

#### 5.3.4 Validity Testing Results

##### Maintenance Testing: Accountable Entity Empirical Validity Testing, Program Level

Below are the Spearman rank correlation coefficients evaluating associations between (1) Oral Evaluation and Utilization of Services and (2) Oral Evaluation and Topical Fluoride:

**Table 5.3.4.A Program Level Spearman Rank Correlation Coefficient (Validity Testing)**

Measure	Number of Medicaid Programs	Spearman's rank correlation coefficient	p-value
Oral Evaluation and Utilization of Services (CBE 2511), CY 2022	47	0.9352	<0.0001
Oral Evaluation and Topical Fluoride (CBE 2528) , CY, 2022	47	0.8615	<0.0001

##### Maintenance Testing: Accountable Entity Empirical Validity Testing, Plan Level

Below are the Spearman rank correlation coefficients evaluating associations between Oral Evaluation and Topical Fluoride for 2022 and 2023:

**Table 5.3.4.B Plan Level Spearman Rank Correlation Coefficient (Validity Testing)**

Measure	Number of CCOs	Spearman's rank correlation coefficient	p-value
Oral Evaluation and Topical Fluoride, CY 2023	16	0.6667	0.0048
Oral Evaluation and Topical Fluoride, CY 2022	16	0.6794	0.0038

**Table 5.3.4.C Maintenance Testing: Data Completeness and Quality Evaluation, Program Level  
State Medicaid Programs, CY 2022**

*	AK	AL	AR	AZ	CA	CO	CT	DC	DE	FL	GA	HI
<b>From T-MSIS Quality Atlas</b>												
Age	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC
Medicaid-Only Enrollment	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC
Claims Volume - Other Services (Outpatient)	LC	MC	LC	LC	LC	LC	LC	LC	LC	MC	MC	MC
Service Users - Other Services (Outpatient)	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC
Procedure Codes - Other Services (Outpatient)	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC
<b>Additional Checks</b>												
Beneficiary ID	0.0%	1.6%	0.0%	0.0%	12.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
Dental Procedure Codes - CDT (% invalid)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Rendering Provider Taxonomy for Dental Procedure Codes	0.0%	0.0%	0.4%	0.0%	0.2%	0.0%	0.1%	0.1%	0.0%	0.2%	0.0%	0.0%
Dental Claims Volume Quality Assessment	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC
*	IA	ID	IL	KS	KY	LA	MA	MD	ME	MI	MO	MS
<b>From T-MSIS Quality Atlas</b>												
Age	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC
Medicaid-Only Enrollment	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC
Claims Volume - Other Services (Outpatient)	LC	LC	LC	LC	LC	MC	HC*	MC	LC	LC	LC	LC
Service Users - Other Services (Outpatient)	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC
Procedure Codes - Other Services (Outpatient)	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	MC	LC
<b>Additional Checks</b>												
Beneficiary ID	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Dental Procedure Codes - CDT (% invalid)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Rendering Provider Taxonomy for Dental Procedure Codes	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%
Dental Claims Volume Quality Assessment	LC	LC	MC	LC	LC	LC	LC	LC	MC	LC	LC	LC

5.3.4. Validity Testing Results,  
Oral Evaluation, CBE ID: 2517

*	MT	NC	ND	NE	NH	NJ	NM	NV	NY	OH	OK	OR
<b>From T-MSIS Quality Atlas</b>												
Age	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC
Medicaid-Only Enrollment	LC	LC	LC	LC	MC	LC	LC	LC	LC	LC	LC	LC
Claims Volume - Other Services (Outpatient)	LC	LC	LC	LC	LC	HC*	LC	LC	MC	LC	LC	LC
Service Users - Other Services (Outpatient)	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC
Procedure Codes - Other Services (Outpatient)	LC	LC	LC	MC	LC	LC	LC	LC	LC	LC	LC	LC
<b>Additional Checks</b>												
Beneficiary ID	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Dental Procedure Codes - CDT (% invalid)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Rendering Provider Taxonomy for Dental Procedure Codes	0.0%	0.0%	0.1%	19.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.2%	0.0%	0.0%
Dental Claims Volume Quality Assessment	LC	LC	MC	LC	LC	LC	MC	LC	MC	MC	LC	LC
*	PA	RI	SC	TN	TX	UT	VA	VT	WA	WI	WY	
<b>From T-MSIS Quality Atlas</b>												
Age	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	
Medicaid-Only Enrollment	LC	MC	LC	LC	LC	LC	LC	LC	LC	LC	LC	
Claims Volume - Other Services (Outpatient)	LC	MC	LC	LC	LC	LC	LC	MC	LC	LC	LC	
Service Users - Other Services (Outpatient)	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	
Procedure Codes - Other Services (Outpatient)	LC	LC	LC	LC	LC	LC	LC	LC	MC	LC	LC	
<b>Additional Checks</b>												
Beneficiary ID	0.00%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Dental Procedure Codes - CDT (% invalid)	0.00%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Rendering Provider Taxonomy for Dental Procedure Codes	3.70%	0.1%	0.0%	0.0%	1.6%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	
Dental Claims Volume Quality Assessment	MC	LC	LC	LC	MC	LC	LC	LC	LC	LC	LC	

LC=Low concern, MC=Medium concern, HC=High concern

\*HC for overall claims volume represents higher than expected claims volume. Because services are deduplicated (numerator counts "at least one") this is not expected to impact the measure score.

### Prior Testing: Person/Encounter Critical Data Element Testing

The table below shows the results of the overall assessment comparing 1,135 dental procedure codes in the claims data to patient record data. There was 94% agreement.

**Table 5.3.4.D Overall Assessment of Agreement between Patient Records and Administrative Data for Dental Procedures**

Number of Procedure Codes	Record and Procedure Code on Claim Correlate	Record Did Not Correlate with Procedure Code on Claim	Unable to Determine
1,135	94.04%	4.22%	1.75%

The table below shows the results specifically assessing agreement between oral evaluation procedure codes in the claims data and documentation supporting evidence of an oral evaluation in the claims data. The chart reviewers noted that evaluating dental records for documented evidence of oral evaluations was more challenging than identifying whether other specific procedures were performed, such as topical fluoride application or restorative procedures, because oral evaluations encompass a set of services and there is greater variability in charting practices related to documenting oral evaluations.

**Table 5.3.4.E Agreement between Patient Records and Administrative Data for Oral Evaluation**

	Concordance	Prevalence	Sensitivity	Specificity	PPV	NPV	Kappa
<b>Oral Evaluation</b>	86.56%	0.808	0.851	0.925	0.979	0.597	0.6419
Dates of service: 613			(0.817-0.881)	(0.858-0.963)	(0.960-0.990)	(0.522-0.667)	(0.574-0.710)
# indeterminate: 6							

**Prior Testing: Percentage of Missing and Invalid Values for Critical Data Elements**

During empirical data testing, we found that the critical data elements had missing/invalid data of <1%. We provide the data for each program below.

**PROGRAM 1**

Member ID: 0.00%

Date of Birth: 0.00%

Monthly enrollment indicator: 0.00%

Dental Procedure Codes - CDT: 0.00%

Date of Service: 0.01%

Rendering Provider ID: 0.28%

**PROGRAM 2**

Member ID: 0.00%

Date of Birth: 0.00%

Monthly enrollment indicator: 0.00%

Dental Procedure Codes - CDT: 0.00%

Date of Service: 0.00%

Rendering Provider ID: 0.00%

**PROGRAM 3**

Member ID: 0.27%

Date of Birth: 0.00%

Monthly enrollment indicator: 0.00%

Dental Procedure Codes - CDT: 0.28%

Date of Service: 0.00%

Rendering Provider ID: 0.18%

PROGRAM 4

Member ID: 0.00%

Date of Birth: 0.00%

Monthly enrollment indicator: 0.00%

Dental Procedure Codes - CDT: 0.01%

Date of Service: 0.00%

Rendering Provider ID: 0.61%

PROGRAM 5

Member ID: 0.43%

Date of Birth: 0.02%

Monthly enrollment indicator: 0.00%

Dental Procedure Codes - CDT: 0.00%

Date of Service: 0.00%

Rendering Provider ID: 0.67%