Domain 2: Caries Risk Assessment and Disease Management Pilot

Domain Goal

The goals for this four (4) year Domain are to assess caries risk and to manage the disease of caries using preventive services and non-invasive treatment approaches instead of more invasive and costly restorative procedures.

Who can participate in this Domain?

Beneficiaries: Limited to Medi-Cal children age six (6) and under.

Providers: Dental providers enrolled as Medi-Cal Dental Fee-For-Service (FFS), Dental Managed Care (DMC), and Safety Net Clinics in select pilot counties are eligible to opt-in to this Domain. Dental providers must be able to submit claims data to the dental fiscal intermediary (Denti-Cal) including encounter data with specific Current Dental Terminology (CDT) code information. Additionally, dental providers in select pilot counties must complete the Department of Health Care Services (DHCS) approved training, submit a certificate of completion for the training and opt-in to the pilot using a department defined process. Continuous opportunity to opt-in to the Domain will occur in pilot counties and in additional counties when, and if, this Domain is expanded.

How is data collected for this Domain?

Aggregate data for this Domain is collected through claims data submitted by providers enrolled in FFS Medi-Cal Dental, DMC and Safety Net Clinics. Statewide and county baseline data and information regarding enrolled FFS and DMC Medi-Cal Dental providers will also be used.

Where will this Domain be implemented?

The department will begin this effort as a pilot in select counties in January 2017, and may seek to implement on a statewide basis if the pilot is determined to be successful. If successful, DHCS will consider expansion no sooner than nine (9) months following the end of Program Year (PY) 2. Pilot expansion is subject to the availability of funding under the Dental Transformation Initiative (DTI) funding.

The data was analyzed, which led to the selection of the following eleven (11) pilot counties:

- Glenn
- Humboldt
- Inyo
- Kings
- Lassen
- Mendocino
- Plumas
- Sacramento
- Sierra
- Tulare
- Yuba

How were the pilot counties selected?

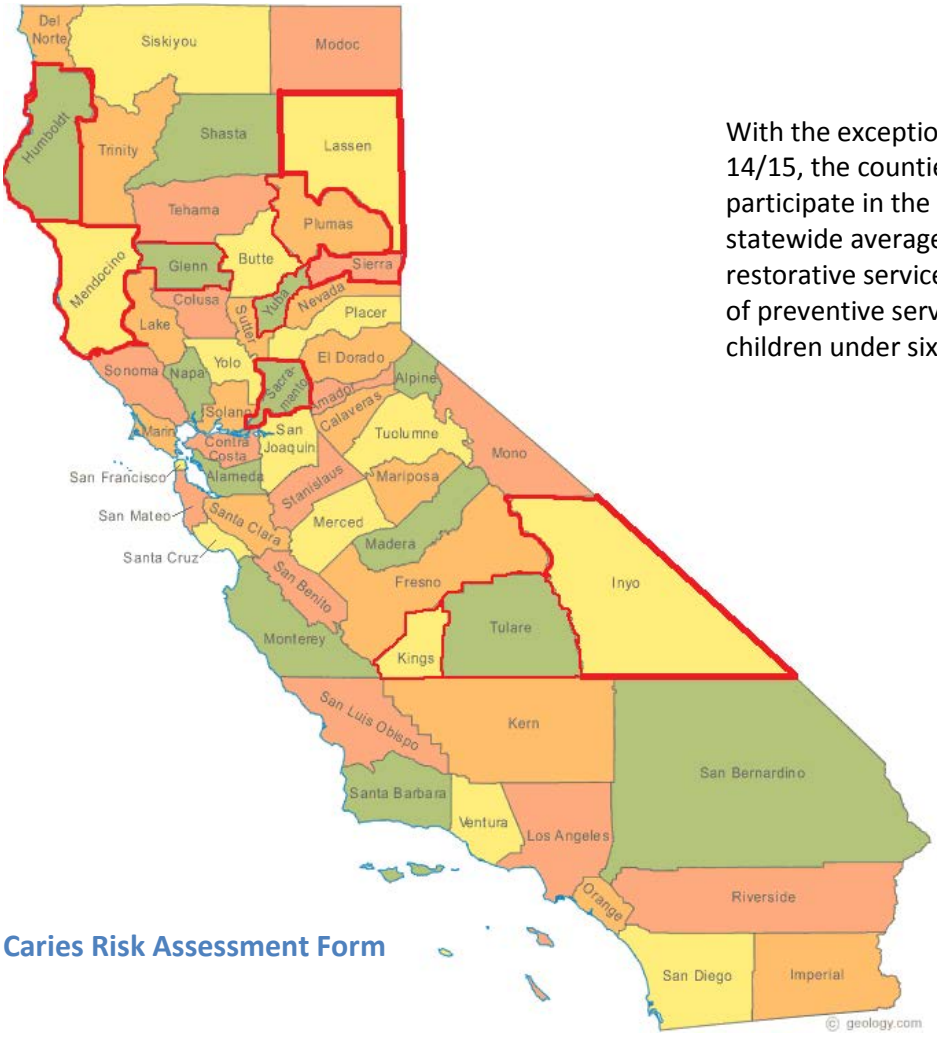
In accordance with the Special Terms and Conditions (STC), pilot counties were selected by the department through an analysis identifying counties with a high percentage of restorative services, a low percentage of preventive services, and an indication of likely participation by enrolled service office locations. Data was collected at the county-level for Fiscal Years (FY) 13-14 and FY 14-15, on the utilization of preventive services (procedure codes D1000-D1999) versus the utilization of restorative services (procedure codes D2000-2999), specifically for children age six (6) and under, as per the Domain's parameters.

Table 1 – County Utilization of Restorative Services versus Preventive Services

	Preventive %		Restorative %	
County	**FY 13/14**	**FY 14/15**	**FY13/14**	**FY 14/15**
Glenn	36.92%	35.47%	63.08%	64.53%
Humboldt	28.56%	29.49%	71.44%	70.51%
Inyo	37.23%	30.31%	62.77%	69.69%
Kings	42.00%	48.20%	58.00%	51.80%
Lassen	68.31%	47.14%	31.69%	52.86%
Mendocino	27.46%	39.42%	72.54%	60.58%
Plumas	42.75%	26.80%	57.25%	73.20%
Sacramento*	49.51%	49.53%	50.49%	50.47%
Sierra	23.33%	11.76%	76.67%	88.24%
Tulare	41.54%	48.36%	58.46%	51.64%
Yuba	47.86%	59.38%	52.14%	40.62%
Average	**47.89%**	**50.93%**	**52.11%**	**49.07%**

**GMC only; all other Counties FFS*

Sacramento was selected as a pilot county to fulfill the agreement with Centers for Medicare & Medicaid (CMS) to include a DMC plan in this Domain. FFS dental providers in Sacramento county will not be authorized to participate in this pilot initially but may be included if expanded at a later date.



With the exception Yuba county in FY 14/15, the counties selected to participate in the pilot were above the statewide average of the utilization of restorative services versus the utilization of preventive services, specifically for children under six (6) years old.

Caries Risk Assessment Form

Domain 2: Caries Risk Assessment and Disease Management Pilot

Dental providers participating in the Domain will utilize a standardized Caries Risk Assessments (CRA) form to ensure uniform application of the CRAs and risk level determinations, using the same criteria. The department has collaborated with a group of clinical experts in the development of the CRA form, piloting testing of the CRA form and training to be used during the pilot. Once finalized, the CRA form will be available on the DTI website.

How will the incentive payment be calculated?

Participating dental providers will receive incentive payments for using the standardized CRA, development of a treatment plan, nutritional counseling, and motivational interviewing. Prophylaxis, application of topical fluoride varnish, application of interim caries arresting medication application (for children assessed at high risk) and oral evaluation will be reimbursed using existing claiming processes. Participating dental providers will receive a bundled incentive payment for completion of the approved CRA, treatment plan, nutritional counseling and motivational interviewing at designated intervals depending upon assessed risk levels. Additional dental services will be reimbursed based on the prescribed frequencies within designated intervals that may exceed standard frequency limitations outlined in the Manual of Criteria (MOC) depending upon assessed risk levels.

Increased frequencies for services will be permitted for children evaluated and determined to be at a caries risk levels as follows:

- "high risk" children will be authorized to visit the Dental provider every three (3) months;
- "moderate risk" children will be authorized to visit their provider every four (4) months; and
- "low risk" children every six (6) months.

The following CDT codes are global to the CRA, and shall be performed at the time of the CRA: CRA D0601, D0602, and D0603 (low, medium or high risk), nutritional counseling (D1310) and motivational interview (D9993). Additionally, dental providers may apply and submit claims for interim caries arresting medication (D1354) for children (high risk only) at the time of the visit, if appropriate for the child.

Table 2 – Pilot CRA Reimbursement Amounts

Risk Level	Procedure	Frequency	CRA Reimbursement Amount
Low	D0601- Caries Risk Assessment, low risk D1310- Nutritional Counseling D9993- Motivational Interview	Every 6 months	$126.00
Moderate	D0602- Caries Risk Assessment, moderate risk D1310- Nutritional Counseling D9993- Motivational Interview	Every 4 months	$126.00
High	D0603- Caries Risk Assessment, high risk D1310- Nutritional Counseling D9993- Motivational Interview	Every 3 months	$126.00
High Risk Only	D1354- Interim Caries Arresting Medication	Every 6 months	$35.00

The reimbursement for the application of topical fluoride varnish (D1206), prophylaxis (D1120), and oral evaluations (D0145, D0150 or D0120) will equate to the current Schedule of Maximum Allowances (SMA) for these procedures.

What is the frequency of incentive payment and who will the incentive be paid to?

Incentive payments will be paid to the participating dental provider, in accordance with the frequency of service as determined by the assessed risk level, using the current Denti-Cal claim submission process.

What are the Performance Metrics?

The following procedures will be incorporated in the department-determined treatment plans for targeted beneficiaries: CRA bundle package (which will globally include behavior modification through nutritional counseling and motivational interviewing, as well as a Caries Risk Assessment), application of topical fluoride varnish, prophylaxis, and oral evaluations. Increased frequencies for prophylaxis, fluoride varnish, and exams will be permitted for children evaluated and determined to be at a particular caries risk level with frequency limitations in a twelve (12) month period, as follows:

- "high risk" will be authorized to visit their provider every three (3) months;
- "moderate risk" children will be authorized to visit their provider every four (4) months; and
- "low risk" children will be authorized to visit their provider every six (6) months.

The baseline year is calculated using statewide data for the most recent state fiscal year preceding implementation of the Domain. The department will collect data and report on the following performance measures, broken down by age ranges, as follows: under one (1), one (1) through two (2), three (3) through four (4), and five (5) through six (6):

1. Number of, and percentage change in, restorative services;
2. Number of, and percentage change in, preventive dental services;
3. Utilization of CRA CDT codes and reduction of caries risk levels (not available in the baseline year prior to the Waiver implementation);
4. Change in use of emergency rooms for dental related reasons among the targeted children for this Domain (use of the ER for dental trauma will be excluded from this analysis); and
5. Change in number and proportion of children receiving dental surgery under general anesthesia.

The department will also track and report on the utilization rates for restorative procedures against preventive services to determine if the Domain has been effective in reducing the number of restorations being performed. Because preventive services do not yield immediate effects, the department will be required to collect data on these performance measures at annual intervals for a number of years to determine correlation and statistical significance. The department will inform CMS of the number of additional years this data will be collected and reported no later than the end of PY 1.

The department will also track and report provider participation in the Domain.

What is the Costing Methodology?

Claims data and eligibility figures for FY 13-14 and FY 14-15 were collected and analyzed. For the purposes of costing and based on the recommendations of the clinical experts, children in publicly financed health care programs will typically be classified as either "low risk", "moderate risk" or "high risk." Since CRAs have not been a program benefit, it was necessary to establish criteria for evaluating previous claims data for children to determine what their caries risk level may have been in order to calculate anticipated expenditures for Domain 2.

Assumptions:

1. Data was collected for FY 13-14 and FY14-15;
2. Medi-Cal children are classified as either low, moderate or high risk;
3. 2.1% growth in eligible population each year; and
4. 40% of the total number of eligible children age 6 and under participate in the pilot.

The following data was collected for FY 13-14 and FY 14-15, by county, for children 0-6:

1. Total eligibles, based on 11/12 months' continuous eligibility with no more than a one-month gap;
2. Number of unduplicated children who received an exam (D0120, D150, or D0145), prophylaxis (D1120), and fluoride procedure (D1206 or D1208) and zero restorative services (D2000-D2999) during the measurement year; and
3. Number of unduplicated children that received at least one restoration (D2000-D2999) during the measurement year.

Table 3 – Number of Eligibles by County

County	Total Eligible Children FY 13-14[1]	Total Eligible Children FY 14-15[1]	Average[1]
Sierra	117	123	120
Plumas	878	902	890
Humboldt	8,177	8,253	8,215
Inyo	1,054	1,021	1,038
Glenn	2,463	2,484	2,474
Mendocino	6,733	6,739	6,736
Lassen	1,414	1,512	1,463
Kings	11,890	11,853	11,872
Tulare	50,543	49,901	50,222
Yuba	5,956	4,815	5,386
Sacramento	83,958	86,421	85,190
Total	**173,183**	**174,024**	**173,604**

[1]*Based on 11/12 months' continuous eligibility*

An initiative driven CRA tool recommended by clinical experts was used to estimate the risk levels of the Medi-Cal target population in pilot counties. Applying this criterion to the number of eligible children in Table 3 results in the estimated risk levels of the children, as shown in Table 4:

Table 4 – Number of Children by County

County:	# Low Risk	# Mod Risk	# High Risk
Sierra	24	41	86
Plumas	236	399	842
Humboldt	1,941	3,276	6,916
Inyo	224	378	799
Glenn	747	1,260	2,660
Mendocino	1,783	3,009	6,352
Lassen	345	582	1,228
Kings	2,402	4,054	8,558
Tulare	9,643	16,273	34,355
Yuba	1,156	1,950	4,117
Sacramento	13,806	23,298	49,184
Total	**32,403**	**54,680**	**115,436**

Table 5 reflects the additional costs associated per child at each risk level. The low risk treatment plan is entirely covered by the MOC and SMA with the exception of the CRA and globally included procedures. As a result, a low risk child will cost $252 a year in incentive payments, and $1,008 over the span of the pilot (CRAs for low risk children is allowed once every 6 months).

Table 5 – Annual Costs per Child by Risk Level

Risk Level	Costs per Child Each Year	Costs per Child Over 4 Year Pilot
Low Risk	$252	$1,008*
Moderate Risk	$441	$1,764
High Risk	$700	$2,800

**CRA only allowed once every 6 months*

Assuming that 40% of the *'# of Low Risk Children Ages 0*-6,' *'# of Moderate Risk Children Ages 0*-6' and '*# of High Risk Children Ages 0*-6' participate in the Domain, and multiplying that number by the annual costs per child reflected on Table 5, results in the total annual dollar amount spent by risk level reflected on Table 6.

Table 6 – Annual Costs by Risk Level

	# Low Risk	# Mod Risk	# High Risk
Total	32,403	54,680	115,436
Assume 40% of total eligibles participate	12,961	21,872	46,174
Total $ per year	**$207,380**	**$9,645,583**	**$32,322,059**

Table 7 reflects the total Domain annual expenditures with an eligibility population growth of 2.1% each year:

Table 7 – Annual Domain Costs by Program Year

Program Year (PY)[1]	Annual Expenditures Amount ($)
PY 1 – January 1, 2016 - December 31, 2016	None
PY 2 – January 1, 2017 - December 31, 2017	$46,404,197
PY 3 – January 1, 2018 - December 31, 2018	$47,405,943
PY 4 – January 1, 2019 - December 31, 2019	$48,429,408
PY 5 – January 1, 2020 - December 31, 2020	$49,475,063
Total Domain Expenditures	**$191,714,612**

[1]*PY in accordance with STC Attachment P*