

Purpose of Study

This study reviewed care provided to the population of Children with Special Health Care Needs (CSHCN). This population included children who received supplemental security income (SSI) or adoption assistance. This study assessed compliance with the Early and Periodic Screening, Diagnosis and Treatment (EPSDT) recommendations.

The emphasis of EPSDT service components is on developmental assessment and early identification of risk-associated problems in children. EPSDT components should be provided at recommended intervals for children from birth through age 21. The age-specific EPSDT recommended components for Michigan Medicaid enrollees is attached in the Appendix.

Study Population

The population for the CSHCN study included children receiving SSI benefits or adoption assistance who were enrolled continuously for the 12 months of the review period January 1, 1999 through December 31, 1999. In addition, each child incurred one or more office visits with a health care provider during the review period. The population included enrollees across all 19 Qualified Health Plans (QHP). The population was stratified according to the enrollee's QHP and whether the child received SSI or adoption assistance. The sample was proportionate for each QHP and adopted/SSI status. Results were calculated for the following age groups based on the age achieved by each child on the birthday occurring within the study period:

- 0-2 years
- 3-6 years
- 7-12 years
- 13-21 years

Study Questions

Study questions developed for the 1999 CSHCN review were used to formulate data abstraction indicators, and as a framework for reporting study results. Results based on the study questions are reported in the following categories:

- What percentage of enrollees in age groups 0-2, 3-6, 7-12, and 13-21 had a minimum of one EPSDT service component during 1999?
- What percentage of enrollees received EPSDT service components of history, immunization review, measurement, sensory screening, developmental assessment and inspection during 1999?

Limitations

This review provides baseline information regarding EPSDT care provided to the CSHCN population. The sample was randomly selected from the entire population, regardless of enrollee age. The results were stratified by age; however, due to the small representation of two age groups in the qualifying population, the 0–2 and 3-6 year old age groups included fewer than 30 enrollees in the sample. Therefore, results are displayed only for the 7-12 and 13-21 age groups. Indicators which are specific to the 0-2 and 3-6 year age groups are excluded from this discussion. These include head circumference measurement, sickle cell, tuberculin skin, blood lead level, and hemoglobin/hematocrit testing. Results for all combined ages, including enrollees less than seven years old, are also included in the report.

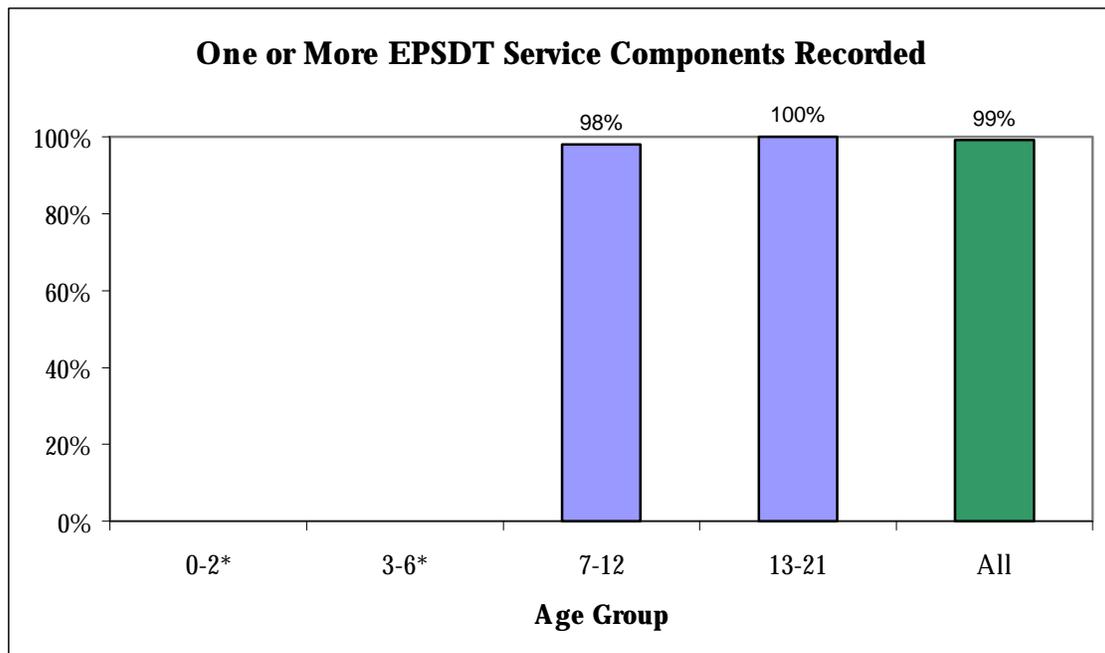
Results

One of More EPSDT Service Components

- ⇒ **98% of enrollees aged 7-12 received one or more EPSDT service components**
- ⇒ **100% of enrollees aged 13-21 received one or more EPSDT service components**
- ⇒ **99% of all enrollees received one or more EPSDT service components**

One or more EPSDT service components were provided during the review period for each of the age groups as displayed in Figure 5.1. Findings from EQR 1999 indicated that one or more services were provided for 98% of children aged 7-12 years and 100% for enrollees aged 13-21 years.

Figure 5.1



*Rates not displayed; based on sample or population < 30.

Multiple EPSDT Service Components

EPSDT involves periodic examinations of children to provide early assessment and recognition of physical or mental problems and to provide health care treatment to address identified problems. It requires distinct, age-appropriate screening procedures and testing. Early detection and treatment are especially important for children who have developmental delays, emotional or behavioral problems, nutritional deficits, infections, and sensory problems related to hearing or vision.

Specific components reviewed in this study included:

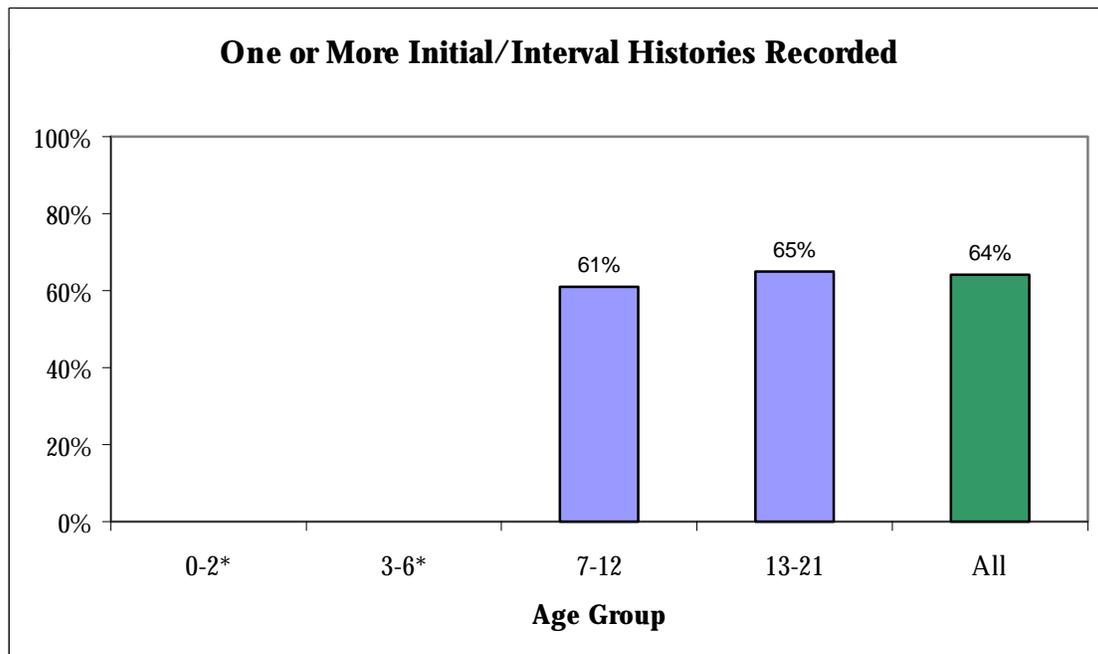
- Initial or interval history
- Immunization review
- Height measurement
- Weight measurement
- Blood pressure measurement
- Vision screening
- Hearing screening
- Dental inspection
- Interpretive conference
- Nutritional assessment
- Developmental assessment
- Physical examination
- Anticipatory guidance

Initial/Interval History

- ⇒ **61% of enrollees aged 7-12 received one or more initial/interval histories**
- ⇒ **65% of enrollees aged 13-21 received one or more initial/interval histories**
- ⇒ **64% of all enrollees received one or more initial/interval histories**

Initial and interval histories allow for an individualized plan of care and contribute to the coordination and continuity of services provided for each child. Results for the two age groups were similar as shown in Figure 5.2.

Figure 5.2



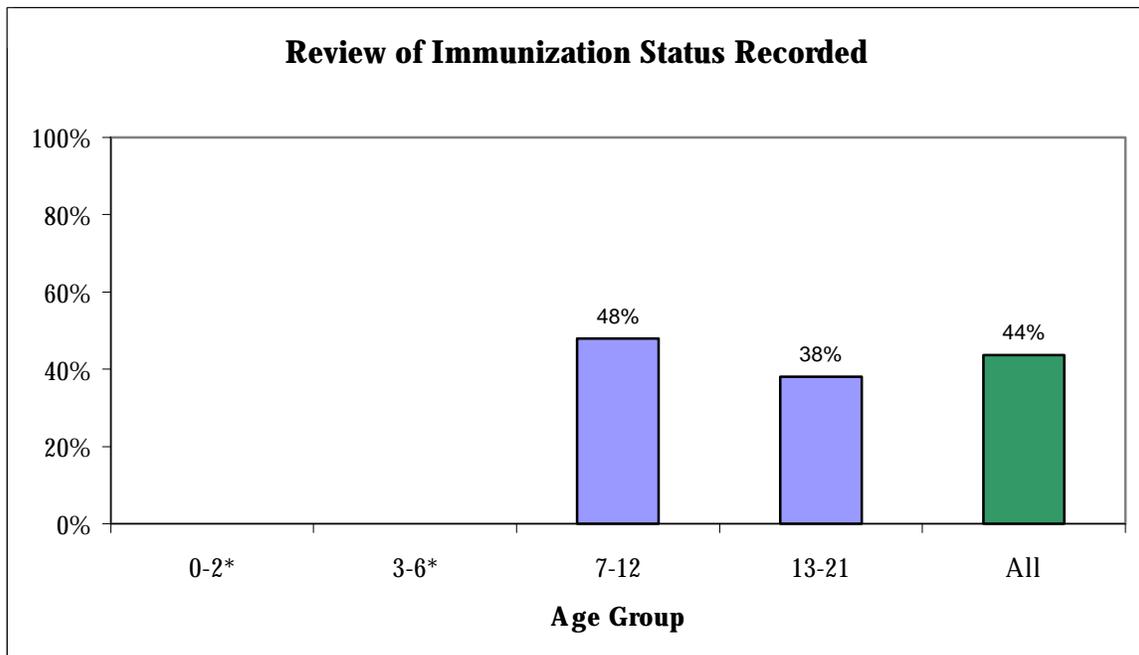
*Rates not displayed; based on sample or population < 30.

Immunization

- ⇒ **48% of enrollees aged 7-12 received immunization review**
- ⇒ **38% of enrollees aged 13-21 received immunization review**
- ⇒ **44% of all enrollees received immunization review**

It is important for the health care provider to review the immunization record of an enrollee to determine if further age-appropriate vaccinations are required. Results for older age groups are typically lower than those for younger children since most immunizations are provided by age five. The findings are displayed below in Figure 5.3.

Figure 5.3



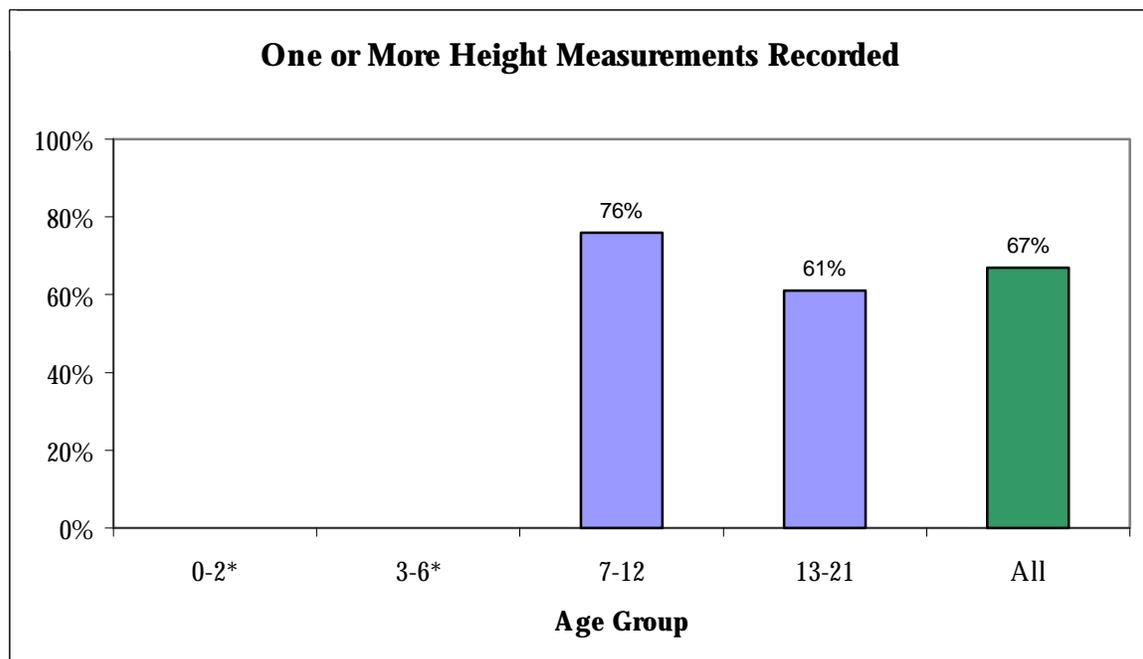
*Rates not displayed; based on sample or population < 30.

Height Measurements

- ⇒ **76% of enrollees aged 7-12 received one or more height measurements**
- ⇒ **61% of enrollees aged 13-21 received one or more height measurements**
- ⇒ **67% of all enrollees received one or more height measurements**

Height measurements, when compared to age-specific standards, provide useful information of a child's growth and suggest additional evaluation when measurements deviate from the acceptable range. The adherence rates for one or more height measurements documented in the medical record are displayed in Figure 5.4. The rates were 76% for enrollees aged 7-12 and 61% for enrollees aged 13-21.

Figure 5.4



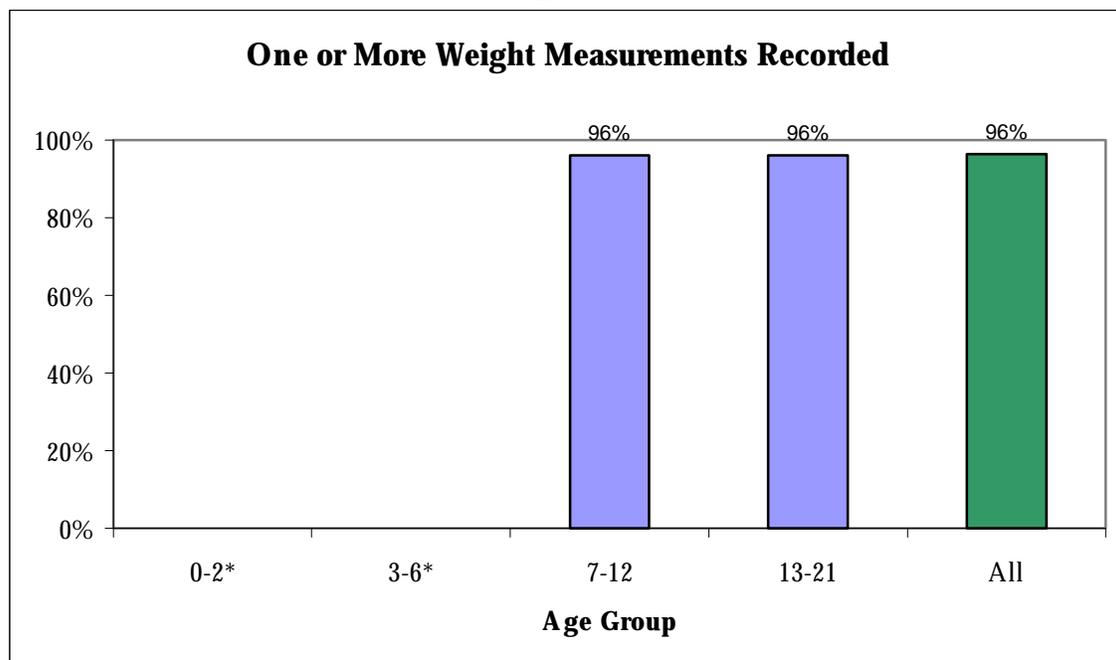
*Rates not displayed; based on sample or population < 30.

Weight Measurement

- ⇒ **96% of enrollees aged 7-12 received one or more weight measurements**
- ⇒ **96% of enrollees aged 13-21 received one or more weight measurements**
- ⇒ **96% of all enrollees received one or more weight measurements**

Weight measurements provide information of growth and development when compared to standards recommended by the American Academy of Pediatrics (AAP). Weight measurement findings outside of the acceptable standard may suggest further clinical evaluation and planned interventions to assist an enrollee in maintaining optimal health. The percentage of medical records with one or more weight measurements recorded was 96% for all age groups as displayed in Figure 5.5 below.

Figure 5.5



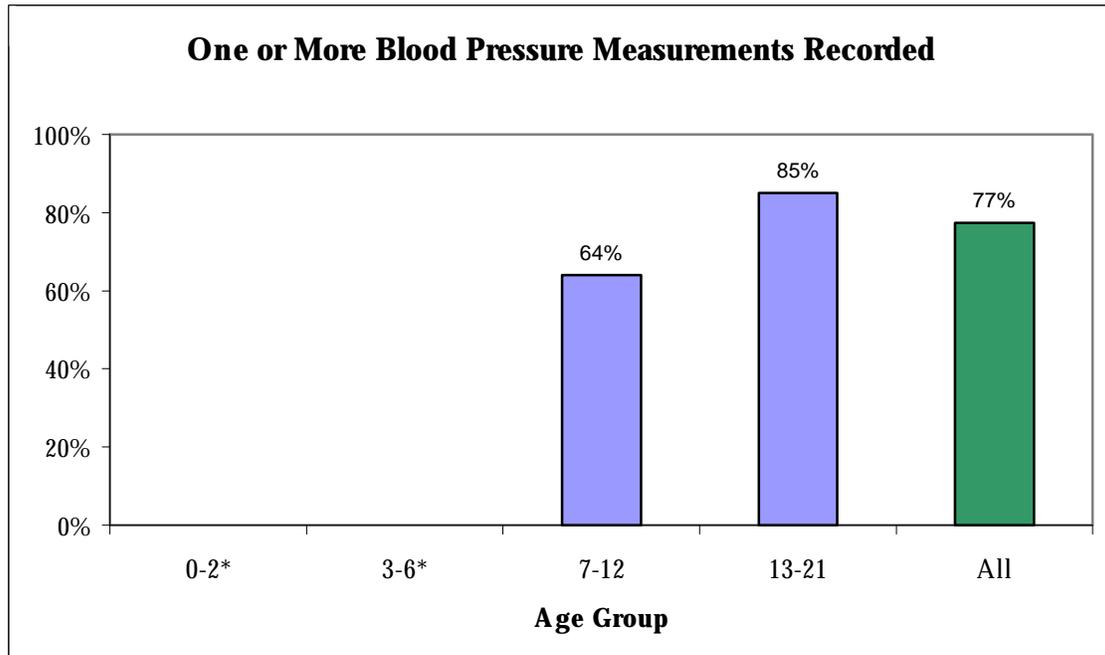
*Rates not displayed; based on sample or population < 30.

Blood Pressure Measurement

- ⇒ **64% of enrollees aged 7-12 received one or more blood pressure measurements**
- ⇒ **85% of enrollees aged 13-21 received one or more blood pressure measurements**
- ⇒ **77% of all enrollees received one or more blood pressure measurements**

The EPSDT component of blood pressure measurement is recommended for children aged three years and older. Blood pressure readings higher or lower than standards accepted by AAP may suggest conditions of hypertension or hypotension. Abnormal findings are indicators for further clinical evaluation and planned interventions to maintain an optimal health status for the child. A higher rate of blood pressure measurement was reported for enrollees aged 13-21 than for younger enrollees. Figure 5.6 displays rates for both reported age groups and the rate for all enrollees.

Figure 5.6



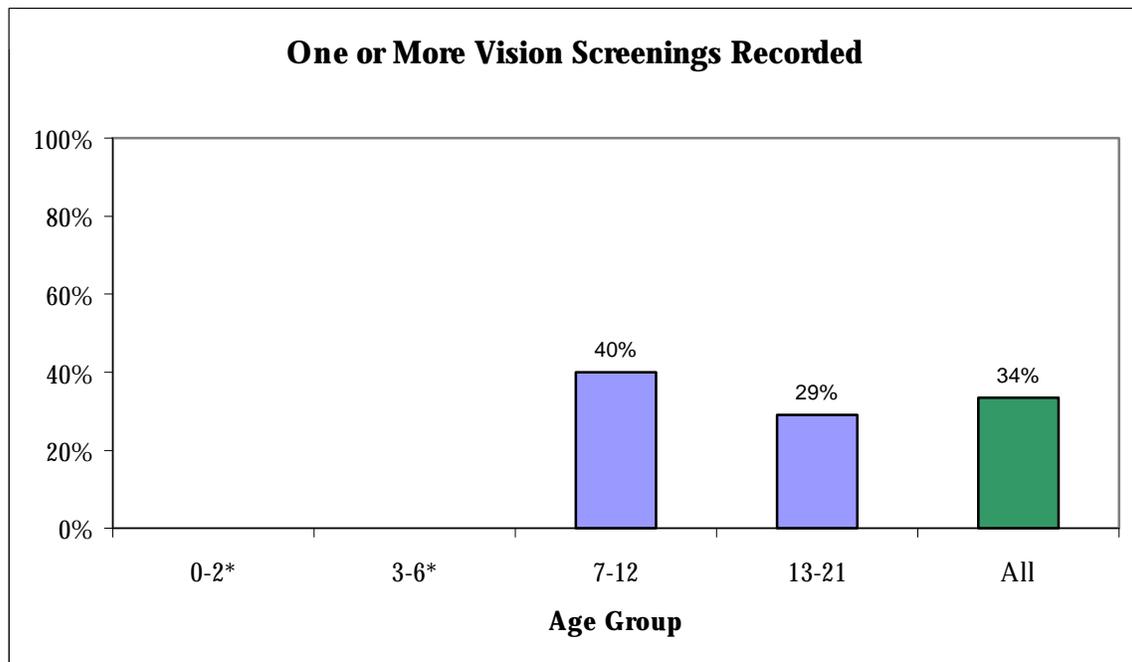
*Rates not displayed; based on sample or population < 30.

Vision Screening

- ⇒ **40% of enrollees aged 7-12 received one or more vision screenings**
- ⇒ **29% of enrollees aged 13-21 received one or more vision screenings**
- ⇒ **34% of all enrollees received one or more vision screenings**

Early detection of visual difficulties enables health care providers to treat patients early and potentially improve outcomes of planned interventions. Objective vision screening methods include the red reflex test, fixation test, or corneal light reflex test. The relatively low rates may be due to the fact that vision problems are typically identified in school systems during the primary grades and followed up with care by an optometrist. Adherence rates for this indicator are displayed in Figure 5.7.

Figure 5.7



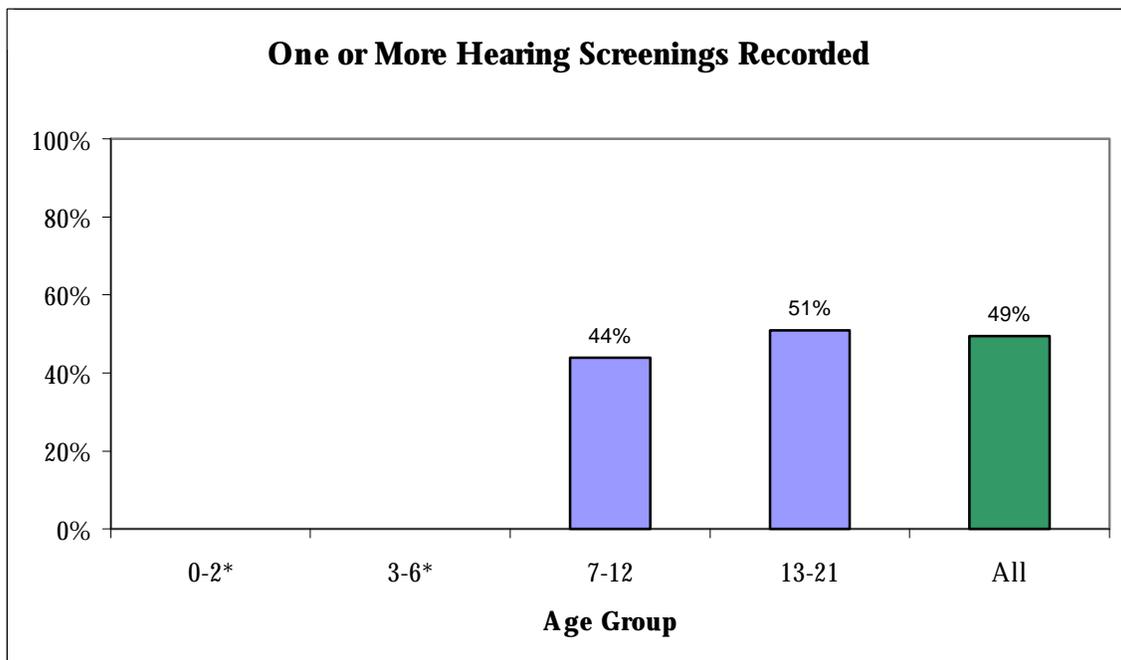
*Rates not displayed; based on sample or population < 30.

Hearing Screening

- ⇒ **44% of enrollees aged 7-12 received one or more hearing screenings**
- ⇒ **51% of enrollees aged 13-21 received one or more hearing screenings**
- ⇒ **49% of all enrollees received one or more hearing screenings**

Identification of hearing difficulties allows for early interventions and reduction in the potential for developmental delays related to hearing deficits. Objective evaluations of hearing include otoacoustic emissions test and auditory brainstem response. Documentation in the medical record of any age-appropriate subjective or objective hearing test by the health care provider was considered acceptable for this study. Rates were 44% for enrollees aged 7-12 and 51% for those aged 13-21.

Figure 5.8



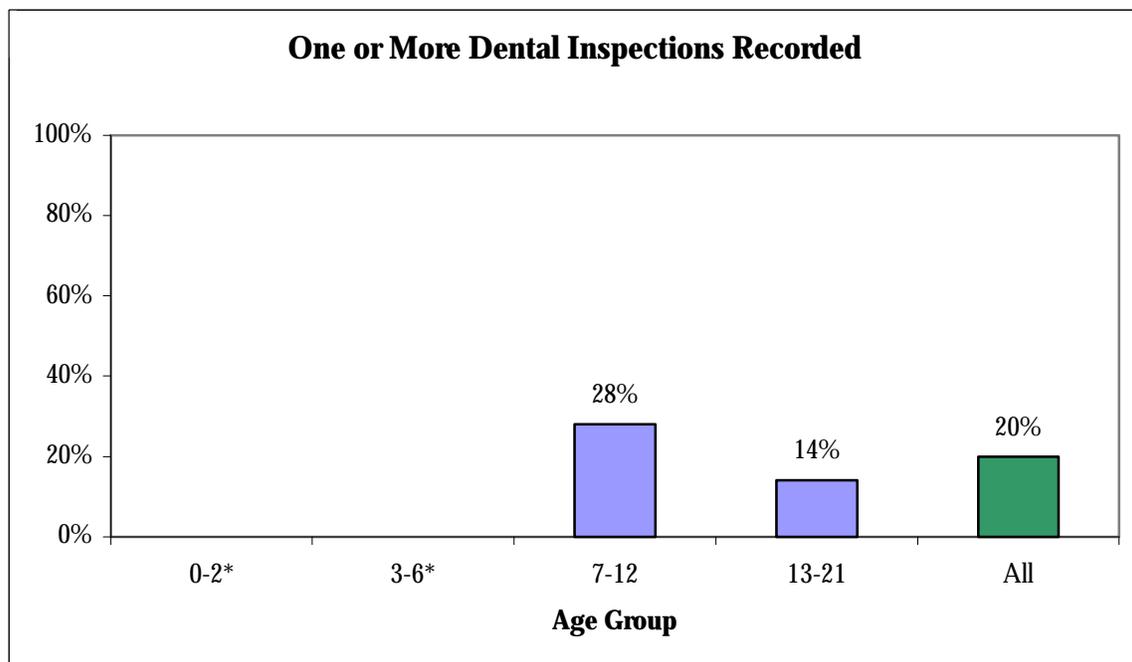
*Rates not displayed; based on sample or population < 30.

Dental Inspection

- ⇒ **28% of enrollees aged 7-12 received one or more dental inspections**
- ⇒ **14% of enrollees aged 13-21 received one or more dental inspections**
- ⇒ **20% of all enrollees received one or more dental inspections**

Dental inspections assess the development and integrity of the child's teeth and supportive tissues to determine problems or potential difficulties. High adherence rates are expected for the younger age groups due to concern regarding the eruption of primary and secondary teeth. Dental care for older age groups is usually provided by a dentist. Adherence rates for documentation of dental inspections are displayed in Figure 5.9.

Figure 5.9



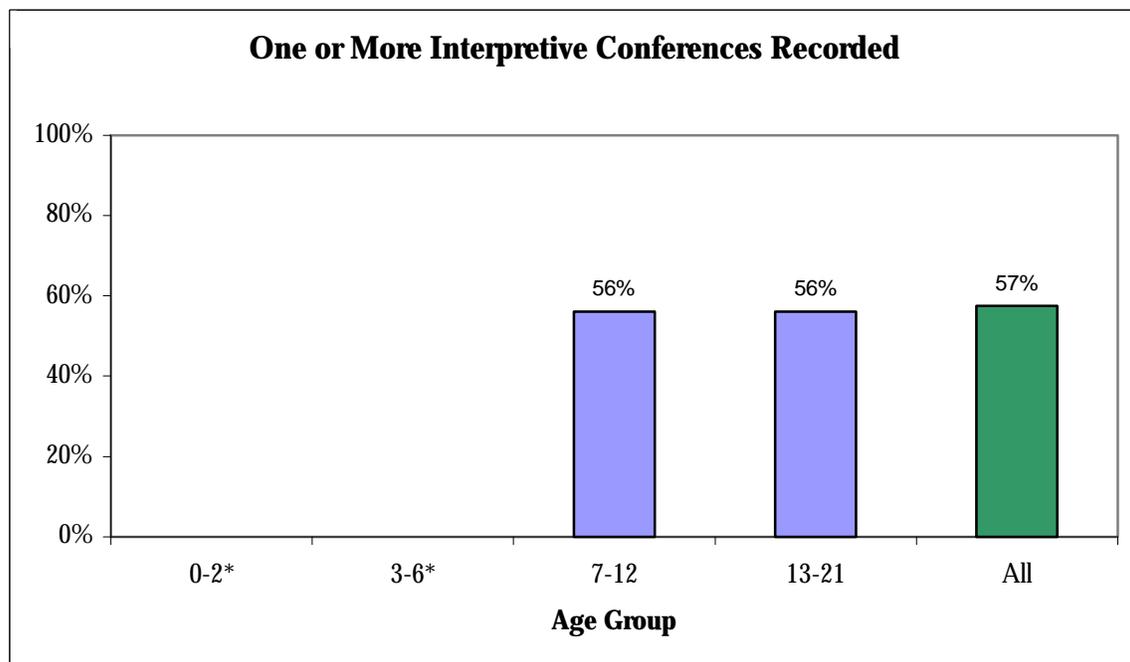
*Rates not displayed; based on sample or population < 30.

Interpretive Conference

- ⇒ **56% of enrollees aged 7-12 received one or more interpretive conferences**
- ⇒ **56% of enrollees aged 13-21 received one or more interpretive conferences**
- ⇒ **57% of all enrollees received one or more interpretive conferences**

An interpretive conference occurs at the time of an office visit and is an opportunity for the health care provider to discuss clinical findings and planned interventions with the child's parent. Likewise, the interpretive conference is intended to answer parent questions and clarify understanding of the child's health needs. Documentation of an interpretive conference was noted in 56% of the records reviewed for both age groups as shown in Figure 5.10.

Figure 5.10



*Rates not displayed; based on sample or population < 30.

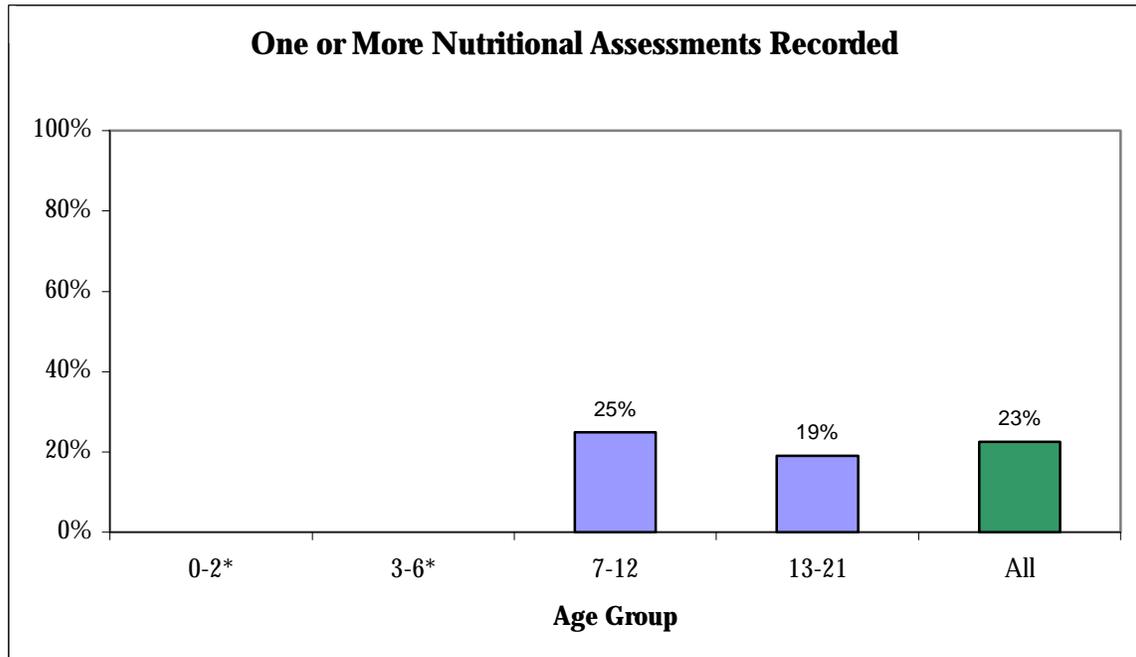
Nutritional Assessment

- ⇒ **25% of enrollees aged 7-12 received one or more nutritional assessments**
- ⇒ **19% of enrollees aged 13-21 received one or more nutritional assessments**
- ⇒ **23% of all enrollees received one or more nutritional assessments**

Nutritional assessment considers the appropriateness of nutritional choices and the possible need for nutritional supplements. The health care provider should be aware of the enrollee's nutritional intake and relate this information to other findings from the overall assessment.

Results reported in Figure 5.11 indicate that a nutritional assessment was most frequently documented in the medical records of enrollees aged 7-12. It was documented in 19% of records for enrollees aged 13-21. For older enrollees, nutritional assessment may only be provided for those with weight issues identified by height and weight measurement.

Figure 5.11



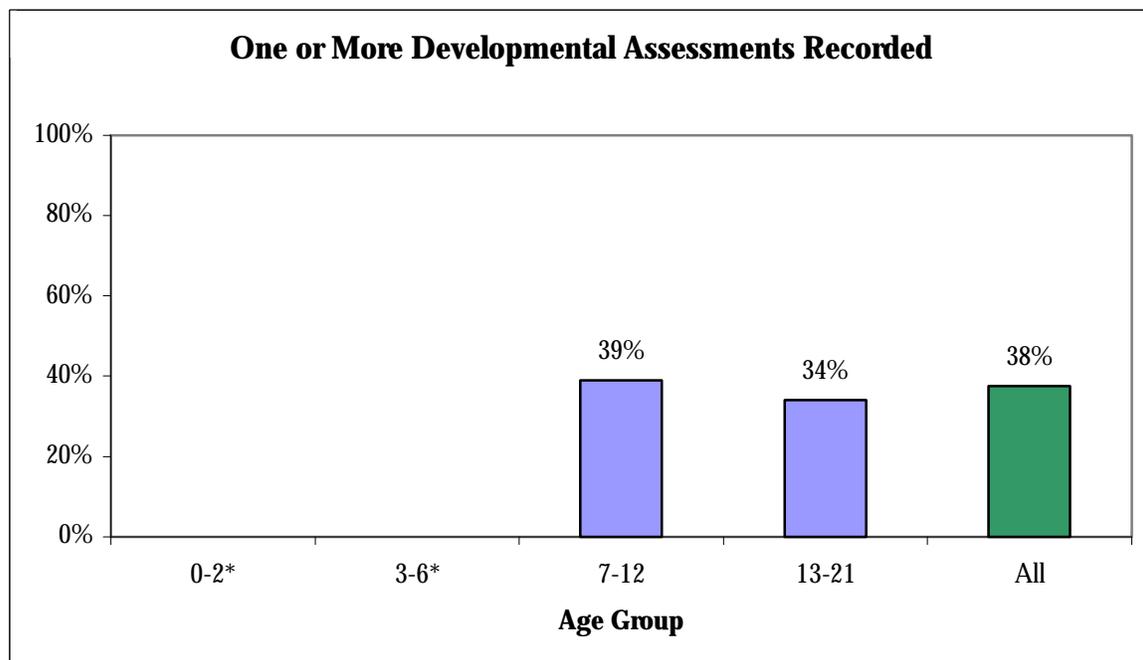
*Rates not displayed; based on sample or population < 30.

Developmental Assessment

- ⇒ **39% of enrollees aged 7-12 received one or more developmental assessments**
- ⇒ **34% of enrollees aged 13-21 received one or more developmental assessments**
- ⇒ **38% of all enrollees received one or more developmental assessments**

A developmental assessment evaluates attainment of established milestones. Measurements such as intellectual, psychosocial, and cognitive development are included in developmental assessments. Results for EQR 1999 documentation of developmental assessments are reported in Figure 5.12. Adherence for this indicator was 39% for enrollees aged 7-12 and 34% for those aged 13-21. This is most often used for children less than five years of age to help with early identification of concerns related to growth and development.

Figure 5.12



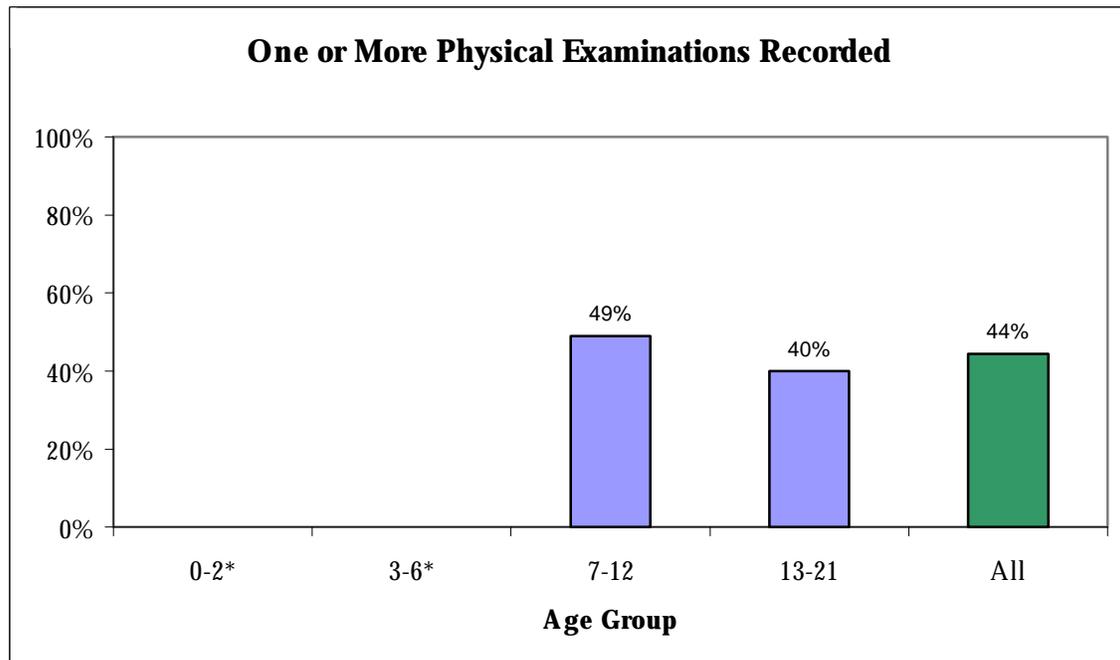
*Rates not displayed; based on sample or population < 30.

Physical Examination

- ⇒ **49% of enrollees aged 7-12 received one or more physical examinations**
- ⇒ **40% of enrollees aged 13-21 received one or more physical examinations**
- ⇒ **44% of all enrollees received one or more physical examinations**

A physical examination minimally includes inspection of the eyes, ears, nose, throat, chest, abdomen, and extremities. Review findings for documentation of a physical examination are reported in Figure 5.13. Enrollees aged 13-21 received a complete physical examination less often than the younger enrollees did.

Figure 5.13



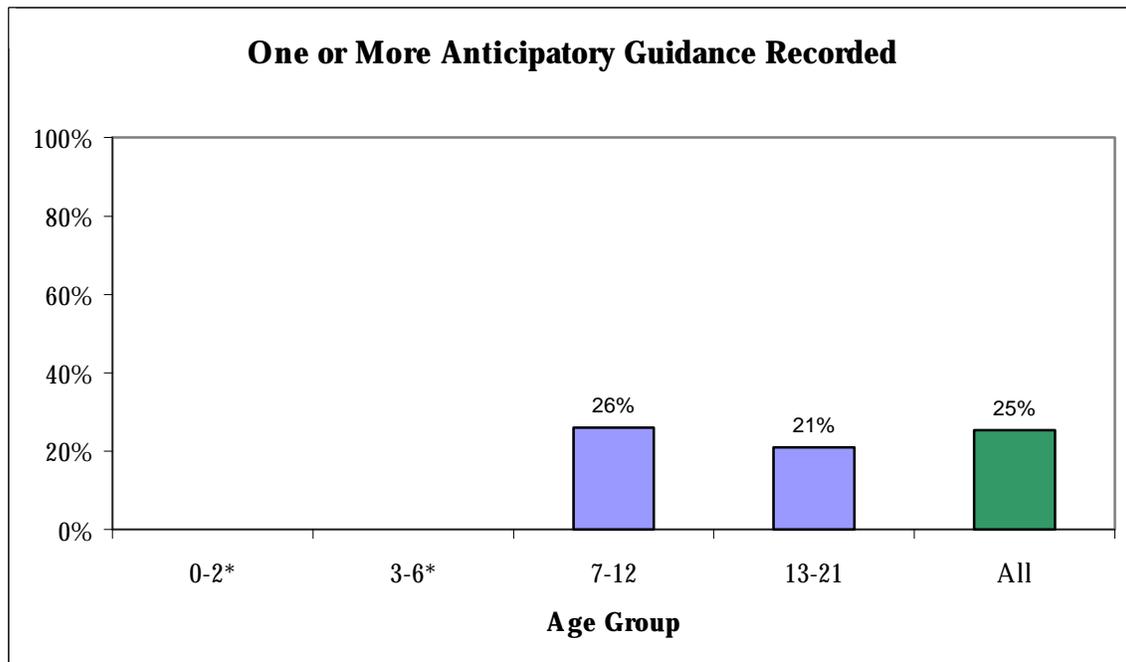
*Rates not displayed; based on sample or population < 30.

Anticipatory Guidance

- ⇒ **26% of enrollees aged 7-12 received one or more anticipatory guidance**
- ⇒ **21% of enrollees aged 13-21 received one or more anticipatory guidance**
- ⇒ **25% of all enrollees received one or more anticipatory guidance**

A number of educational and informative services are essential components of well child care. Anticipatory guidance, or discussion of “anticipated conditions” that the parent or child may encounter in different age groups assists them in preparing for safety and developmental concerns. Information of age-specific physical growth and skills development assists parents in recognizing normal progress or areas of concern in their child’s development. EQR 1999 results were similar for enrollees aged 7-12 and those aged 13-21 as displayed in Figure 5.14.

Figure 5.14



*Rates not displayed; based on sample or population < 30.

Discussion

A summary of the indicators reported for the CSHCN review is included in the following table. Rates for at least one service, weight measurement, and blood pressure measurement were above 75%. Interval history and height measurement rates were above 60%. Even though the reviewed indicators for the EPSDT study and the CSHCN study were identical, these populations are not comparable. The CSHCN population includes children receiving SSI and adoption assistance who have met special qualifying parameters.

Table 5.1
CSHCN Results Summary

Indicator	Rate
One or More EPSDT Services	99%
Interval History	64%
Immunization Review	44%
Height	67%
Weight	96%
Blood Pressure	77%
Vision	34%
Dental	20%
Interpretive Conference	57%
Nutrition	23%
Hearing	49%
Developmental Assessment	38%
Physical Exam	44%
Anticipatory Guidance	25%