because the child was not enrolled in Medicaid. However, nearly 40 percent of the EPSDT claims we reviewed were for dates of service outside 2007, indicating that children were generally enrolled in Medicaid during their sample periods.

The estimates for the percentage of children who did not receive vision and hearing screenings may be marginally overstated. One of the nine selected States does not require that vision and hearing screenings be documented during the medical screenings. In fact, officials from this State reported that doctors were aware that vision and hearing screenings occurred in schools and, therefore, the screenings were usually not noted in medical records. However, the children from this State make up less than 1 percent of the nine-State sampling frame.

Finally, the projections are only for children who were enrolled in Medicaid and eligible for the EPSDT benefit for all of 2007. The sample excludes children who were enrolled in Medicaid for only part of 2007.

I N T R O D U C T I O N

For this reason, the study results cannot be projected to all Medicaid children in the nine selected States.

Standards

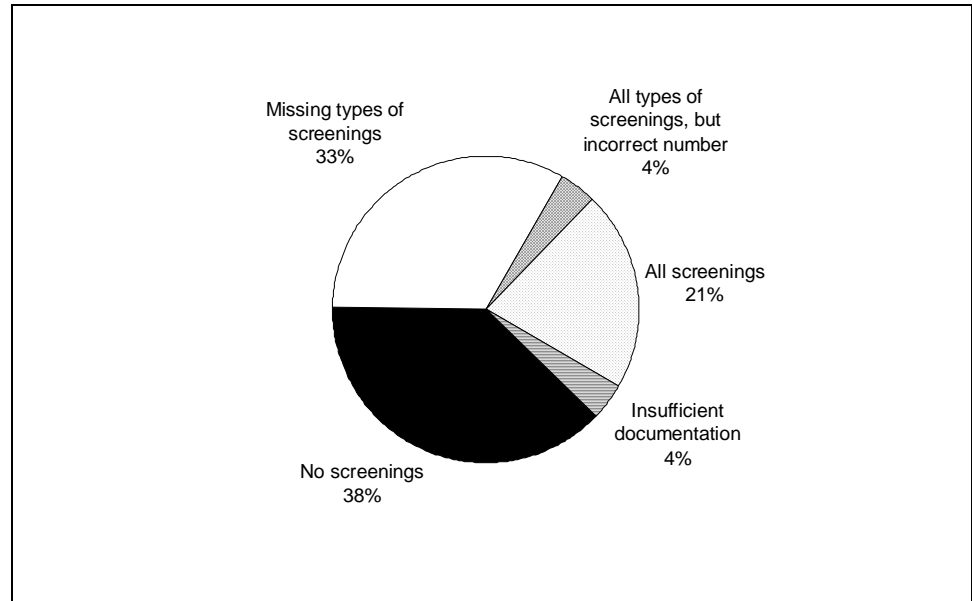
This study was conducted in accordance with the *Quality Standards for Inspections* approved by the Council of the Inspectors General on Integrity and Efficiency.

► FINDINGS

Three out of four children did not receive all required medical, vision, and hearing screenings

In 9 selected States, 76 percent of children, or 2.7 million children, did not receive 1 or more of the required EPSDT medical, vision, or hearing screenings during their sample period. Thirty-eight percent of children did not receive any EPSDT screenings during their sample periods. Moreover, only 21 percent of children received all screenings. However, this percentage does not take into account the completeness of medical screenings; this is addressed in the next finding. Chart 1 illustrates the extent to which children received required EPSDT screenings, by percentage of children.⁴⁴

Chart 1: Required Screenings Received, by Percentage of Children



Source: OIG analysis of results of a review of medical records, 2009.

An additional 37 percent received at least one, but not all, required EPSDT screenings based on their States' periodicity schedules. The percentage of children who received some, but not all, required EPSDT screenings includes children in two categories: (1) children who received all types of screenings (medical, vision, hearing), but received the incorrect number of screenings according to the States' periodicity schedules, and (2) children who were missing types of screenings.

⁴⁴ The 76 percent of children that did not receive 1 or more required screenings is depicted in Chart 1 as 75 percent because of rounding.

F I N D I N G S

Four percent of children fall into the first category, those who receive all types of screenings, but an incorrect number of screenings. This includes only children under the age of 3, as they are the only children for whom States' periodicity schedules mandate multiple screenings per year. For example, a child in this category could be a child under 1 who received four medical, vision, and hearing screenings when the State periodicity schedule recommends that six of each type occur.

Thirty-three percent of children fall into the second category, those who received some screenings, but not all types. For example, an 8-year-old child whose periodicity schedule recommends one of each type of screening could have received a medical and vision screening, but not a hearing screening.

Below is specific information on children who did not receive screenings, broken out by the type of screening not received.

Four out of ten children did not receive any required medical screenings

Forty-one percent of children did not receive any required medical screenings. Children who did not receive medical screenings were likely to be missing all other types of screenings. Indeed, 86 percent of children who did not receive medical screenings did not receive vision and hearing screenings. There appears to be a link between not receiving a medical screening and not receiving a vision and hearing screening.

More than half of children did not receive any required vision or hearing screenings

Sixty percent of children did not receive any vision screenings and 67 percent of children did not receive any hearing screenings. Further, over half of children who did not receive vision or hearing screenings also did not receive medical screenings. Specifically, 60 percent of children who did not receive vision screenings and 56 percent of children who did not receive hearing screenings did not receive medical screenings.

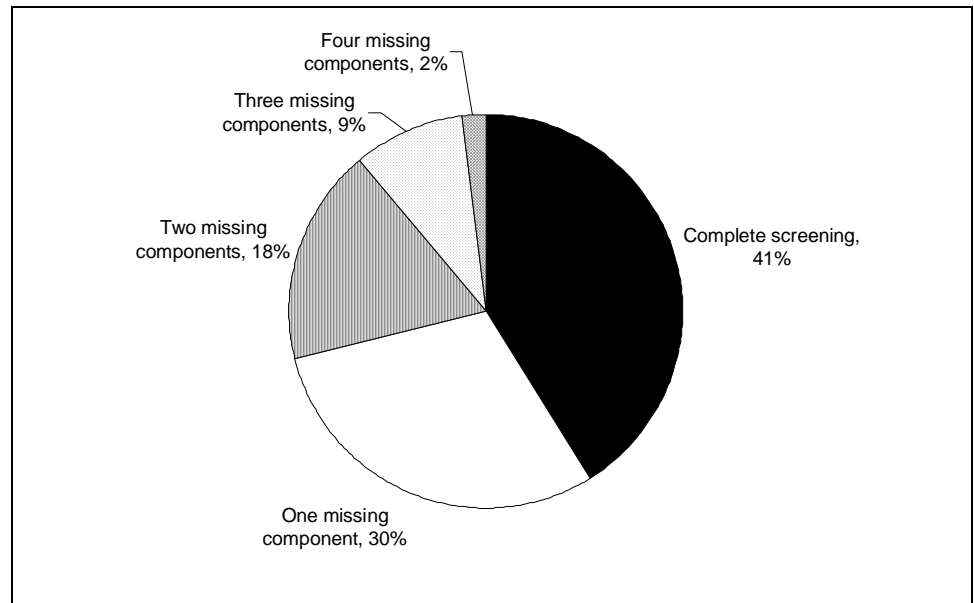
FINDINGS

Nearly 60 percent of children who received EPSDT medical screenings lacked at least one component of a complete medical screening

Fifty-five percent,⁴⁵ or nearly 2 million children in the 9 selected States, received medical screenings during the study period. Of these 2 million

children, 59 percent did not receive all five required components of a medical screening during the study period: a comprehensive health and developmental history, a comprehensive unclothed physical exam, appropriate immunizations, appropriate lab tests, and health education. More than a quarter of children who received medical screenings were missing only one component of a complete medical screening. Chart 2 illustrates the number of missing components, by percentage of children who received medical screenings.

Chart 2: Number of Missing Components, by Percentage of Children Who Received Medical Screenings



Source: OIG analysis of results of a review of medical records, 2009.

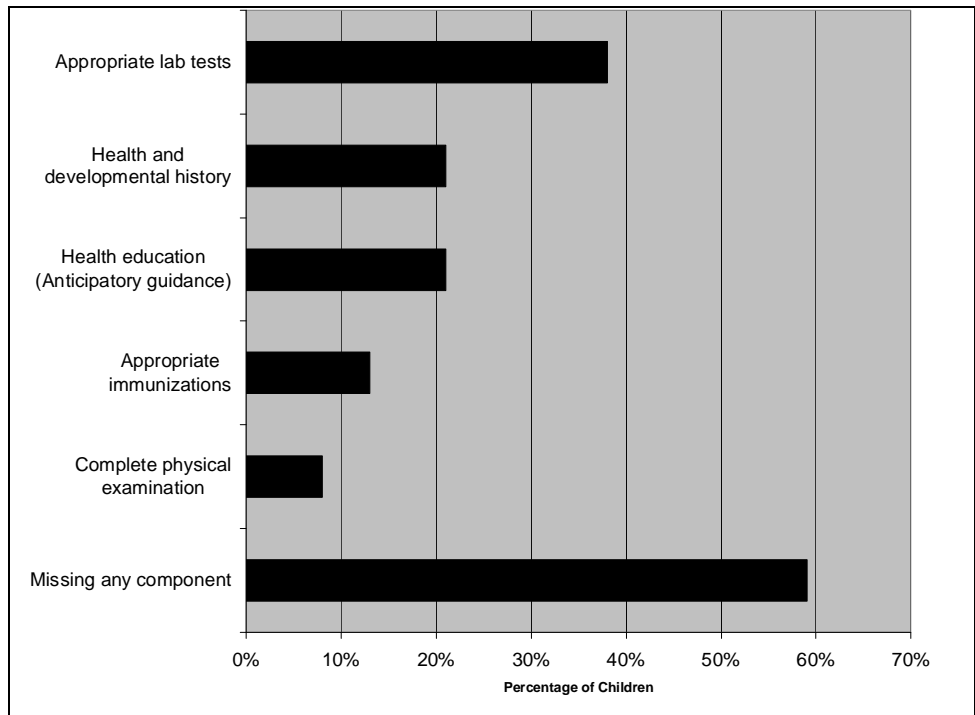
⁴⁵ As noted in the first finding, 41 percent did not receive medical screenings. An additional 4 percent of children had insufficient documentation in their medical records to determine screenings received.

FINDINGS

Of the five components, children were missing appropriate lab tests most often

While each of the five components was missing for at least some children who received medical screenings, more children were missing appropriate lab tests.⁴⁶ Thirty-eight percent of children who received medical screenings did not receive appropriate lab tests. Chart 3 illustrates this, along with the percentage of children missing each of the other components of a medical screening.

Chart 3: Of Children Who Received Medical Screenings, Percentage Missing Each Component



Source: OIG analysis of results of a review of medical records, 2009

Appropriate lab tests. Low receipt of lab tests is highlighted by examining two lab tests in particular: blood lead tests and tuberculosis (TB) tests. Blood lead tests are the only federally mandated lab test for EPSDT medical screenings.⁴⁷ However, other lab tests, such as TB, cholesterol, or a complete blood count, must be performed depending on State requirements.

⁴⁶ The difference is statistically different from other components at the 95-percent confidence level in a multiple comparison test using a Bonferroni threshold of 0.0125.

⁴⁷ Social Security Act, § 1905(r)(1)(B)(iv), 42 U.S.C. § 1396d(r)(1)(B) (iv).

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Fifty-seven percent of 1- and 2-year-olds did not receive a blood lead test as required.⁴⁸ CMS considers all children at risk for lead toxicity and requires all children to receive blood lead tests at 12 and 24 months.⁴⁹ Children with “high” blood lead levels are at risk of decreased intelligence, academic failure, and behavior problems.⁵⁰

Further, 69 percent of children required by their State to receive a TB assessment did not receive one. Five of the nine selected States require a TB assessment at certain ages. The disease can affect any part of the body and can be fatal if left untreated.⁵¹ Infection in children is a signal of poor health conditions and a sign that preventive care needs improvement.⁵²

Other components. The percentage of children who received medical screenings and were missing each of the other required components, although smaller than the percentage missing lab tests, is still a concern. For example, 21 percent of these children did not have their health and development history assessed and 21 percent of these children did not receive health education.

One example from the sampled medical records highlights issues that can arise from inadequate health education. One 4-month-old child was documented to be “overfed” during the exam, and the child’s family was given guidance to improve this. During the two previous medical screenings, there was no health education documented. Had the provider given information on proper feeding for infants during previous medical screenings, the overfeeding might have been avoided.

A second example demonstrates the benefits of gathering a health history and providing health education. In this case, the child went from the 50th percentile to the 95th percentile in height/weight between

⁴⁸ Because this percentage is based on a small sample size, the estimate is less precise than other estimates presented in this report because of a larger standard error. See Appendix C for a complete list of confidence intervals.

⁴⁹ CMS, *Manual*, § 5123.2(D)(1).

⁵⁰ Centers for Disease Control and Prevention (CDC), *Recommendations for Blood Lead Screening of Medicaid-Eligible Children Aged 1–5 Years: An Updated Approach to Targeting a Group at High Risk*, 58(RR09); 1-11, August 7, 2009. Accessed at <http://www.cdc.gov> on October 2, 2009.

⁵¹ CDC, *Tuberculosis (TB)*. Accessed at <http://www.cdc.gov> on October 2, 2009.

⁵² American Academy of Pediatrics, *Red Book Online*, Section 3: Summaries of Infectious Diseases. Tuberculosis. Accessed at <http://aapredbook.aappublications.org> on September 11, 2009.

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the 6-month visit and the 1-year visit. By collecting a thorough health history, the provider determined that the increase was due likely to a diet high in sugary drinks and offered guidance to move the child to a more appropriate diet.

All nine States reported strategies to improve participation in EPSDT screenings and the completeness of EPSDT medical screenings

Staff from all selected States' Medicaid agencies (hereinafter referred to as officials) identified efforts to increase

the number of children who receive screenings, as well as increase the completeness of medical screenings.

Officials from all nine States reported efforts to improve participation in EPSDT screenings, but barriers remain

Officials from all selected States identified at least one of three strategies to improve participation in EPSDT: direct communication to eligible families, outreach, and incentives. Despite these strategies, officials from all States identified barriers to improving participation in EPSDT screenings.

Direct communication. Officials from all selected States indicated that States communicate directly with eligible families at multiple times while a child is EPSDT-eligible. As required by Federal law, officials for each State noted that their State provided either an initial letter or beneficiary handbook upon enrollment in Medicaid. These documents inform the family what services are available to them, including EPSDT. However, officials from all selected States indicated that States also provided additional notices to families at one or more of the following times: when a screening is due, annually (usually around the child's birthday), when data indicate there is no EPSDT billing for the child, or when a child has missed a scheduled appointment. Officials from one State also indicated that a notice of when screenings are due is printed on a child's Medicaid identification card.

In addition, an official from one State described a system to help determine when communication to families is needed. Officials in this State reported that they established a no-reimbursement billing code that providers can bill to Medicaid when beneficiaries miss appointments so that the State can track these instances and communicate directly with these families.

Outreach. Officials from all selected States also reported outreach efforts aimed at the public and other State agencies. These efforts included: outreach focused on special populations, such as high-risk

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individuals and adolescents; media campaigns; participation in health fairs and food drives; and outreach in churches or schools. Officials noted the importance of collaborating with other State agencies in charge of Head Start, public health, and education. Some of these collaborations include data-sharing agreements that allow Medicaid staff to identify children who need screenings.

Incentives. Officials from four States discussed incentive programs aimed at providers and families to increase participation. Examples of provider incentives include additional payments to providers that exceed the average screening rate by 5 percent and 10 percent, pay-for-performance programs for preventive screenings for children under the age of 5, and increased reimbursement rates for preventive screenings. In addition, these officials indicated that some managed care organizations provide small incentives (e.g., diaper coupons) to families for bringing children to EPSDT screenings.

Barriers. However, officials from all selected States identified barriers to getting children to visit a doctor for preventive screenings. The most frequently cited barriers were cultural or family attitudes and circumstances. The officials indicated that some parents think preventive screenings are not necessary, believe children need to go to the doctor only when sick, and have concerns about taking time off work. Other barriers cited include limited access to providers, incorrect beneficiary contact information, and failure of beneficiaries to keep appointments.

Officials from all nine States reported strategies to increase the number of complete medical screenings

Officials from all selected States reported efforts to increase the number of complete medical screenings, primarily through education and incentives. Officials from all selected States indicated that States provide education to providers about screening requirements. In addition, officials from some States reported incentive programs used to increase the number of complete screenings.

Education. The officials from all selected States identified attempts to inform and educate providers about EPSDT screening requirements. The officials reported educating providers in a variety of ways, including provider toolkits with information about the five components, online information and training opportunities, provider handbooks and bulletins, and in-person training or conferences. Despite these efforts, officials in three States reported that some providers remain unaware of

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what a complete medical screening entails or do not believe all components are necessary.

As a further reminder of the required components, four States have standardized forms for providers to use during visits that contain all components of a medical screening. Although actual use of State-provided EPSDT screening forms is unknown, it may be low. Records from sampled children in the four States with standardized forms showed that only 40 percent of the sample records used the forms.

Incentives. In addition, officials from four States reported tracking some components of the medical screening separately and offering incentives to providers. Officials noted that tracking some components separately enables the State to maintain a focus on them. In addition, officials described incentive programs that States or managed care organizations offer, including one that offers a bonus to providers if their percentages of children immunized are above a set goal and a payment reduction when immunization percentages are below the goal.



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Most children are not fully benefiting from EPSDT's comprehensive screening services. Two primary factors contributed to this problem. First, children did not receive the correct number of each type of screening. In fact, only 21 percent of children received all required medical, vision, and hearing screenings. Second, when children received medical screenings, they were often incomplete. Specifically, 59 percent of children who received medical screenings did not receive complete medical screenings. These two factors taken together indicate that considerably less than 21 percent of children received the correct number of complete medical screenings and the correct number of vision and hearing screenings. This conclusion is supported by OIG and other organizations that have established a body of work that indicates low beneficiary participation in EPSDT covering at least a decade.

Although all States reported strategies to improve both the number of screenings and the completeness of medical screenings, these strategies do not appear to have the desired effect. The disconnect between States' efforts to improve the EPSDT program and the low number of children receiving required screenings is difficult to account for, but indicates that additional efforts are required. When choosing which additional efforts to implement, special emphasis should be placed on strategies that States show to be effective or strategies in States with high participation ratios.

To increase participation in EPSDT screenings and increase the completeness of medical screenings, we make the following four recommendations. CMS should:

Require States to report vision and hearing screenings

Currently, States do not report vision and hearing screenings to CMS on the CMS-416 or in any other way. By requiring these data, CMS could better monitor participation in these screenings. Once tracking systems for reporting are in place, CMS could establish a baseline participation rate and perhaps a goal to increase participation in vision and hearing screenings. Further, the requirement would likely drive States to develop guidance for providers to assist them with proper documentation and billing so that the State could report these screenings to CMS. Lastly, requiring these data would enable CMS and States to identify problem areas and work to find solutions.

While we recognize that States may not currently have mechanisms for tracking vision and hearing screenings, we make this recommendation as a first step in obtaining usable data about these screenings.

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Requiring that vision and hearing screening data be reported to CMS will enable CMS to determine the number of States that do not have data available and the quality of the data in the States where they are available. It may also enable CMS to determine the barriers to collecting these data. Having this information, CMS could begin working with States to improve reporting. Although obtaining quality data is likely a multiyear process, as stated above, we believe that reporting is a necessary first step that would enable States and CMS to monitor the delivery of vision and hearing screenings.

To collect data on vision and hearing screenings, CMS could revise the CMS-416 data collection form to include vision and hearing screenings or it could work with States to develop an alternative method of tracking these screenings and reporting to CMS. In response to recommendations in a 2009 GAO report, CMS indicated a willingness to review and revise the CMS-416.⁵³ We suggest that CMS consider making these changes as part of that review and revision process.

Collaborate with States and providers to develop effective strategies to encourage beneficiary participation in EPSDT screenings

CMS and States should collaborate to develop appropriate education for families. In addition to alerting families of the EPSDT benefit, States could focus education and outreach efforts on the importance of preventive care. Officials from multiple States discussed a concern that families do not emphasize preventive care. Due to this concern, a culture that supports preventive care needs to be developed.

CMS should also collaborate with providers, such as through national or local pediatric medical organizations. Collaborating with providers may identify the best way to work with families. It may involve ideas about how to reach out to families to encourage preventive care or ideas for small incentives that might encourage more children to participate.

Collaborate with States and providers to develop education and incentives for providers to encourage complete medical screenings

CMS and States should collaborate with national or local pediatric medical organizations and regional or State provider groups to educate providers on the necessity and importance of each of the five components of a medical screening. The education could clarify what is expected during a medical screening and what is considered appropriate

⁵³ GAO, *Medicaid Preventive Services*.

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documentation. Strong working relationships between States and providers and their associations are critical for supporting providers' participation in delivering EPSDT services.⁵⁴ In addition, provider input is important for developing effective education techniques.

Additionally, CMS should work with States to develop incentives for providers to encourage complete medical screenings. This could include exploring ways to revise billing practices to encourage complete screenings. One example of revising billing practices could involve billing separate codes for each component of a medical screening (at lesser amounts), and if all five components were billed on the same date of service, the provider would receive payment up to the current reimbursement amount.

Identify and disseminate promising State practices for increasing children's participation in EPSDT screenings and providers' delivery of complete medical screenings

CMS should identify and disseminate promising practices among States to ensure that children benefit from EPSDT's screening services. This effort should focus on practices designed to ensure that families are aware of EPSDT screening services and methods to encourage children's participation in EPSDT screening services. For example, this may include information about incentives offered by States or managed care organizations within a State to families to encourage participation.

In identifying promising practices, CMS should also identify and disseminate promising approaches to working with providers to increase the completeness of medical screenings. Officials from the selected States described some approaches that appear, at face value, to be promising. Perhaps this could be a starting point for this effort. Those ideas included initiatives focused on various components, States' experiences with the development and adoption of standardized forms, and the creation of incentive programs.

To accomplish these tasks, CMS could consider an initiative similar to the recently completed EPSDT dental reviews for developing promising practices. As a result of that initiative, CMS published a National Dental Summary that included promising and notable practices for

⁵⁴ National Academy for State Health Policy, *New Opportunities and Continuing Challenges: A Report from the NASHP EPSDT Forum*. July 2008. Accessed at <http://www.nashp.org> on November 3, 2009.

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improving access to dental services.⁵⁵ CMS has also indicated a willingness to collect promising practices from States to ensure children receive preventive services.⁵⁶

AGENCY COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE

CMS indicated that it concurred, in part, with our first recommendation to require States to report vision and hearing screenings. In its comments, CMS stated that it will consider how hearing and vision screenings could be included as part of any revised or new data collection efforts currently in progress. CMS stated that it is implementing new reporting requirements based on two laws enacted in 2009 and that it will consider our recommendation as part of these efforts. However, CMS indicated that it will need to assess the effect new data collection requirements might have on States' financial resources as well as consider the difficulty States might have in obtaining data on services that are provided outside traditional provider settings.

We agree that CMS should assess the costs of any new data collection requirements for vision and hearing screenings and States' ability to collect these data. However, we continue to think that requiring States to report vision and hearing screenings will enable CMS to better monitor participation in these screenings. Requiring these data would enable CMS to identify which States do not have data available, determine the quality of the data that are available, and identify barriers to collecting these data. With this information, CMS could begin working with States to improve reporting. Although obtaining quality data is likely a multiyear process, we continue to believe that reporting is a necessary first step that would enable States and CMS to monitor the delivery of vision and hearing screenings.

CMS concurred with our other three recommendations and indicated its commitment to improving beneficiary and provider participation in EPSDT. CMS stated that in collaboration with States and national experts, it has begun efforts to improve the provision of EPSDT services. CMS also stated that it is developing an internal work plan to

⁵⁵ CMS, *2008 National Dental Summary*, January 2009. Accessed at <http://www.cms.hhs.gov> on November 3, 2009.

⁵⁶ GAO, *Medicaid Preventive Services*.

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improve EPSDT guidance for State Medicaid agencies. In addition, CMS held two events in 2009 to obtain input from State Medicaid programs and national organizations and to hear their recommendations on how to improve EPSDT. Further, CMS stated that it intends to create a National EPSDT Improvement Workgroup in 2010, which will include State Medicaid agencies, providers, and other stakeholders. CMS expects this workgroup to recommend a multifaceted approach to improving EPSDT, including strategies that ensure accountability on the part of providers. The workgroup is also expected to determine whether there are opportunities to identify and share promising practice information.

We made revisions to the draft report based on CMS's technical comments.

For the full text of CMS's comments, see Appendix D.

Components of a Complete Medical Screening

A complete medical screening is one in which each of the five required components is delivered.⁵⁷ The required components are:

1. **Comprehensive health and developmental history.** This includes a physical and mental developmental assessment and an assessment of nutritional status. Providers are expected to assess the child’s usual functioning as reported by a familiar person, review all information and make an objective judgment as to whether the child is within the expected range, ensure that assessments are culturally sensitive and valid, refrain from making a premature diagnosis and instead report only that a condition was referred or that a type of diagnostic or treatment services is needed, and consult child development resources when concerns or questions remain.
2. **Comprehensive unclothed physical examination.** The physical examination should note obvious physical defects and include an examination of all organ systems. In addition, physical growth, including height and weight, must be included. Results should be compared to what is considered normal for that age.
3. **Appropriate immunizations.** Immunizations should be provided when medically necessary and appropriate for age and health history according to the recommendations of the Advisory Committee on Immunization Practices.
4. **Appropriate laboratory tests.** CMS requires a blood lead test at the ages of 12 and 24 months. Additional appropriate laboratory tests should be determined by each State for particular age and population groups. CMS instructs States to develop their minimum laboratory screening requirements in consultation with State medical organizations or by referencing recognized and accepted clinical practice guidelines. CMS provides examples of tests for States to consider, such as hematocrit, urinalysis, tuberculosis (TB) skin testing, sexually transmitted disease screening, and cholesterol screening.

States often require a risk assessment to determine whether a lab test should be performed. A risk assessment may include questions such as “Does the child live in a home with peeling or chipped paint built prior to 1978?” (lead risk assessment) or “As far as you know has your child been around anyone sick with TB?” (TB risk assessment).

5. **Health education (including anticipatory guidance).** Providers are instructed to use the screening as context for providing health education. Providers are

⁵⁷ Centers for Medicare & Medicaid Services (CMS), *Manual*, §§ 5123.2(A)-(E).

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to give information to the child and the child's family about the benefits of healthy lifestyles and practices as well as accident and disease prevention (health education). This component is also intended to assist in understanding what to expect in the child's development (anticipatory guidance).

Detailed Methodology

Sample

State selection. To review the Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) benefit, we selected 10 States for review. To determine which States to include in this study, we used States' 2006 *Annual EPSDT Participation Report* Form CMS-416 (CMS-416) submissions to the Centers for Medicare & Medicaid Services (CMS). Data from 2006 were the most recent CMS-416 data available at the time of State selection. The 2006 CMS-416 data for Kentucky and Maine were not available from CMS; therefore we excluded these States. We also excluded States that had more than 90 percent enrollment in either fee-for-service (FFS) or managed care, based on the CMS-416, to ensure representation from both service delivery models. This removed nine States.⁵⁸ We ranked the remaining 39 States and the District of Columbia by number of children eligible for the Medicaid EPSDT and by participant ratio. We then summed the two rankings to create a combined score for State selection. To provide us with a range of State sizes and EPSDT participation, we chose the five States with the lowest combined scores and the five States with the highest combined scores.

Beneficiary sampling frame. We created a sampling frame of EPSDT-eligible children in the 10 originally selected States expected to receive at least one EPSDT medical screening based on their ages. We used Medicaid eligibility data from the selected States and States' periodicity schedules to determine which children were required to receive screenings.

First, we requested 2007 Medicaid State Information System (MSIS) eligibility files from CMS. For States with available MSIS data, we used these data to determine those children enrolled in Medicaid and eligible for the EPSDT benefit for the entire year. For the four States for which MSIS data were unavailable or incomplete, we requested directly from the States a list of children enrolled in Medicaid and eligible for the EPSDT benefit for all of 2007.

Second, we determined the age of each EPSDT-eligible child, using the demographic information from the MSIS eligibility files or the

⁵⁸ These States included Alaska, Arizona, Colorado, Mississippi, Oregon, South Carolina, South Dakota, Tennessee, and Wyoming.

State-provided data. If a child's birthday was during the first 6 months of 2007, then we used the age he or she became in 2007. If a child's birthday was in the last 6 months of 2007, then we used the age he or she became on his or her last birthday, in 2006. For example, if a child turned age 6 on April 3, 2007, we determined the child to be 6 years old. If a child turned age 6 on September 3, 2007, we determined the child to be 5 years old. Hereinafter, when we refer to a child's age, we mean the age we determined the child to be in this step.

Third, we determined whether a child was required to receive an EPSDT service based on the child's age. To do this, we used each State's periodicity schedule in effect during 2007. Although States' periodicity schedules may change from year to year, the requirements remained the same across the study period in the selected States.

Finally, we combined all of the remaining children from the original 10 selected States into 1 sampling frame.

Beneficiary sample. The final sample consisted of 345 children. After creating the sampling frame, we selected a stratified random sample of 360 children. We stratified the sample by service delivery model (FFS or managed care) and age group. We stratified by service delivery model because a previous Office of Inspector General (OIG) report on EPSDT found problems in managed care.⁵⁹ We stratified by age because research suggested vulnerabilities by age in EPSDT.⁶⁰ We used three age groups for representation: under age 3, 3–8, and 9–21. We determined each child's service delivery model based on the model each child was enrolled in for at least 6 months of 2007. We selected 60 children from each of the 6 strata.

From the sample of 360 children, we dropped 11 children because of ongoing investigations into their provider(s) by OIG or State Medicaid Fraud Control Units. One State was dropped at this time because of an ongoing provider investigation by OIG, resulting in nine States. We dropped an additional four children because further research deemed them ineligible for EPSDT. Table B-1 shows the population of children within the sampling frame, the six strata, and the final number of children in each stratum.

⁵⁹ OIG, *Medicaid Managed Care and EPSDT*.

⁶⁰ National Health Law Program, *Children's Health Under Medicaid*.

Table B-1: Sample Stratification

Age Group	Managed Care		FFS		Total	
	Population	Sample	Population	Sample	Population	Sample
< 3	669,281	58	240,185	60	909,466	118
3-8	941,968	55	408,501	60	1,350,469	115
9-21	964,891	57	583,126	55	1,548,017	112
Total	2,576,140	170	1,231,812	175	3,807,952	345

Source: OIG Sample stratification, 2009.

Data Collection

Medical record request. For the 345 children, States reported that 98 children did not have any providers who billed EPSDT-related Current Procedural Terminology (CPT) codes during their sample periods. Therefore, for the remaining 247 children, we requested medical records from all providers who billed an EPSDT-related CPT code. We requested medical records for a 14-month period of time from providers for these 247 children. This period of time included documentation for 1 month before and 1 month after each child’s 12-month determined age to provide additional context. For 82 children, the sample period was 26 months because the State’s periodicity schedule required 1 screening within a 2-year period.

The initial medical record request was sent by mail. We made two additional attempts by mail and two attempts by telephone to obtain the records. We made the last written request by signature-required certified mail. We received responses from all providers.

However, we did not receive enough information for 14 children to determine whether they received screenings. For these children, at least one of their providers either responded that the child was not a patient or that the provider retired and did not retain records or responded only with the signed certified-mail receipt from the last written request.

Test review. To test the medical record review instrument and to ensure uniformity among the multiple OIG staff reviewers, we conducted a preliminary review of children’s medical records. Beyond the original sample of 360 children, we selected an additional 30 children for the test review and requested their medical records as outlined above. Each child was assigned to one of four OIG staff reviewers. Each reviewer reviewed the first 15 medical records received. As a group, we analyzed

the results of the review. We then made necessary revisions to the review instrument and discussed the results to resolve any reviewer inconsistencies.

Data Analysis

We reviewed medical records to determine whether a child received all, some, or none of the required EPSDT screenings. The reviewers used the periodicity schedule established by the State in which each child resided to determine the required number of medical screenings at his or her determined age. For vision and hearing screenings, we used State periodicity schedules to determine whether a child was required to receive a screening at his or her age. We then analyzed the documents in the medical records to determine the types of screenings that occurred.

We also reviewed the medical records to determine the completeness of medical screenings. We considered a medical screening complete only if the medical record included documentation of all five required components.

Quality assurance. We selected both a purposive sample and a random sample of children to review for quality assurance during and after the review of medical records. On a weekly basis during the review of medical records, reviewers chose the two to four most difficult of their assigned medical records for a quality assurance check. Difficult records may have been illegible or the assigned reviewer had concerns about the sufficiency of the record's documentation. The other reviewers then analyzed the records for the selected children, and we discussed the results each week to resolve any reviewer inconsistencies and changed the results if necessary. At the end of the review of medical records, an additional random sample of children was selected for a similar quality assurance review. In total, all reviewers participated in a quality assurance check for 35 children, or 14 percent of children for whom medical records were requested.

Analysis of medical record review results. We used the results of the review of medical records, including the 98 children without EPSDT-related billing, to calculate the percentage of children missing all, some, or none of the required screenings. We counted the number of children who received all required screenings, the number of children who received some screenings, and the number of children who did not receive any screenings and divided each total by the number of children

in the sample, including children whose medical records had insufficient documentation.

We used the results to count the number of children who did not receive each type of screening. We then divided the totals for each type of screening by the total number of children in the sample.

We considered a child to have received a medical screening even if the screening did not include all five components.

In addition, for the children whose medical records did not indicate that they received vision or hearing screenings and who were not required to receive those screenings, we considered those children to have met the vision and hearing requirements.

To determine the percentage of children who were missing components of a medical screening over the course of a year, we first excluded any children who did not receive any medical screenings during the sample period. We also excluded children whose records had insufficient documentation. This left 197 children for analysis.

We used the results to determine how many of the five components a child did not receive during the sample period. We determined whether each child was missing 0, 1, 2, 3, or 4 of the components. Then, we divided each group of children by the total number of children who received medical screenings. We also determined whether the lab test component was not received more often than any other component. Using the Bonferroni method for multiple comparisons, a difference was statistically significant if the confidence interval of the difference did not contain zero using an alpha of 0.05 divided by 4, or 0.0125.

We attempted to be as generous as possible when reviewing records for documentation of the components. For the health and developmental history component, we looked for any documentation indicating that a developmental assessment (both mental and physical health history) and an assessment of nutritional status occurred. Similarly, for the immunization component, we considered the component complete if there was any indication that providers checked to be sure a child was up-to-date on immunizations or administered immunizations. For the lab test component, we used each State's laboratory schedule to determine what, if any, lab tests were required at a child's age. If no lab test was required, we considered the laboratory component complete. If lab tests were required, we looked for any indication that the required lab tests were assessed or performed. Lastly, for the other two

components, we looked for any documentation (physician notes, checkmarks on forms, etc.) that the provider attempted to address the component.

To determine the percentage of children missing each component, we counted the number of children who lacked each component during an entire year and divided that by the total number of children who received medical screenings.

As part of the analysis of the laboratory component, we also analyzed the results for two different lab tests. To determine the percentage of children who were missing blood lead tests, we counted the number of children who did not receive required blood lead tests and divided that by the number of children required by Federal law to receive blood lead tests. To determine the percentage of children who were missing tuberculosis (TB) tests, we counted the number of children who did not receive required TB tests and divided that by the number of children required by their States to receive TB tests.

Generally, we found no significant differences in EPSDT participation between children in FFS and managed care or between age groups. Therefore, we did not present the results in the report.

Estimates and Confidence Intervals

Table C-1: Estimates of Medical Record Review Results Analysis

Estimate Description	Sample Size	Point Estimate	95-Percent Confidence Interval
Percentage of children who did not receive all required Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) medical, vision, and hearing screenings	345	75.7	70.7%—80.6%
Number of children who did not receive all required EPSDT medical, vision, and hearing screenings	345	2,731,975	2,553,012—2,910,938
Percentage of children who received all EPSDT screenings	345	20.8	16.1%—25.5%
Percentage of children who did not receive any EPSDT screenings	345	37.8	32.4%—43.3%
Percentage of children who were missing types of screenings	345	33.5	28.1%—38.9%
Percentage of children who had all types of screenings, but an incorrect number of screenings	345	4.3	2.4%—6.2%
Percentage of children whose medical records had insufficient documentation	345	3.6	1.5%—5.6%
Percentage of children who received at least one, but not all, EPSDT screenings	345	37.8	32.4%—43.2%
Percentage of children who did not receive any medical screenings	345	41.4	35.9%—46.9%
Percentage of children who did not receive any vision screenings	345	59.6	53.9%—65.2%
Percentage of children who did not receive any hearing screenings	345	66.6	61.4%—71.9%
Percentage of children who received at least one medical screening	345	55.0	49.5%—60.6%
Number of children who received at least one medical screening	345	1,986,492	1,786,186—2,186,798

Source: Office of Inspector General (OIG) analysis of results of a review of medical records, 2009.

Table C-2: Estimates of Medical Record Review Results Analysis for Children Who Did Not Receive Hearing Screenings

Estimate Description	Sample Size	Point Estimate	95-Percent Confidence Interval
Percentage of children who did not receive hearing screenings and did not receive medical screenings	242	55.7	49.0%—62.4%

Source: OIG analysis of results of a review of medical records, 2009.

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Table C-3: Estimates of Medical Record Review Results Analysis for Children Who Did Not Receive Vision Screenings

Estimate Description	Sample Size	Point Estimate	95-Percent Confidence Interval
Percentage of children who did not receive vision screenings and did not receive medical screenings	222	60.1	53.9%—67.2%

Source: OIG analysis of results of a review of medical records, 2009.

Table C-4: Estimates of Medical Record Review Results Analysis for Children Who Received Medical Screenings

Estimate Description	Sample Size	Point Estimate	95-Percent Confidence Interval
Percentage of children who received medical screenings but did not receive all components	197	59.5	52.0%—66.8%
Percentage of children who received medical screenings and received complete screenings	197	41.4	35.9%—46.9%
Percentage of children who received medical screenings but did not receive one component	197	29.9	22.9%—36.9%
Percentage of children who received medical screenings but did not receive two components	197	17.9	11.8%—24.0%
Percentage of children who received medical screenings but did not receive three components	197	9.1	4.5%—13.6%
Percentage of children who received medical screenings but did not receive four components	197	2.0	0.6%—5.1%*
Percentage of children who received medical screenings but did not receive the appropriate laboratory tests component	197	38.2	30.7%—45.6%
Percentage of children who received medical screenings but did not receive the health and developmental history component	197	21.0	14.7%—27.4%
Percentage of children who received medical screenings but did not receive the complete unclothed physical examination component	197	8.2	3.9%—12.5%
Percentage of children who received medical screenings but did not receive the appropriate immunizations component	197	12.8	7.6%—17.9%

* Confidence interval calculated with an exact method based on the binomial distribution.

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Table C-4: Estimates of Medical Record Review Results Analysis for Children Who Received Medical Screenings, *continued*

Estimate Description	Sample Size	Point Estimate	95-Percent Confidence Interval
Percentage of children who received medical screenings but did not receive the health education (including anticipatory guidance) component	197	20.7	14.4%—27.0%

Source: OIG analysis of results of a review of medical records, 2009.

Table C-5: Estimates of Medical Record Review Results Analysis for Children Who Did Not Receive Any Medical Screenings

Estimate Description	Sample Size	Point Estimate	95-Percent Confidence Interval
Percentage of children who did not receive medical screenings and did not receive vision and hearing screenings	148	86.4	81.1%—91.8%

Source: OIG analysis of results of a review of medical records, 2009.

Table C-6: Estimates of Medical Record Review Results Analysis for Children Who Received Medical Screenings and Were Required to Receive Tuberculosis Tests

Estimate Description	Sample Size	Point Estimate	95-Percent Confidence Interval
Percentage of children who received medical screenings and were required to receive tuberculosis tests but did not receive them	115	69.1	59.9%—78.3%

Source: OIG analysis of results of a review of medical records, 2009.

Table C-7: Estimates of Medical Record Review Results Analysis for Children Who Received Medical Screenings and Were Required to Receive Blood Lead Tests

Estimate Description	Sample Size	Point Estimate	95-Percent Confidence Interval
Percentage of one- and two-year-olds who received medical screenings but did not receive mandatory blood lead tests	56	57.4	42.4%—72.4%

Source: OIG analysis of results of a review of medical records, 2009.

Agency Comments



DEPARTMENT OF HEALTH & HUMAN SERVICES

Centers for Medicare & Medicaid Services

Administrator
Washington, DC 20201

DATE: MAR 18 2010
TO: Daniel R. Levinson
Deputy Inspector General
FROM: Charlene Frizzera /S/
Acting Administrator
SUBJECT: Office of Inspector General (OIG) Draft Report: Most Medicaid Children Are Not Receiving All Required Preventive Screening Services (OEI -05-08-00520)

The Centers for Medicare & Medicaid Services (CMS) appreciates the opportunity to review and comment on the Office of Inspector General (OIG) draft report.

The CMS is committed to improving access to services for Medicaid eligible children, and to ensuring that children receive the full scope of services available under the Medicaid Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) benefit. We concur with most of the recommendations in this report and are undertaking efforts in conjunction with States and national experts to improve the provision of EPSDT services. In addition, we have attached technical comments on the draft report.

OIG Recommendation

Require States to report vision and hearing screenings.

CMS Response

The CMS concurs, in part, with this recommendation. CMS is undertaking broader efforts, which are described below, to strengthen the EPSDT program. As OIG notes in its report, this could include reviewing the data collected on the Form CMS-416 to ensure that the data accurately measure children's access to the preventive and follow up services to which they are entitled under EPSDT. Additionally, we will assess opportunities to improve our data collection and reporting to better measure the quality of and access to services provided to children under EPSDT. As we continue to implement the child health care quality measure program and annual quality reporting provisions established by the Children's Health Insurance Program Reauthorization Act of 2009, and the electronic health records incentive provisions of the American Recovery and Reinvestment Act of 2009, we will consider how hearing and vision screenings could be included as part of any revised or new data collection effort.

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Our goal is to ensure access to quality services under EPSDT, and as we continue to explore new data collection approaches, we will also assess the impact on States of collecting such data, by taking into account the costs and fiscal impact on States of making any system changes that are required to collect new data. We will also consider ways in which to synergize these efforts with new strategies to improve provider compliance, taking into account the difficulty of obtaining data on services that are provided outside of traditional provider settings.

OIG Recommendation

Collaborate with States and providers to develop effective strategies to encourage beneficiary participation in EPSDT screenings.

CMS Response

The CMS agrees with this recommendation, and increasing beneficiary participation is a key goal of our EPSDT improvement efforts. CMS is committed to undertaking new efforts to ensure that children obtain the preventive and follow up services to which they are entitled under EPSDT. These efforts are being developed through both internal and external processes that began in 2009. In late 2009, CMS held two “EPSDT Listening Sessions” to obtain input from State Medicaid programs and national organizations and hear their recommendations on improving service delivery, monitoring, and assessment of health outcomes related to EPSDT services. Internally CMS is developing a work plan to provide updated, comprehensive guidance for State Medicaid agencies and evaluating opportunities to improve the provision of EPSDT services to children. These opportunities may include:

- 1) Providing additional EPSDT guidance to State Medicaid agencies,
- 2) Enhancing guidance within the State Medicaid Manual on EPSDT services, and
- 3) Conducting additional comprehensive or targeted EPSDT reviews for other types of EPSDT services.

Building on these efforts, CMS will create a National EPSDT Improvement Workgroup this year, which will include State Medicaid Agencies, providers, and national organizations involved in child health care issues. The national workgroup will be charged with recommending a multi-faceted approach to improving EPSDT services to comprehensively address the needs of Medicaid beneficiaries. This approach may include strategies to encourage beneficiary participation in EPSDT screenings, developing additional CMS guidance on EPSDT, improving technical assistance to States, and strengthening the provision of EPSDT services at the provider level. The recommendations provided by the OIG Reports on preventive screening services will also be reviewed by the national EPSDT improvement workgroup. We expect the workgroup to provide valuable information about improving the quality and comprehensiveness of CMS data on children’s health services.

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OIG Recommendation

Collaborate with States and providers to develop education and incentives for providers to encourage complete medical screenings.

CMS Response

The CMS agrees with this recommendation. Promoting better provider understanding and accountability of EPSDT services is central to improving access. We look forward to working with States to develop approaches to create provider incentives for screening children, including aligning payment incentives with the provision of EPSDT services. CMS will assess incentives related to EPSDT services for purposes of developing payment strategies that reward quality of care rather than volume of services furnished. While this work is ongoing, CMS encourages States to consider State plan amendments to implement incentives or changes in billing practices to encourage complete medical screenings.

In addition, CMS intends to consider strategies that ensure accountability on the part of providers for providing medically necessary services to children under EPSDT. Since more than 70 percent of Medicaid beneficiaries are enrolled in managed care for example, it is essential that State managed care contracts reflect EPSDT requirements and encourage accurate reporting on the provision of services. These efforts will be undertaken in recognition that CMS, States and providers have a shared interest in ensuring that children receive EPSDT services. Our national EPSDT improvement workgroup will also examine whether there are opportunities to identify and share provider best practices to facilitate the adoption of the most effective approaches being implemented across States.

OIG Recommendation

Identify and disseminate promising State practices for increasing children's participation in EPSDT screenings and providers' delivery of complete medical screenings.

CMS Response

The CMS agrees with this recommendation. As noted in the OIG Draft Report, CMS has identified and disseminated promising dental practices in a National Dental Summary published in January 2009. CMS is continually working to identify promising practices from our State Medicaid Agency partners, including soliciting States to submit their promising practices for dissemination via our promising practices Web page. The Web page is located at: http://www.cms.hhs.gov/MedicaidCHIPQualPrac/10_PromisingPracticesConceptNominationProcess.asp. We expect that the national EPSDT improvement workgroup will provide additional focus in this area. We hope to collect and share additional promising practices among States, including lessons, successes, and challenges.

The CMS is committed to improving access to services for Medicaid eligible children and concurs with most of the recommendations in this report. CMS is undertaking efforts in conjunction with States and national experts to improve the provision of EPSDT services, and

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anticipates providing additional guidance to States on the provision of EPSDT services. Currently, CMS is reviewing our EPSDT guidance, policies and procedures. CMS has developed an internal workgroup specifically to evaluate opportunities for: 1) providing improved and more comprehensive EPSDT guidance to State Medicaid agencies, 2) specifically enhancing guidance in the State Medicaid Manual on EPSDT services, and 3) assessing the need for additional comprehensive or targeted EPSDT reviews for other types of EPSDT services. CMS will convene a national EPSDT improvement workgroup encompassing States, providers and national organizations to identify strategies that CMS could undertake to strengthen the EPSDT benefit.

Finally, CMS will continue focusing its efforts on collecting and disseminating promising practices related to child health issues including oral health services. We will continue to use every opportunity to solicit input from States including a reminder in our guidance to States through our State Medicaid Director letters on EPSDT services.

Again, CMS appreciates the opportunity to review and comment on this draft report.

Attachment



A C K N O W L E D G M E N T S

This report was prepared under the direction of Ann Maxwell, Regional Inspector General for Evaluation and Inspections in the Chicago regional office, and Thomas F. Komaniecki, Deputy Regional Inspector General.

Nicole Hrycyk served as the team leader for this study. Other principal Office of Evaluation and Inspections staff from the Chicago regional office who contributed to the report include Benjamin Dieterich, Patrick Joyce, Meghan Kearns, and Lauren Rosapep; central office staff who contributed include Heather Barton, Scott Manley, and Megan Ruhnke.

Office of Inspector General

<http://oig.hhs.gov>

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