

**Kentucky Medicaid Managed Care
EPSDT Screening Encounter Data Validation
Clinical Focus Study 2014
Data Analysis Plan**

This data analysis plan is designed to provide an outline for examining the study objectives and identifying any significant patterns in the data.

Introduction

Early and Periodic Screening, Diagnostic and Treatment (EPSDT) services is a federally mandated health program, which provides comprehensive and preventive health care services for children and adolescents up to age 21. EPSDT services include a complete physical examination, a comprehensive health and developmental history, appropriate immunizations according to the Advisory Committee on Immunization Practices, laboratory testing including lead toxicity screening, and health education that includes anticipatory guidance regarding child development, healthy lifestyles and accident and injury prevention. Age appropriate mental health and substance use screening are also part of EPSDT services. The Centers for Medicare and Medicaid Services (CMS) has recently released an informational bulletin noting that although half of mental health conditions and substance use disorders begin by age 14, many young people do not have their conditions identified and do not receive the mental health services they need. While a broad range of services are covered under EPSDT, national studies have shown that not all eligible children receive all components of needed services. The Department of Health and Human Services Office of the Inspector General in 2010 evaluated 9 states and found that 60% of children with documented EPSDT screenings had incomplete screenings. The study showed that 76% of children did not receive required medical, vision, or hearing screenings. Accurate assessments of the extent to which Medicaid children receive all required EPSDT services are especially challenging for children enrolled in managed care, since capitation arrangements may lead to underreporting of individual services provided. Difficulty linking data from various sources, as well as gaps in Medicaid enrollment, present additional barriers to ascertaining which services a particular child has received. Foster care can also present barriers to receipt of age-appropriate preventive services.

The importance of early identification and management of developmental disorders and prevention and management of chronic disease is heightened by evolving epidemiologic trends and evidence for the benefits of early intervention. Medicaid's EPSDT services are particularly important because children with public insurance are more likely to have special health care needs, including chronic conditions and developmental delays, for which EPSDT provides access to specialized health services. The Centers for Disease Control and Prevention (CDC) reports developmental disabilities in the United States are increasing. National Health Interview Survey (NHIS) data revealed that 1 in 6 children in the U.S. had an identified developmental disability in 2006-2008, and that children insured by Medicaid had a nearly two-fold higher prevalence of any developmental disability compared to those with private insurance. The American Academy of Pediatrics recommends developmental surveillance at every well-child visit, with administration of standardized developmental screening tests at age 9 months, 18 months and 30 months. This screening is intended to enhance the developmental surveillance process, since clinical impression has been shown to be less accurate than formal screening in estimating a child's developmental status. "Developmental Screening in the First Three Years of Life" is a measure in the Children's Health Insurance Program Reauthorization Act (CHIPRA) core measure set that examines the percentage of children screened for risk of developmental, behavioral, and social delays using a standardized screening tool in the 12 months preceding their first, second, or third birthday. Although this screening can be represented by CPT code 96110, the code has been shown to have questionable validity. Therefore, the measure steward recommends that states conduct a validity assessment of claims data as compared to medical chart review, in order to verify that the use of the CPT code 96110: Developmental Testing, limited, reflects developmental screening using a standardized screening tool.

Objectives

The study aims to compare administrative data and medical record documentation to validate encounter data codes relevant to the receipt of EPSDT screening of children enrolled in Kentucky Medicaid Managed Care.

Study questions:

1. Do encounter data codes used to indicate EPSDT (well-child) screening visits reflect well-child visits that include comprehensive health and developmental history (including mental health and substance use screening), comprehensive physical exam, and health education/anticipatory guidance?
2. Is mental health screening and follow up of identified problems included in EPSDT visits?
3. Does submission of a CPT 96110 code reflect developmental screening using a standardized developmental screening tool?
4. Does submission of hearing and vision screening codes reflect age-appropriate hearing and vision screening?

Methodology

Review Period

The review period will be January 1, 2013 through April 30, 2013, as these are the first four months when all four of the Managed Care Organizations (MCO) could provide claims data. This also allowed for three months claims lag. Humana CareSource initiated its Kentucky Medicaid contract in January 2013.

Scope of Review

Two cohorts of children will be selected from the eligible population:

- **Cohort I:** A stratified (divided into groups before sampling) random sample of 110 eligible children for each of the four MCOs, as available, for whom an administrative claim for well child visit was submitted. This cohort will be used to evaluate the contents of well child visits relative to recommended EPSDT services.
- **Cohort II:** A stratified random sample of 100 eligible children for among of the four MCOs for whom an administrative claim for Developmental Screening (CPT code 96110) has been submitted. This cohort will be used to evaluate the accuracy of the administrative developmental screening code, i.e., whether medical record documentation confirms that the screening was conducted as the claim would indicate.

Eligible Population

The eligible population from which a sample will be drawn will consist of Medicaid Managed Care (MMC)-enrolled children at least 1 year of age to no older than 20 years by April 30 of the measurement year who had a well-child visit code during the identified study period.

Study Indicators

In order to organize the data for meaningful analysis, study indicators are categorized into four areas addressing various aspects of well-child visit and early childhood developmental screening:

1. EPSDT screening-well visit: The proportion of children in the study sample that had the following assessed during the well care visit associated with the EPSDT code(s):
 - Health history
 - Developmental surveillance
 - Mental health assessment (age appropriate, including depression screening)
 - Risk behavior assessment for adolescents, including substance use
 - Comprehensive physical exam
 - Height/weight/BMI percentile
 - Health education/anticipatory guidance
 - All of the applicable elements above

2. Developmental screening
 - The proportion of children with 96110 code that had formal developmental screening
 - The proportion of children without 96110 code that had formal developmental screening
 - The proportion of children with 96110 code that had developmental surveillance
 - The proportion of children without 96110 code that had developmental surveillance

3. Vision screening
 - The proportion of children with a vision screening code that had age appropriate vision screening
 - The proportion of children without a vision screening code that had vision screening
 - The proportion of children with a vision screening code that did not have age appropriate vision screening

4. Hearing screening
 - The proportion of children with a hearing screening code that had age appropriate hearing screening
 - The proportion of children without a hearing screening code that had age appropriate hearing screening
 - The proportion of children with a hearing screening code that did not have age appropriate hearing screening

The following comprise the categories and specific elements to be abstracted from the medical records:

1. Demographic information (prepopulated)

2. Codes associated with well-child visits (prepopulated from administrative data) and specific services:
 - Preventive medicine services (99381-99385; 99391-99395; V20, V70)
 - Developmental screening (96110)
 - Hearing screening (92551, 92552, 92567)
 - Vision screening (99173, 99174)

- Substance abuse screening and brief intervention (99406-99409)
- Substance abuse counseling (V65.42)

3. Age and gender appropriate comprehensive health history:

- Past Medical History, Family History, Social History, Review of Systems
- Developmental Surveillance (milestones/general surveillance, parental concerns)
- Mental Health Assessment
 - Informal query/ Formal tool
 - Depression screening for adolescents
 - Substance abuse screen for adolescents
 - Documented follow-up of identified problems
 - Counseling
 - Medication
 - Further testing
 - Referral

4. Age and gender appropriate comprehensive physical exam

- Height/weight/BMI
- HEENT/Pulmonary/Cardiovascular/Abdomen/Extremities/Neurologic/Genitourinary

5. Counseling/anticipatory guidance/risk reduction

- Nutrition/physical activity/safety-injury prevention/school readiness/risk reduction
- Adolescent risk behaviors

6. Developmental screening with a standardized tool

- Use of a validated developmental screening tool that addresses all four domains: motor, language, cognitive and socio-emotional domains:
 - Ages and Stages Questionnaire (ASQ) - 2 months to 5 years
 - Ages and Stages Questionnaire - 3rd Edition (ASQ-3)
 - Battelle Developmental Inventory Screening Tool (BDI-ST) – Birth to 95 months
 - Bayley Infant Neuro-developmental Screen (BINS) - 3 months to 2 years
 - Brigance Screens-II – Birth to 90 months
 - Child Development Inventory (CDI) - 18 months to 6 years
 - Infant Development Inventory – Birth to 18 months
 - Modified Checklist for Autism in Toddlers (M-CHAT)
 - Parents' Evaluation of Developmental Status (PEDS) – Birth to 8 years
 - Parents' Evaluation of Developmental Status - Developmental Milestones (PEDS-DM)
 - Other Validated Developmental Screening Tool

7. Vision screening (age appropriate)

- visual acuity
- ocular alignment

8. Hearing screening (age appropriate)

- screening
- audiometry
- tympanometry

Disposition of Records

This section of the report will detail record sample sizes, retrieval information, any noted exclusions, and the final study sample. Exclusions noted will include those members for whom the record could not be located or retrieved, the record was incomplete, the record was illegible or the date of service fell outside the study period, based on a review of the submitted charts.

Overall Disposition of Records - Cohort 1

	Coventry	Humana	Passport	WellCare	TOTAL	
Category	N	N	N	N	N	%
Total Members Selected						
Total Records Received						
Exclusions ⁺						
Total Records Reviewed						
Final Study Sample (total with a confirmed WCV code associated with PCP visit)*						

⁺ Reasons for exclusion include: record could not be located, record was incomplete, record was illegible, date of service falls outside of study period, administrative issues such as mismatch between chart date of service and the coded visit date, and prenatal services provided during visit.

*The remaining analyses for this study will be based on these members, unless otherwise noted.

Overall Disposition of Records - Cohort 2

	Coventry	Humana	Passport	WellCare	TOTAL	
Category	N	N	N	N	N	%
Total Members Selected						
Total Records Received						
Exclusions ⁺						
Total Records Reviewed						
Final Study Sample (total with a confirmed Developmental Screen code)*						

⁺ Reasons for exclusion include: record could not be located, record was incomplete, record was illegible, date of service falls outside of study period, administrative issues, such as mismatch between chart date of service and the coded visit date, and prenatal services provided during visit

*The remaining analyses for this study will be based on these members, unless otherwise noted.

Data Analysis

The main focus of the analyses will differ by cohort: the focus for the first cohort is to determine the validity of the well-child visit code; and for the second cohort, the focus is to determine the validity of the developmental screen code from the administrative data. For both cohorts, the analyses will determine whether the use of

either the well-child visit code or the developmental screen code reflects appropriate screenings and evaluations. In addition, developmental screening code will also be evaluated with respect to the use of global developmental screening tools that meet specifications as delineated in CHIPRA core measure specifications¹.

All the data abstracted from the administrative data and the medical records will be included in the report via frequency tables. Results will be presented by age group.

Group Comparisons: In addition to age groups, comparative analyses may be performed between the following groups:

- 1) Gender (Males vs. Females)
- 2) Race (White vs. Black vs. American Indian vs. Asian vs. Pacific Islander vs. Multiple Races vs. Other vs. Unreported)
 - a. Other Race will be reported for those members where the documented race was not listed on the abstraction tool and not related to one on the list
 - b. Unreported Race will be reported for those members where the race was not documented in the provided medical record
- 3) Ethnicity (Hispanic vs. Non-Hispanic vs. Unreported)
- 4) Electronic Medical Record (Yes vs. No)
- 5) MCO (CoventryCares of Kentucky vs. Humana CareSource vs. Passport Health Plan vs. WellCare of Kentucky)

The proposed group comparisons listed above will depend on the frequency distribution of each group after data abstraction.

Methodological Considerations

To test for any differences in proportions, chi-square tests will be employed for all comparative analyses incorporating dichotomous data (e.g., yes / no variables). To detect any differences in means, t-tests will be employed for all comparative analyses incorporating continuous data (e.g., number of medications). Any items found to be significant at the $p < 0.05$ level will be highlighted in bold font.

Note that due to small sample sizes, some items, although of clinical interest, will not be analyzed for statistical significance. All such data will be presented descriptively, however.

Results

The tables below display examples of the tables for the report. Each table only includes selected items and response options for illustrative purposes, although the report will include all items and all response options.

¹ Centers for Medicare and Medicaid Services. Core Set of Children's Health Care Quality Measures: Technical Specifications and Resource Manual for Federal Fiscal Year 2012 Reporting. Updated November 2012.

Member Characteristics [BOTH COHORTS]	1-4 Years		5-11 Years		12-20 Years		TOTAL	
	N	%	N	%	N	%	N	%
Plan								
CoventryCares of Kentucky								
Humana CareSource								
Passport Health Plan								
WellCare of Kentucky								
Race								
White								
Black								
American Indian								
Asian								
Pacific Islander								
Multiple Races								
Other								
Unreported								
Ethnicity								
Hispanic								
Non-Hispanic								
Unreported								
Gender								
Female								
Male								
Primary language spoken by the parent or guardian documented								
English								
Spanish								
Other								
UTD (No documentation on language)								
Interpreter services provided for the parent or guardian that accompanied the child to the visit documented								
Yes								
No								

Member Characteristics [BOTH COHORTS]	1-4 Years		5-11 Years		12-20 Years		TOTAL	
	N	%	N	%	N	%	N	%
UTD ¹								
NA ¹								
Medical record documentation was EMR								
Yes								
No								

COHORT I

MEDICAL RECORD REVIEW: EPSDT VALIDATION: Well-Child Visit [COHORT I ONLY]	1-4 Years		5-11 Years		12-20 Years		TOTAL	
	N	%	N	%	N	%	N	%
Members with a visit on at least one of the visit dates identified?								
Yes								
No								
Members for whom reviewed visit was identified as a well visit in the record								
Yes								
No								
Members for whom the claims data shows a Preventive Services code (99381-99385; 99391-99395; V20, V70)								
Yes								
No								
Well-child Composite								
Of those members with a Preventive Medicine Service code, members with visit which includes ALL basic screening elements of a well-child visit as outlined in HEDIS								

¹ UTD: This designation was used if English is NOT the primary language AND there is no documentation indicating whether an interpreter was provided, also if there is no documentation indicating the primary language spoken. NA: This designation was used if the primary language is English or it is documented that an interpreter is not needed.

MEDICAL RECORD REVIEW: EPSDT VALIDATION: Well-Child Visit [COHORT I ONLY]	1-4 Years		5-11 Years		12-20 Years		TOTAL	
	N	%	N	%	N	%	N	%
specifications. These include patient history, physical exam, anticipatory guidance and developmental screening.								
Yes								
No								
Of those members with a Preventive Medicine Service code, members with visit which includes three out of four basic screening elements of a well-child visit as outlined in HEDIS specifications. These include patient history, physical exam, anticipatory guidance and developmental screening.								
Yes								
No								
Of those members with a Preventive Medicine Service code, members with visit which includes two out of four basic screening elements of a well-child visit as outlined in HEDIS specifications. These include patient history, physical exam, anticipatory guidance and developmental screening.								
Yes								
No								
Of those members with a Preventive Medicine Service code, members with visit which includes one out of four basic screening elements of a well-child visit as outlined in HEDIS specifications. These include patient history, physical exam, anticipatory guidance and developmental screening.								
Yes								
No								
Of those members with a Preventive Medicine Service code, members with visit which includes none of the basic screening elements of a well-child visit as outlined in HEDIS specifications. These include patient history, physical exam, anticipatory guidance and developmental screening.								

MEDICAL RECORD REVIEW: EPSDT VALIDATION: Well-Child Visit [COHORT I ONLY]	1-4 Years		5-11 Years		12-20 Years		TOTAL	
	N	%	N	%	N	%	N	%
Yes								
No								
Patient History								
History obtained included:								
Past Medical History								
Yes								
No								
Family History								
Yes								
No								
Social History								
Yes								
No								
Review of Systems								
Yes								
No								
Height and Weight								
Height/Length and Weight Documented								
Yes - Height/Length								
Yes - Weight								
Yes - Both								
No - neither								
Children ages 2 years and older had BMI percentile documented								
Yes								
No								

MEDICAL RECORD REVIEW: EPSDT VALIDATION: Well-Child Visit [COHORT I ONLY]	1-4 Years		5-11 Years		12-20 Years		TOTAL	
	N	%	N	%	N	%	N	%
Children ages 2 years and older had BMI category ¹ documented								
Yes								
No								
Physical Exam Elements								
Physical Exam was unclothed								
Yes								
No								
Members for whom physical exam included examination of:								
Head								
Yes								
No								
Eyes								
Yes								
No								
Ears/Nose/Throat								
Yes								
No								
Lungs/Respiratory								
Yes								
No								
Heart/Cardiovascular								
Yes								
No								
Abdomen/GI								
Yes								

¹ BMI categories as documented include: Underweight, Normal or Healthy Weight or Normal BMI 5-85th percentile, Overweight, Obese, BMI 85th to less than the 95th percentile, BMI greater than 95th percentile

MEDICAL RECORD REVIEW: EPSDT VALIDATION: Well-Child Visit [COHORT I ONLY]	1-4 Years		5-11 Years		12-20 Years		TOTAL	
	N	%	N	%	N	%	N	%
No								
Skin								
Yes								
No								
Spine/Back								
Yes								
No								
Neurologic								
Yes								
No								
Extremities/Musculoskeletal								
Yes								
No								
Genitalia								
Yes								
No								
Oral Health								
Received an Oral Health Assessment								
Yes								
No								
Referred to an Oral Health provider								
Yes								
No								
Children ages 3 years and older had blood pressure documented								
Yes								
No								

MEDICAL RECORD REVIEW: EPSDT VALIDATION: Well-Child Visit [COHORT I ONLY]	1-4 Years		5-11 Years		12-20 Years		TOTAL	
	N	%	N	%	N	%	N	%
Mental Health Assessment								
Formal Mental Health Screening Tool Documented								
Yes								
No								
Parental observations/concerns documented								
Yes								
No								
Provider inquiry or observation documented								
Yes								
No								
CPT II Code 2014F- Mental Status Assessed								
Yes								
No								
Type of standardized tools used (mental health)								
Ages and Stages Questionnaire: Social/Emotional (ASQ: SE)								
Brief Infant/Toddler Social-Emotional Assessment (BITSEA)								
Greenspan Social-Emotional Growth Chart								
Pediatric Symptom Checklist (PSC-17, PSC – 35)								
Strength and Difficulties Questionnaire (SDQ)								
Early Childhood Screening Assessment								
Vanderbilt Diagnostic Rating Scales								
Other								
Mental Health Problem Identified								
Yes								
No								
For those members who had Mental Health Problem identified, follow-up care was documented:								
Counseling								
Yes								
No								

MEDICAL RECORD REVIEW: EPSDT VALIDATION: Well-Child Visit [COHORT I ONLY]	1-4 Years		5-11 Years		12-20 Years		TOTAL	
	N	%	N	%	N	%	N	%
Testing								
Yes								
No								
Revisit for repeat screening or evaluation								
Yes								
No								
Medication								
Yes								
No								
Referral for further evaluation or treatment								
Yes								
No								
None								
Yes								
No								
For adolescents ages 12-20 years , a depression screening was performed								
Yes - informal inquiry								
Yes - formal screening								
Yes - both informal inquiry and formal screening								
No - neither								
For adolescents ages 12-20 years , for whom a formal depression screening was performed, the type of formal tools used								
Guidelines for Adolescent Preventive Services (GAPS) questionnaire								
Modified PHQ-9								
PHQ-2								
Patient Health Questionnaire for Adolescents [PHQ-A]								

MEDICAL RECORD REVIEW: EPSDT VALIDATION: Well-Child Visit [COHORT I ONLY]	1-4 Years		5-11 Years		12-20 Years		TOTAL	
	N	%	N	%	N	%	N	%
Beck Depression Inventory-Primary Care Version [BDI-PC]								
Reynolds Adolescent Depression Screen								
Mood and Feelings Questionnaire								
Vanderbilt Tool								
Strengths and Difficulties Questionnaire for adolescents (SDQ)								
Other								
Substance Abuse								
Members ages 12-20 years with a Substance Abuse screening and brief intervention code (99406-99409)								
Yes								
No								
Of those members with a code for Substance Abuse screening and intervention, members ages 12-20 years were assessed for:								
Tobacco use								
Yes								
No								
Alcohol use								
Yes								
No								
Drug use								
Yes								
No								
Formal tool was used for alcohol or drug screening for members ages 12-20 years :								
DAST								
Yes								
No								
CRAFT								

MEDICAL RECORD REVIEW: EPSDT VALIDATION: Well-Child Visit [COHORT I ONLY]	1-4 Years		5-11 Years		12-20 Years		TOTAL	
	N	%	N	%	N	%	N	%
Yes								
No								
CAGE-AID								
Yes								
No								
Other								
Yes								
No								
Members ages 12-20 years were identified with:								
Tobacco use								
Yes								
No								
Alcohol use								
Yes								
No								
Drug use								
Yes								
No								
Members ages 12-20 years with a Substance Abuse Counseling code (V65.42)								
Yes								
No								
Of those members with a code for Substance Abuse counseling, members ages 12-20 years who were identified as a tobacco user problem received follow-up care:								
Tobacco counseling/advice to quit								
Yes								
No								

MEDICAL RECORD REVIEW: EPSDT VALIDATION: Well-Child Visit [COHORT I ONLY]	1-4 Years		5-11 Years		12-20 Years		TOTAL	
	N	%	N	%	N	%	N	%
Tobacco referral								
Yes								
No								
Tobacco medication/treatment								
Yes								
No								
Of those members with a code for Substance Abuse counseling, members ages 12-20 years who were identified as a alcohol user problem received follow-up care:								
Alcohol counseling/brief intervention								
Yes								
No								
Alcohol referral for treatment								
Yes								
No								
Of those members with a code for Substance Abuse counseling, members ages 12-20 years who were identified as a drug user received follow-up care:								
Drug use counseling/brief intervention								
Yes								
No								
Drug use referral for treatment								
Yes								
No								
Anticipatory Guidance								
Age appropriate anticipatory guidance provided for:								
Nutrition and Diet								
Yes								
No								

MEDICAL RECORD REVIEW: EPSDT VALIDATION: Well-Child Visit [COHORT I ONLY]	1-4 Years		5-11 Years		12-20 Years		TOTAL	
	N	%	N	%	N	%	N	%
Safety/Injury Prevention								
Yes								
No								
Members ages 2 years and older , Physical Activity/Screen Time								
Yes								
No								
Members ages 5 years and older , Development/Mental Health/Emotional Well Being								
Yes								
No								
Members ages 5 years and older , School Readiness/Academic/Social								
Yes								
No								
Members ages 12 years and older , Risk Reduction/Physical Development								
Yes								
No								

MEDICAL RECORD REVIEW: EPSDT VALIDATION:	1-4 Years		5-11 Years		12-20 Years		TOTAL	
Developmental Assessment [COHORT I ONLY]	N	%	N	%	N	%	N	%
Developmental Surveillance								
Development Assessed during visit								
Yes								
No								
The following elements of surveillance were performed:								
Discussion of Developmental Milestones and/or General Surveillance								
Yes								

MEDICAL RECORD REVIEW: EPSDT VALIDATION:	1-4 Years		5-11 Years		12-20 Years		TOTAL	
Developmental Assessment [COHORT I ONLY]	N	%	N	%	N	%	N	%
No								
Assessment of Parental Concerns								
Yes								
No								
Domains of Surveillance Addressed:								
Social Emotional								
Yes								
No								
Cognitive								
Yes								
No								
Language								
Yes								
No								
Motor								
Yes								
No								
Developmental Screening								
Formal Developmental Screening Test Documented								
Yes								
No								
UTD								
Members with a formal screening test that meets CHIPRA specifications								
Ages and Stages (ASQ)								
Ages and Stages 3rd Edition (ASQ-3)								
Battelle Developmental Inventory Screening Tool (BDI-ST)								
Bayley Infant Neuro-developmental screen (BINS)								
Brigance Screens II								

MEDICAL RECORD REVIEW: EPSDT VALIDATION:	1-4 Years		5-11 Years		12-20 Years		TOTAL	
Developmental Assessment [COHORT I ONLY]	N	%	N	%	N	%	N	%
Child Development Inventory (CDI)								
Infant Development Inventory								
Parents' Evaluation of Developmental Status (PEDS)								
Parents' Evaluation of Developmental Status-Dev Milestones (PEDS-DM)								
Members with formal screening test that does NOT meet CHIPRA specifications								
Modified Checklist for Autism in Toddlers (M-CHAT)								
Other Developmental Screening Tool								
UTD								
Of those members who had a developmental screening code:								
Members with a formal screening test that meets CHIPRA specifications								
Members with formal screening test that does NOT meet CHIPRA specifications								
Members with only developmental surveillance								
Members with neither surveillance nor formal screening								

MEDICAL RECORD REVIEW: EPSDT VALIDATION: Vision	1-4 Years		5-11 Years		12-20 Years		TOTAL	
[COHORT I ONLY]	N	%	N	%	N	%	N	%
Members with a Vision Screening code (99173, 99174)								
Yes								
No								
Of those members with a Vision Screening code, members under 3 years of age received age appropriate vision screening ¹								
Yes								
No								

¹ Age appropriate vision screen for those **under 3 years of age** includes: observation/exam/responses; picture test such as Allen cards; Universal cover test; responses to visual stimuli

Of those members with a Vision Screening code, members ages 3 years and older received age appropriate vision screening ¹								
Yes								
No								
Member referred to eye health professional								
Yes								
No								

MEDICAL RECORD REVIEW: EPSDT VALIDATION: Hearing	1-4 Years		5-11 Years		12-20 Years		TOTAL	
[COHORT I ONLY]	N	%	N	%	N	%	N	%
Members with a Hearing Screening code (92551, 92552, 92567)								
Yes								
No								
Of those members with a Hearing Screening code, members under 3 years of age received age appropriate hearing screening ²								
Yes								
No								
Of those members with a Hearing Screening code, members ages 3 years and older received age appropriate hearing screening ³								
Yes								
No								
Member referred to audiology related health professional								
Yes								
No								

¹ Age appropriate vision screen for those **3 years of age and older** includes: distance visual acuity via Snellen wall chart; ocular alignment via unilateral cover test or random dot

² Age appropriate hearing screening for those **under 3 years of age** includes: observation/exam/responses to auditory stimuli

³ Age appropriate hearing screening for those **ages 3 years and older** includes: pure tone audiometry and tympanometry testing performed

COHORT II

MEDICAL RECORD REVIEW: DEVELOPMENTAL ASSESSMENT [COHORT II ONLY]	1 Year		2 Years		3 Years		TOTAL	
	N	%	N	%	N	%	N	%
Developmental Surveillance								
Development Surveillance documented								
Yes								
No								
The following elements of surveillance were performed:								
Discussion of Developmental Milestones and/or General Surveillance								
Yes								
No								
Assessment of Parental Concerns								
Yes								
No								
Assessment of Risk Factors for Developmental Delay								
Yes								
No								
Domains of Surveillance Addressed:								
Social Emotional								
Yes								
No								
Cognitive								
Yes								
No								

MEDICAL RECORD REVIEW: DEVELOPMENTAL ASSESSMENT [COHORT II ONLY]	1 Year		2 Years		3 Years		TOTAL	
	N	%	N	%	N	%	N	%
Language								
Yes								
No								
Motor								
Yes								
No								
Developmental Screening								
Formal Developmental Screening Test Performed on preloaded date								
Yes - on preloaded date								
Yes- within 7 days of preloaded date								
No								
UTD								
Members with a formal screening test that meets CHIPRA specifications								
Ages and Stages (ASQ)								
Ages and Stages 3rd Edition (ASQ-3)								
Battelle Developmental Inventory Screening Tool (BDI-ST)								
Bayley Infant Neuro-developmental screen (BINS)								
Brigance Screens II								
Child Development Inventory (CDI)								
Infant Development Inventory								
Parents' Evaluation of Developmental Status (PEDS)								
Parents' Evaluation of Developmental Status-Dev Milestones (PEDS-DM)								
Members with formal screening test that does NOT meet CHIPRA specifications								

MEDICAL RECORD REVIEW: DEVELOPMENTAL ASSESSMENT [COHORT II ONLY]	1 Year		2 Years		3 Years		TOTAL	
	N	%	N	%	N	%	N	%
Modified Checklist for Autism in Toddlers (M-CHAT)								
Other Developmental Screening Tool								
UTD								
Of those members who had a developmental screening code:								
Members with a formal screening test that meets CHIPRA specifications								
Members with formal screening test that does NOT meet CHIPRA specifications								
Members with only developmental surveillance								
Members with neither surveillance nor formal screening								