

Purpose of Study

This study assessed compliance with the Early and Periodic Screening, Diagnosis and Treatment (EPSDT) recommendations. The EPSDT periodicity table was introduced over 30 years ago as part of the federal Medicaid program in the United States (Olsen et al, 1998). 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 EPSDT study included children 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 was stratified by age group based upon the age achieved by each child on the birthday occurring within the study period. The ages were stratified as follows:

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

Study Questions

Study questions developed for the 1999 EPSDT evaluation 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?
- What percentage of enrollees received age-appropriate hemoglobin testing, lead testing, and TB testing during 1999?

Beginning in 1987 the Michigan Public Health Act required sickle cell screening of all newborn infants. Since this testing is provided at the time of birth and may not have been documented in physician office records, sickle cell screening was not reviewed for this study. In addition, urinalysis screening was not reported for EQR 1999. The necessity for routine urinalysis screening for children under age two is controversial and the American Academy

of Pediatrics (AAP) does not recommend urine testing of children before the age of five years.

Limitations

The population of Michigan Medicaid children studied for EQR 1999 was stratified into four age groups, while the EQR 1998 review was based on a population inclusive of children aged 0 to less than 2 years. The EQR 1999 age group 0-2 years included children with a second birthday occurring during the study period; however, children in the EQR 1998 population had not achieved a second birthday during the study period. To allow for comparative discussion of EPSDT findings, MPRO identified a population in EQR 1999 data similar to the population in EQR 1998 including children aged 0 to less than 2 years. The similar populations will be discussed throughout this report to provide comparison of EQR 1998 and EQR 1999 findings. It should be noted that although the population used to compare EQR 1998 and EQR 1999 includes children of the same age, enrollment criteria for selection of the populations varied for the two studies. The impact of these selection differences on the study results is unknown.

Results

One or More EPSDT Service Components

- ⇒ **100% of enrollees aged 0-2 received one or more EPSDT service components**
- ⇒ **99% of enrollees aged 3-6 received one or more EPSDT service components**
- ⇒ **99% of enrollees aged 7-12 received one or more EPSDT service components**
- ⇒ **98% of enrollees aged 13-21 received one or more EPSDT service components**

One or more EPSDT service components were provided during the review period for each of the studied age groups as noted in Table 4.1. Weighted aggregate findings from EQR 1999 indicated that one or more services were provided for 100% of enrolled children aged 0-2 years. For a similar population of children aged 0 to less than 2, 99% of medical records reviewed for both EQR 1999 and EQR 1998 included documentation of one or more service component.

The QHP results were compared to aggregate rates using the two-tailed binomial Z test for statistical significance. In tables throughout this report, performance rates significantly above the weighted aggregate are displayed in bold green; rates below the weighted aggregate are presented in italic orange.

The percentage of children with a minimum of one EPSDT service component documented for the study period for all Qualified Health Plans (QHPs) are displayed in Table 4.1. Higher performance in the 0-2 age group may be related to increased frequency of expected visits for infants and toddlers.

Table 4.1
One or More EPSDT Service Components Recorded

Qualified Health Plan	Age Group			
	0 - 2	3 - 6	7 - 12	13 - 21
Botsford Health Plan	100%	100%	100%	100%
Cape Health Plan	99%	100%	98%	99%
Care Choices HMO	100%	99%	99%	99%
Community Care Plan	100%	99%	99%	99%
Community Choice Michigan	100%	100%	99%	100%
Great Lakes Health Plan	98%	99%	98%	99%
Health Plan of Michigan	100%	97%	99%	100%
Health Plus of Michigan	98%	98%	97%	95%
M-Care	100%	100%	99%	97%
McLaren Health Plan	100%	99%	98%	100%
Midwest Health Plan	100%	100%	99%	97%
Molina Healthcare	99%	96%	100%	99%
OmniCare Health Plan	100%	100%	100%	98%
PHP of Mid-Michigan	100%	99%	97%	95%
PHP of Southwest Michigan	100%	100%	100%	100%
Priority Health	100%	99%	98%	98%
The Wellness Plan	100%	99%	99%	99%
Total Health Care	99%	99%	97%	99%
Upper Peninsula Health Plan	100%	100%	98%	96%
Weighted Aggregate Rate	100%	99%	99%	98%

Green	- bolded rates are statistically above aggregate
Orange	- italic rates are statistically below aggregate

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
- Head circumference measurement
- Blood pressure measurement
- Vision screening
- Hearing screening
- Dental inspection
- Interpretive conference
- Nutritional assessment
- Developmental assessment
- Physical examination
- Anticipatory guidance

Results displayed in Tables 4.2 through 4.15 identify the percentage of children who received the recommended age-specific services when indicated for each QHP.

Initial/Interval History

- ⇒ **76% of enrollees aged 0-2 received one or more initial/interval histories**
- ⇒ **68% of enrollees aged 3-6 received one or more initial/interval histories**
- ⇒ **58% of enrollees aged 7-12 received one or more initial/interval histories**
- ⇒ **59% of enrollees aged 13-21 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. For children aged 0-2 years, 76% of records reviewed in EQR 1999 included an initial or interval history. However, comparison of similar populations of children aged 0 to less than 2 years revealed that 83% of records reviewed in EQR 1999 and 84% of records reviewed in EQR 1998 included an initial or interval history.

Medical records with the inclusion of a documented history demonstrated considerable variation among the QHPs. Performance rates for all QHPs are displayed in Table 4.2.

Table 4.2
One or More Initial/Interval Histories Recorded

Qualified Health Plan	Age Group			
	0 - 2	3 - 6	7 - 12	13 - 21
Botsford Health Plan	67%	50%	50%	59%
Cape Health Plan	68%	68%	45%	51%
Care Choices HMO	92%	65%	68%	58%
Community Care Plan	80%	83%	53%	60%
Community Choice Michigan	84%	74%	64%	56%
Great Lakes Health Plan	79%	71%	60%	66%
Health Plan of Michigan	73%	52%	58%	72%
Health Plus of Michigan	64%	56%	47%	55%
M-Care	78%	78%	73%	67%
McLaren Health Plan	73%	67%	51%	45%
Midwest Health Plan	63%	55%	57%	50%
Molina Healthcare	76%	72%	72%	67%
OmniCare Health Plan	70%	62%	54%	54%
PHP of Mid-Michigan	71%	69%	65%	48%
PHP of Southwest Michigan	92%	73%	61%	56%
Priority Health	84%	71%	60%	57%
The Wellness Plan	79%	72%	60%	61%
Total Health Care	75%	68%	54%	65%
Upper Peninsula Health Plan	75%	70%	59%	63%
Weighted Aggregate Rate	76%	68%	58%	59%

Green	- bolded rates are statistically above aggregate
Orange	- italic rates are statistically below aggregate

Immunization

- ⇒ **85% of records of enrollees aged 0-2 documented immunization review**
- ⇒ **71% of records of enrollees aged 3-6 documented immunization review**
- ⇒ **48% of records of enrollees aged 7-12 documented immunization review**
- ⇒ **36% of records of enrollees aged 13-21 documented immunization review**

It is extremely important for the health care provider to review the immunization record of an enrollee to determine if further age-appropriate vaccinations are required. Results in Table 4.3 demonstrate a wide range of variability in the percentage of records that included a documented history of immunizations. Considerable differences were noted across age groups. This indicator was not measured in EQR 1998 so comparative data were not available. Results indicated that the immunization status was most frequently recorded for children aged 0-2, and least frequently recorded for those aged 13-21.

Table 4.3
Review of Immunization Status Recorded

Qualified Health Plan	Age Group			
	0 - 2	3 - 6	7 - 12	13 - 21
Botsford Health Plan	94%	85%	59%	48%
Cape Health Plan	86%	75%	50%	32%
Care Choices HMO	92%	69%	49%	46%
Community Care Plan	81%	69%	33%	28%
Community Choice Michigan	90%	78%	55%	39%
Great Lakes Health Plan	87%	71%	47%	33%
Health Plan of Michigan	89%	66%	45%	46%
Health Plus of Michigan	80%	63%	43%	35%
M-Care	87%	80%	49%	43%
McLaren Health Plan	83%	52%	33%	24%
Midwest Health Plan	69%	78%	60%	31%
Molina Healthcare	58%	46%	19%	22%
OmniCare Health Plan	86%	69%	44%	38%
PHP of Mid-Michigan	85%	69%	42%	41%
PHP of Southwest Michigan	88%	80%	47%	32%
Priority Health	87%	64%	57%	42%
The Wellness Plan	89%	73%	56%	39%
Total Health Care	91%	80%	56%	48%
Upper Peninsula Health Plan	79%	64%	21%	22%
Weighted Aggregate Rate	85%	71%	48%	36%

Green	- bolded rates are statistically above aggregate
Orange	- italic rates are statistically below aggregate

Height Measurements

- ⇒ **83% of enrollees aged 0-2 received one or more height measurements**
- ⇒ **78% of enrollees aged 3-6 received one or more height measurements**
- ⇒ **66% of enrollees aged 7-12 received one or more height measurements**
- ⇒ **56% of enrollees aged 13-21 received one or more height measurements**

For EQR 1999, height and weight measurements received were measured separately and findings are displayed in Tables 4.4 and 4.5. The combined measures in EQR 1998 indicated that height and weight were recorded for 93% of children aged 0 to less than 2 years.

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 rate for one or more height measurements documented in the medical record is displayed in Table 4.4 for each QHP. For children aged 0-2 years, 83% of records included one or more height measurement compared to 56% of those aged 13-21.

Table 4.4
One or More Height Measurements Recorded

Qualified Health Plan	Age Group			
	0 - 2	3 - 6	7 - 12	13 - 21
Botsford Health Plan	71%	65%	69%	65%
Cape Health Plan	84%	79%	76%	55%
Care Choices HMO	92%	73%	72%	58%
Community Care Plan	84%	84%	67%	55%
Community Choice Michigan	90%	81%	73%	56%
Great Lakes Health Plan	88%	89%	74%	63%
Health Plan of Michigan	74%	61%	67%	69%
Health Plus of Michigan	88%	77%	66%	56%
M-Care	78%	66%	56%	57%
McLaren Health Plan	88%	78%	57%	72%
Midwest Health Plan	82%	87%	76%	56%
Molina Healthcare	65%	75%	50%	41%
OmniCare Health Plan	94%	77%	95%	74%
PHP of Mid-Michigan	79%	71%	57%	53%
PHP of Southwest Michigan	82%	77%	66%	52%
Priority Health	89%	80%	73%	60%
The Wellness Plan	73%	76%	52%	47%
Total Health Care	90%	80%	71%	65%
Upper Peninsula Health Plan	76%	73%	65%	59%
Weighted Aggregate Rate	83%	78%	66%	56%

Green	- bolded rates are statistically above aggregate
Orange	- italic rates are statistically below aggregate

Weight Measurement

- ⇒ **97% of enrollees aged 0-2 received one or more weight measurements**
- ⇒ **96% of enrollees aged 3-6 received one or more weight measurements**
- ⇒ **93% of enrollees aged 7-12 received one or more weight measurements**
- ⇒ **92% of enrollees aged 13-21 received one or more weight measurements**

Weight measurements during childhood provide information of growth and development when compared to standards recommended by the 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 demonstrated less variability among QHPs than findings for height measurement. For all age groups studied, the rate of adherence for this indicator was 92% or greater based on weighted averages, as shown in Table 4.5.

Table 4.5
One or More Weight Measurements Recorded

Qualified Health Plan	Age Group			
	0 - 2	3 - 6	7 - 12	13 - 21
Botsford Health Plan	100%	97%	97%	96%
Cape Health Plan	96%	99%	95%	88%
Care Choices HMO	99%	97%	91%	91%
Community Care Plan	96%	94%	91%	83%
Community Choice Michigan	98%	98%	93%	93%
Great Lakes Health Plan	96%	98%	94%	91%
Health Plan of Michigan	93%	74%	80%	84%
Health Plus of Michigan	94%	94%	83%	90%
M-Care	97%	94%	94%	89%
McLaren Health Plan	97%	94%	92%	96%
Midwest Health Plan	100%	99%	96%	86%
Molina Healthcare	94%	93%	97%	91%
OmniCare Health Plan	100%	95%	100%	93%
PHP of Mid-Michigan	95%	95%	91%	84%
PHP of Southwest Michigan	97%	97%	99%	96%
Priority Health	99%	99%	93%	93%
The Wellness Plan	99%	97%	94%	94%
Total Health Care	98%	97%	95%	96%
Upper Peninsula Health Plan	90%	96%	90%	89%
Weighted Aggregate Rate	97%	96%	93%	92%

Green	- bolded rates are statistically above aggregate
Orange	- italic rates are statistically below aggregate

Head Circumference Measurement

⇒ **68% of medical records of enrollees aged 0-2 included one or more head circumference measurement**

Measurement of head circumference is primarily applicable for children under age two and this was the only age group studied for EQR 1999. For children aged 0-2, head circumference was obtained for 68% of the population studied. Comparison of similar populations of children aged 0 to less than 2 indicated that 84% of records reviewed for EQR 1999 and 87% of EQR 1998 records included documentation of head circumference.

**Table 4.6
One or More Head Circumference Recorded**

Qualified Health Plan	Age Group			
	0 - 2	3 - 6	7 - 12	13 - 21
Botsford Health Plan	63%			
Cape Health Plan	58%			
Care Choices HMO	82%			
Community Care Plan	70%			
Community Choice Michigan	73%			
Great Lakes Health Plan	66%			
Health Plan of Michigan	63%			
Health Plus of Michigan	64%			
M-Care	73%			
McLaren Health Plan	69%			
Midwest Health Plan	<i>52%</i>			
Molina Healthcare	60%			
OmniCare Health Plan	66%			
PHP of Mid-Michigan	58%			
PHP of Southwest Michigan	77%			
Priority Health	82%			
The Wellness Plan	67%			
Total Health Care	76%			
Upper Peninsula Health Plan	66%			
Weighted Aggregate Rate	68%			

Green	- bolded rates are statistically above aggregate
Orange	- italic rates are statistically below aggregate

Blood Pressure Measurement

- ⇒ **58% of enrollees aged 3-6 received one or more blood pressure measurements**
- ⇒ **56% of enrollees aged 7-12 received one or more blood pressure measurements**
- ⇒ **76% of enrollees aged 13-21 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.

Detailed results are displayed in Table 4.7. Since this indicator was not reported for EQR 1998, comparative data were not available. Blood pressure measurements were obtained most frequently in the 13-21 age group, across all QHPs.

Table 4.7
One or More Blood Pressure Measurements Recorded

Qualified Health Plan	Age Group			
	0 - 2	3 - 6	7 - 12	13 - 21
Botsford Health Plan		48%	56%	74%
Cape Health Plan		50%	39%	60%
Care Choices HMO		51%	60%	81%
Community Care Plan		68%	62%	77%
Community Choice Michigan		68%	72%	89%
Great Lakes Health Plan		63%	69%	81%
Health Plan of Michigan		46%	49%	78%
Health Plus of Michigan		53%	49%	76%
M-Care		56%	54%	71%
McLaren Health Plan		49%	54%	80%
Midwest Health Plan		57%	53%	67%
Molina Healthcare		41%	51%	73%
OmniCare Health Plan		49%	49%	77%
PHP of Mid-Michigan		58%	63%	65%
PHP of Southwest Michigan		65%	61%	84%
Priority Health		63%	69%	80%
The Wellness Plan		63%	52%	72%
Total Health Care		55%	48%	78%
Upper Peninsula Health Plan		48%	59%	81%
Weighted Aggregate Rate		58%	56%	76%

Green	- bolded rates are statistically above aggregate
Orange	- italic rates are statistically below aggregate

Vision Screening

- ⇒ **49% of enrollees aged 0-2 received one or more vision screenings**
- ⇒ **45% of enrollees aged 3-6 received one or more vision screenings**
- ⇒ **37% of enrollees aged 7-12 received one or more vision screenings**
- ⇒ **29% of enrollees aged 13-21 received one or more vision screenings**

Children who were screened by their health care provider and determined not to be at risk were excluded from the denominator. Early detection of visual difficulties enables health care providers to treat young patients early and potentially improve outcomes of planned interventions. Providers often screen visual acuity in the very young by observing an infant's eyes "track" an object moved across his or her field of vision. Objective vision screening methods include the red reflex test, fixation test, or corneal light reflex test.

Adherence rates for this indicator are displayed in Table 4.8. EQR 1999 results indicated that 49% of children aged 0-2 received vision screening during the study period. In a similar population of children 0 to less than 2 years, vision screening was recorded in 57% of EQR 1999 medical records compared to 67% of EQR 1998 medical records. The 1999 performance rate decreased from the prior year. Vision screenings occurred most frequently among children aged 0-2 years and least frequently among enrollees aged 13-21.

**Table 4.8
One or More Vision Screenings Recorded**

Qualified Health Plan	Age Group			
	0 - 2	3 - 6	7 - 12	13 - 21
Botsford Health Plan	67%	55%	46%	46%
Cape Health Plan	36%	35%	15%	31%
Care Choices HMO	56%	32%	32%	21%
Community Care Plan	57%	71%	44%	28%
Community Choice Michigan	52%	47%	31%	27%
Great Lakes Health Plan	46%	48%	34%	30%
Health Plan of Michigan	31%	25%	35%	38%
Health Plus of Michigan	42%	39%	46%	39%
M-Care	51%	45%	34%	36%
McLaren Health Plan	51%	41%	30%	27%
Midwest Health Plan	36%	41%	39%	18%
Molina Healthcare	40%	24%	25%	31%
Omnicare Health Plan	39%	29%	39%	23%
PHP of Mid-Michigan	55%	43%	37%	31%
PHP of Southwest Michigan	76%	49%	37%	27%
Priority Health	51%	57%	47%	35%
The Wellness Plan	54%	54%	43%	26%
Total Health Care	58%	43%	41%	33%
Upper Peninsula Health Plan	28%	33%	13%	17%
Weighted Aggregate Rate	49%	45%	37%	29%

Green	- bolded rates are statistically above aggregate
Orange	- italic rates are statistically below aggregate

Hearing Screening

- ⇒ **49% of enrollees aged 0-2 received one or more hearing screenings**
- ⇒ **50% of enrollees aged 3-6 received one or more one hearing screenings**
- ⇒ **49% of enrollees aged 7-12 received one or more hearing screenings**
- ⇒ **52% of enrollees aged 13-21 received one or more hearing screenings**

Identification of hearing difficulties at a young age allows for early interventions and reduction in the potential for developmental delays related to hearing deficits. Health care providers can assess an infant's ability to hear by observing the child's reaction to clapping or other noises. For more objective evaluation of hearing, health care providers may use methods including an otoacoustic emissions test or an 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.

During the EQR 1999 study period, 49% of medical records reviewed for enrollees aged 0-2 displayed evidence of hearing screening (see Table 4.9).

To allow for comparison of EQR 1998 and EQR 1999 findings for this indicator, data for a similar population of children 0 to less than 2 years were analyzed. In EQR 1999, 56% of this population received hearing screening compared to 63% in EQR 1998, demonstrating a decrease in performance in 1999 compared to 1998. Based on weighted averages, hearing screening tests occurred at comparable rates among all age groups.

Table 4.9
One or More Hearing Screenings Recorded

Qualified Health Plan	Age Group			
	0 - 2	3 - 6	7 - 12	13 - 21
Botsford Health Plan	43%	57%	64%	69%
Cape Health Plan	42%	47%	50%	61%
Care Choices HMO	60%	43%	40%	<i>40%</i>
Community Care Plan	59%	64%	61%	68%
Community Choice Michigan	43%	54%	56%	54%
Great Lakes Health Plan	62%	57%	49%	52%
Health Plan of Michigan	<i>29%</i>	<i>30%</i>	61%	65%
Health Plus of Michigan	<i>36%</i>	43%	41%	48%
M-Care	56%	54%	<i>37%</i>	55%
McLaren Health Plan	58%	52%	<i>34%</i>	<i>34%</i>
Midwest Health Plan	<i>35%</i>	52%	49%	<i>41%</i>
Molina Healthcare	51%	<i>39%</i>	52%	60%
OmniCare Health Plan	42%	46%	44%	<i>38%</i>
PHP of Mid-Michigan	56%	51%	54%	53%
PHP of Southwest Michigan	66%	49%	54%	63%
Priority Health	65%	55%	58%	62%
The Wellness Plan	51%	54%	51%	52%
Total Health Care	53%	47%	47%	48%
Upper Peninsula Health Plan	<i>25%</i>	<i>35%</i>	48%	54%
Weighted Aggregate Rate	49%	50%	49%	52%

Green	- bolded rates are statistically above aggregate
Orange	- italic rates are statistically below aggregate

Dental Inspection

- ⇒ **42% of enrollees aged 0-2 received one or more dental inspections**
- ⇒ **34% of enrollees aged 3-6 received one or more dental inspections**
- ⇒ **23% of enrollees aged 7-12 received one or more dental inspections**
- ⇒ **18% of enrollees aged 13-21 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. Adherence rates for documentation of oral cavity inspections are displayed in Table 4.10.

Of children aged 0-2 years, a dental inspection was recorded for 42% during the EQR 1999 study period. To allow for comparison of EQR 1998 and EQR 1999 findings for this indicator, data for a similar population of children 0 to less than 2 years was analyzed. The rate for dental inspection was 51%; the EQR 1998 rate was 46%. Weighted averages indicated that dental inspections occurred most frequently among children aged 0-2 and least frequently among those aged 13-21.

Table 4.10
One or More Dental Inspections Recorded

Qualified Health Plan	Age Group			
	0 - 2	3 - 6	7 - 12	13 - 21
Botsford Health Plan	37%	<i>25%</i>	<i>13%</i>	19%
Cape Health Plan	<i>23%</i>	<i>15%</i>	16%	15%
Care Choices HMO	38%	27%	<i>15%</i>	12%
Community Care Plan	36%	<i>21%</i>	17%	17%
Community Choice Michigan	46%	38%	20%	16%
Great Lakes Health Plan	36%	40%	25%	19%
Health Plan of Michigan	<i>27%</i>	<i>20%</i>	18%	18%
Health Plus of Michigan	<i>21%</i>	<i>20%</i>	<i>13%</i>	<i>7%</i>
M-Care	37%	29%	<i>14%</i>	11%
McLaren Health Plan	<i>17%</i>	<i>10%</i>	<i>3%</i>	12%
Midwest Health Plan	76%	59%	48%	39%
Molina Healthcare	32%	<i>16%</i>	17%	12%
OmniCare Health Plan	38%	<i>15%</i>	<i>11%</i>	13%
PHP of Mid-Michigan	55%	39%	29%	23%
PHP of Southwest Michigan	42%	34%	24%	16%
Priority Health	42%	37%	24%	21%
The Wellness Plan	55%	49%	30%	23%
Total Health Care	48%	40%	35%	23%
Upper Peninsula Health Plan	<i>32%</i>	<i>14%</i>	<i>8%</i>	12%
Weighted Aggregate Rate	42%	34%	23%	18%

Green	- bolded rates are statistically above aggregate
Orange	- italic rates are statistically below aggregate

Interpretive Conference

- ⇒ **75% of enrollees aged 0-2 received one or more interpretive conferences**
- ⇒ **65% of enrollees aged 3-6 received one or more interpretive conferences**
- ⇒ **54% of enrollees aged 7-12 received one or more interpretive conferences**
- ⇒ **51% of enrollees aged 13-21 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 75% of the records reviewed for children aged 0-2 years for EQR 1999. A similar population of children aged 0 to less than 2 was analyzed to provide data more comparable to the previous EQR study. Results indicated that 81% of this population had a least one interpretive conference recorded in EQR 1999 compared to 78% in EQR 1998. This was not a statistically significant difference. Weighted averages indicated that interpretive conference occurred most frequently among children aged 0-2 and least frequently among those aged 13-21.

Table 4.11
One or More Interpretive Conferences Recorded

Qualified Health Plan	Age Group			
	0 - 2	3 - 6	7 - 12	13 - 21
Botsford Health Plan	65%	<i>47%</i>	<i>31%</i>	44%
Cape Health Plan	59%	60%	41%	40%
Care Choices HMO	82%	69%	56%	60%
Community Care Plan	73%	73%	56%	59%
Community Choice Michigan	84%	86%	60%	49%
Great Lakes Health Plan	71%	<i>54%</i>	48%	44%
Health Plan of Michigan	73%	<i>53%</i>	59%	74%
Health Plus of Michigan	65%	56%	40%	39%
M-Care	77%	69%	48%	51%
McLaren Health Plan	73%	65%	54%	37%
Midwest Health Plan	81%	74%	60%	59%
Molina Healthcare	75%	71%	63%	60%
OmniCare Health Plan	73%	60%	54%	54%
PHP of Mid-Michigan	73%	66%	52%	47%
PHP of Southwest Michigan	86%	76%	67%	75%
Priority Health	87%	74%	64%	64%
The Wellness Plan	71%	66%	59%	48%
Total Health Care	80%	67%	53%	56%
Upper Peninsula Health Plan	82%	62%	49%	66%
Weighted Aggregate Rate	75%	65%	54%	51%

Green	- bolded rates are statistically above aggregate
Orange	- italic rates are statistically below aggregate

Nutritional Assessment

- ⇒ **61% of records of enrollees aged 0-2 recorded one or more nutritional assessments**
- ⇒ **41% of records of enrollees aged 3-6 recorded one or more nutritional assessments**
- ⇒ **29% of records of enrollees aged 7-12 recorded one or more nutritional assessments**
- ⇒ **22% of records of enrollees aged 13-21 recorded one or more nutritional assessments**

Nutritional assessment is an important component of well child care. The health care provider should be aware of the enrollee's nutritional intake and relate this information to other findings from the overall assessment. For a nutritional assessment, the health care provider reviews the child's food intake and eating habits. The assessment considers the appropriateness of nutritional choices and the possible need for nutritional supplements.

Results reported in Table 4.12 indicate that a nutritional assessment was most frequently documented in the medical records of enrollees aged 0-2. One or more nutritional assessments were recorded during the EQR 1999 review period for 61% of the children in this age group. Analysis of a similar population of children aged 0 to less than 2 reported that 73% of records reviewed in EQR 1999 met this indicator compared to 81% of EQR 1998 records.

The performance rate decreased in 1999 from the prior year. Weighted averages demonstrated that nutritional assessments occurred most frequently among children aged 0-2 years and least frequently among those aged 13-21.

Table 4.12
One or More Nutritional Assessments Recorded

Qualified Health Plan	Age Group			
	0 - 2	3 - 6	7 - 12	13 - 21
Botsford Health Plan	61%	35%	<i>17%</i>	33%
Cape Health Plan	<i>30%</i>	<i>15%</i>	<i>14%</i>	<i>12%</i>
Care Choices HMO	76%	57%	32%	27%
Community Care Plan	73%	51%	25%	24%
Community Choice Michigan	71%	48%	28%	29%
Great Lakes Health Plan	62%	42%	27%	20%
Health Plan of Michigan	<i>49%</i>	32%	31%	31%
Health Plus of Michigan	<i>49%</i>	<i>31%</i>	23%	19%
M-Care	74%	53%	35%	24%
McLaren Health Plan	66%	38%	21%	21%
Midwest Health Plan	53%	49%	34%	23%
Molina Healthcare	56%	<i>24%</i>	23%	17%
OmniCare Health Plan	<i>45%</i>	<i>20%</i>	19%	13%
PHP of Mid-Michigan	61%	51%	40%	30%
PHP of Southwest Michigan	85%	49%	26%	29%
Priority Health	84%	59%	47%	33%
The Wellness Plan	58%	48%	35%	17%
Total Health Care	56%	42%	32%	31%
Upper Peninsula Health Plan	72%	<i>28%</i>	<i>15%</i>	22%
Weighted Aggregate Rate	61%	41%	29%	22%

Green	- bolded rates are statistically above aggregate
Orange	- italic rates are statistically below aggregate

Developmental Assessment

- ⇒ **65% of enrollees aged 0-2 received one or more developmental assessments**
- ⇒ **47% of enrollees aged 3-6 received one or more developmental assessments**
- ⇒ **35% of enrollees aged 7-12 received one or more developmental assessments**
- ⇒ **30% of enrollees aged 13-21 received one or more developmental assessments**

A developmental assessment evaluates a child's attainment of established milestones such as the ability to recognize shapes, first words, or crawling. Measurements of intellectual, psychosocial, and cognitive development might be included in developmental assessment as well as speech and language formation. Assessment documentation may include a listing of milestones achieved, a checklist of tasks the child is able to perform, or a formal assessment form including gross and fine motor skills.

Results for EQR 1999 documentation of developmental assessments are reported in Table 4.13. The highest level of adherence for this indicator occurred among children aged 0-2 with a developmental assessment recorded in 65% of records reviewed. In an analysis of a similar population of children aged 0 to less than 2, 79% of records reviewed for EQR 1998 met the indicator compared to 77% for EQR 1999. This was not a statistically significant difference. Weighted averages demonstrated that developmental assessments occurred most frequently among children aged 0-2 and least frequently among those aged 13-21.

Table 4.13
One or More Developmental Assessments Recorded

Qualified Health Plan	Age Group			
	0 - 2	3 - 6	7 - 12	13 - 21
Botsford Health Plan	59%	42%	29%	41%
Cape Health Plan	55%	38%	23%	23%
Care Choices HMO	75%	43%	37%	34%
Community Care Plan	71%	67%	28%	35%
Community Choice Michigan	78%	59%	37%	40%
Great Lakes Health Plan	68%	49%	35%	25%
Health Plan of Michigan	60%	25%	34%	39%
Health Plus of Michigan	51%	40%	27%	26%
M-Care	72%	49%	38%	35%
McLaren Health Plan	66%	51%	26%	25%
Midwest Health Plan	50%	44%	37%	27%
Molina Healthcare	57%	24%	26%	36%
OmniCare Health Plan	53%	32%	33%	26%
PHP of Mid-Michigan	68%	57%	45%	36%
PHP of Southwest Michigan	86%	62%	46%	35%
Priority Health	81%	64%	49%	44%
The Wellness Plan	61%	49%	37%	25%
Total Health Care	64%	44%	41%	37%
Upper Peninsula Health Plan	69%	35%	31%	30%
Weighted Aggregate Rate	65%	47%	35%	30%

Green	- bolded rates are statistically above aggregate
Orange	- italic rates are statistically below aggregate

Physical Examination

- ⇒ **70% of records of enrollees aged 0-2 included one or more physical examinations**
- ⇒ **60% of records of enrollees aged 3-6 included one or more physical examinations**
- ⇒ **45% of records of enrollees aged 7-12 included one or more physical examinations**
- ⇒ **39% of records of enrollees aged 13-21 included one or more physical examinations**

A child's physical examination minimally includes inspection of the eyes, ears, nose, throat, chest, abdomen, and extremities. Review findings for documentation of a physical examination for all QHPs across all age groups are reported in Table 4.14. The weighted aggregate rate for documentation of one or more physical examinations during the review period for children aged 0-2 was 70%. Analysis of a similar population of enrollees aged 0 to less than 2 demonstrated that 78% of records reviewed for EQR 1999 included a physical examination compared to 93% of EQR 1998 records. The performance rate decreased in 1999 from the prior year. Weighted averages demonstrated that physical examinations were recorded most frequently among children aged 0-2 years and least frequently among those aged 13-21.

Table 4.14
One or More Physical Examinations Recorded

Qualified Health Plan	Age Group			
	0 - 2	3 - 6	7 - 12	13 - 21
Botsford Health Plan	76%	63%	47%	54%
Cape Health Plan	68%	52%	34%	31%
Care Choices HMO	74%	52%	45%	39%
Community Care Plan	71%	71%	40%	37%
Community Choice Michigan	80%	72%	35%	37%
Great Lakes Health Plan	62%	55%	38%	42%
Health Plan of Michigan	66%	68%	56%	58%
Health Plus of Michigan	61%	52%	39%	37%
M-Care	73%	64%	43%	48%
McLaren Health Plan	68%	49%	18%	40%
Midwest Health Plan	82%	75%	53%	53%
Molina Healthcare	58%	34%	41%	30%
OmniCare Health Plan	71%	54%	58%	52%
PHP of Mid-Michigan	82%	71%	52%	47%
PHP of Southwest Michigan	82%	71%	53%	38%
Priority Health	78%	69%	53%	48%
The Wellness Plan	65%	60%	50%	28%
Total Health Care	73%	63%	54%	48%
Upper Peninsula Health Plan	69%	46%	23%	36%
Weighted Aggregate Rate	70%	60%	45%	39%

Green	- bolded rates are statistically above aggregate
Orange	- italic rates are statistically below aggregate

Anticipatory Guidance

- ⇒ **55% of enrollees aged 0-2 received anticipatory guidance**
- ⇒ **41% of enrollees aged 3-6 received anticipatory guidance**
- ⇒ **27% of enrollees aged 7-12 received anticipatory guidance**
- ⇒ **25% of enrollees aged 13-21 received 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. Educational information of approved safety seats, seat belt usage, and poison control measures anticipate the parent’s needs in providing a safe environment for their child. 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 demonstrated considerable variation in documentation of anticipatory guidance as displayed in Table 4.15. For children aged 0-2 years, 55% of records reviewed included documentation of one or more anticipatory guidance. In a similar population of children aged 0 to less than 2, 66% of records reviewed for EQR 1999 met this indicator compared to 70% of those reviewed for EQR 1998. This was not a statistically significant difference. Weighted averages demonstrated that anticipatory guidance was recorded most frequently among children aged 0-2 years and least frequently among those aged 13-21.

**Table 4.15
Anticipatory Guidance Recorded**

Qualified Health Plan	0 - 2	3 - 6	7 - 12	13 - 21
Botsford Health Plan		38%		30%
Cape Health Plan		<i>26%</i>	21%	
Care Choices HMO		36%	27%	
Community Care Plan	63%		22%	32%
	75%	54%		33%
Great Lakes Health Plan		49%	27%	
Health Plan of Michigan	46%		41%	35%
	<i>41%</i>	32%		<i>14%</i>
M-Care		47%	29%	
McLaren Health Plan	58%		26%	24%
	55%	45%		31%
Molina Healthcare		<i>11%</i>	<i>9%</i>	
OmniCare Health Plan	48%		28%	18%
	65%	48%		31%
PHP of Southwest Michigan		53%	34%	
Priority Health	73%		47%	40%
	54%	42%		22%
Total Health Care		40%	34%	
Upper Peninsula Health Plan	<i>45%</i>		<i>10%</i>	24%
	55%	41%		25%

Green	- bolded rates are statistically above aggregate
	- italic rates are statistically below aggregate

EPSDT Procedures

Tuberculin Skin Testing

⇒ **14% of enrollees aged 0-2 received one or more tuberculin skin tests**

⇒ **23% of enrollees aged 3-6 received one or more tuberculin skin tests**

A screening test for tuberculosis (TB) infection or disease should be performed for infants and children with identified high risk factors. Risk assessment focuses on children exposed to any relative, playmate, or other acquaintance with active or inactive TB. The Michigan Medicaid population of children aged 0-6 years was evaluated for TB testing in EQR 1999.

EQR 1999 results for enrollees are displayed in Table 4.16. Findings were not reported for children in the age groups 7-12 and 13-21. For children aged 0-2 years, 14% of records reviewed included documentation of one or more tuberculin skin tests. In a population of children aged 12-18 months, 12% of records reviewed for EQR 1999 met this indicator compared to 15% of those reviewed for EQR 1998. This finding represented no significant difference between years. The weighted aggregate rates of 14% and 23% may suggest an area for potential improvement among all QHPs.

Table 4.16
One or More Tuberculin Tests Recorded

Qualified Health Plan	Age Group			
	0 - 2	3 - 6	7 - 12	13 - 21
	25%	42%		
Care Choices HMO	6%	9%		
Community Care Plan	15%	6%		
Community Choice Michigan	16%	18%		
Great Lakes Health Plan	8%	22%		
Health Plan of Michigan	26%	22%		
Health Plus of Michigan	4%	9%		
M-Care	12%	17%		
McLaren Health Plan	2%	6%		
Midwest Health Plan	19%	28%		
Molina Healthcare	1%	1%		
OmniCare Health Plan	18%	29%		
PHP of Mid-Michigan	7%	4%		
PHP of Southwest Michigan	5%	14%		
Priority Health	9%	9%		
The Wellness Plan	25%	39%		
Total Health Care	24%	40%		
Upper Peninsula Health Plan	1%	3%		
Weighted Aggregate Rate	14%	23%		

Green	- bolded rates are statistically above aggregate
Orange	- italic rates are statistically below aggregate

Blood Lead Level Testing

- ⇒ **27% of at-risk children aged 0-2 received one or more blood lead level tests**
- ⇒ **25% of at-risk children aged 3-6 received one or more blood lead level tests**

Among environmental risks faced by children in the United States, lead poisoning is the number one hazard. It occurs most frequently in children under the age of six, and when undiagnosed or untreated may result in death. Early detection and treatment are essential since cognitive impairment associated with lead poisoning are only partially reversible when blood lead levels are successfully lowered. The most common sources of lead poisoning are paint found in older homes and leaded gasoline deposited in the soil. It is currently estimated that 75% of homes in the United States contain lead paint (Perkins, 1999).

EQR 1999 results for screening of enrollees for blood lead level for all QHPs among children aged 0-6 are reported in Table 4.17. Screening for blood lead levels was not measured or reported for this population for EQR 1998. The weighted aggregate rates of 27% and 25% may suggest an area for potential improvement among all QHPs.

Table 4.17
One or More Blood Lead Tests Recorded

Qualified Health Plan	Age Group			
	0 - 2	3 - 6	7 - 12	13 - 21
Botsford Health Plan	23%	45%		
Cape Health Plan	29%	29%		
Care Choices HMO	14%	17%		
Community Care Plan	17%	13%		
Community Choice Michigan	39%	32%		
Great Lakes Health Plan	22%	20%		
Health Plan of Michigan	16%	18%		
Health Plus of Michigan	17%	11%		
M-Care	12%	17%		
McLaren Health Plan	10%	5%		
Midwest Health Plan	27%	38%		
Molina Healthcare	7%	10%		
OmniCare Health Plan	31%	30%		
PHP of Mid-Michigan	30%	14%		
PHP of Southwest Michigan	23%	14%		
Priority Health	35%	7%		
The Wellness Plan	35%	38%		
Total Health Care	31%	37%		
Upper Peninsula Health Plan	15%	14%		
Weighted Aggregate Rate	27%	25%		

Green	- bolded rates are statistically above aggregate
<i>Orange</i>	- italic rates are statistically below aggregate

Hemoglobin/Hematocrit Testing

⇒ **41% of enrollees aged 0-2 received one or more hemoglobin/hematocrit tests**

Hemoglobin and hematocrit tests are used to evaluate the oxygen carrying capacity of an individual's blood and are important screening methods for a number of potentially harmful conditions. EQR 1999 findings indicated that 41% of enrollees aged 0-2 had one or more hemoglobin/hematocrit tests documented in the medical record (see Table 4.18). In a population of children aged 12-18 months, 45% of records reviewed for EQR 1999 met this indicator compared to 41% of those reviewed for EQR 1998. These findings were not significantly different.

Table 4.18
One or More Hemoglobin/Hematocrit Tests Recorded

Qualified Health Plan	Age Group			
	0 - 2	3 - 6	7 - 12	13 - 21
Botsford Health Plan	53%			
Cape Health Plan	38%			
Care Choices HMO	35%			
Community Care Plan	40%			
Community Choice Michigan	45%			
Great Lakes Health Plan	46%			
Health Plan of Michigan	47%			
Health Plus of Michigan	<i>27%</i>			
M-Care	32%			
McLaren Health Plan	39%			
Midwest Health Plan	49%			
Molina Healthcare	<i>25%</i>			
OmniCare Health Plan	36%			
PHP of Mid-Michigan	<i>29%</i>			
PHP of Southwest Michigan	39%			
Priority Health	44%			
The Wellness Plan	50%			
Total Health Care	37%			
Upper Peninsula Health Plan	49%			
Weighted Aggregate Rate	41%			

Green	- bolded rates are statistically above aggregate
Orange	- italic rates are statistically below aggregate

Discussion

Because EQR 1999 included a broader range of children's age groups (0-2, 3-6, 7-12, 13-21) not all findings were comparable to past performance. Aggregate findings overall remained stable between EQR 1999 and EQR 1998 for the population of enrollees aged 0 to less than 2 among nine of 13 indicators with comparable data. Downward trends were noted for four indicators including hearing screening, vision screening, physical inspection, and nutritional assessment. The comparative differences for these indicators were in a range of 7% to 15%.

Although data suggest a trend of improvement for three indicators including dental inspection, hemoglobin/hematocrit testing and interpretive conferences, these differences were not statistically significant. These indicators continued to be areas of lowest performance overall for EQR EPSDT 1999.

The data from this focus study were used to calculate a score to determine the performance of each plan for each indicator. The maximum score for each indicator was three, with a minimum of one. A score of "three" was assigned when the rate for the plan for each indicator was statistically significantly higher than the weighted aggregate rate for that indicator. A score of "two" was assigned for rates similar to the weighted aggregate, and a score of "one" was assigned when the rate was significantly lower than the weighted aggregate. Scores were calculated for each age range and each indicator. An average was then calculated to determine a composite score for each QHP for the focus study. The QHPs were then sorted by score to determine the ranking of each plan within the range of scores.

The four highest performing QHPs identified in the EPSDT Review were Priority Health Care, Community Choice Michigan, Physicians Health Plan of Southwest Michigan, and Total Health Care. Figure 4.19 displays QHP performance for the EQR EPSDT study, with highest ranking performances at the top.

Table 4.19
EQR 1999 Summary of Indicator Results

QHP	One or More Services	Interval History	Immunization Review	Height	Weight	Head Circumference	Blood Pressure	Vision	Dental	Interpretive Conference	Nutrition	Hearing	Developmental Assess.	Physical Exam	Hct/Hgb	Blood Lead	TB Test	Anticipatory Guidance	Average Score
Priority	2.3	2.0	2.0	2.0	2.3	3.0	2.3	2.3	2.0	2.5	3.0	2.3	3.0	2.0	2.0	1.5	1.5	3.0	2.3
CCM	2.8	2.0	2.0	2.3	2.0	2.0	2.7	2.0	2.0	2.5	2.3	2.0	2.5	2.3	2.0	2.5	2.0	2.5	2.2
PHP-SW	3.0	2.3	2.0	2.0	2.5	2.0	2.0	2.3	2.0	3.0	2.3	2.3	2.5	2.5	2.0	1.5	1.0	2.5	2.2
THC	2.0	2.0	2.5	2.3	2.3	2.0	2.0	2.0	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.5	3.0	2.0	2.2
Botsford	3.0	1.5	3.0	1.5	2.8	2.0	1.7	2.5	1.5	1.3	2.0	2.5	2.3	2.3	3.0	2.5	1.0	1.8	2.1
TWP	2.3	2.0	2.0	1.5	2.0	2.0	2.0	2.0	2.5	2.0	2.0	2.0	2.0	1.8	2.0	2.5	3.0	2.0	2.1
Care	2.3	2.5	2.3	2.3	2.0	3.0	2.0	1.8	1.8	2.0	2.5	2.0	2.3	2.0	2.0	1.5	1.0	2.3	2.1
Midwest	2.5	1.5	2.0	2.5	2.5	1.0	2.0	1.5	3.0	2.0	2.0	1.5	1.8	2.8	2.0	2.5	2.0	2.0	2.1
GLHP	2.0	2.0	2.0	2.3	2.0	2.0	2.3	2.0	2.0	1.8	2.0	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0
M-Care	2.5	2.5	2.3	1.8	2.0	2.0	2.0	2.0	1.8	2.0	2.5	1.8	2.0	2.0	2.0	1.5	2.0	2.0	2.0
CCP	2.3	2.3	1.8	2.0	1.8	2.0	2.0	2.3	1.8	2.0	2.3	3.0	2.3	2.3	2.0	1.0	1.5	2.0	2.0
Omni	2.8	2.0	2.0	2.8	2.5	2.0	2.0	1.8	1.5	2.0	1.5	1.8	1.8	2.3	2.0	2.0	2.0	1.8	2.0
HP-M	2.5	2.0	2.0	2.0	1.5	2.0	1.7	1.5	1.5	2.0	1.8	2.0	1.8	2.5	2.0	1.5	2.5	2.0	1.9
PHP-MID	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.0	2.0	2.0	2.0	2.5	1.0	1.5	1.0	2.0	1.9
Cape	2.3	1.8	2.0	2.3	2.3	2.0	1.3	1.5	1.5	1.5	1.0	2.0	1.8	1.8	2.0	2.0	3.0	1.3	1.8
MHP	2.5	1.8	1.3	2.3	2.0	2.0	2.0	2.0	1.3	1.8	2.0	1.5	2.0	1.8	2.0	1.0	1.0	2.0	1.8
UPHP	2.5	2.0	1.5	2.0	1.8	2.0	2.0	1.0	1.3	2.3	1.8	1.5	1.8	1.5	2.0	1.0	1.0	1.3	1.7
HPlus	2.0	1.3	2.0	2.0	1.8	2.0	2.0	2.3	1.0	1.3	1.5	1.8	1.8	2.0	1.0	1.0	1.0	1.5	1.6
Molina	2.3	2.3	1.0	1.3	2.3	2.0	1.7	1.5	1.8	2.0	1.8	1.8	1.5	1.5	1.0	1.0	1.0	1.3	1.6

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[KN1]LINKS ARE NOT AUTOMATICALLY UPDATED – NEED TO DO MANUALLY