Caries Risk Assessment

Dental Transformation Initiative (DTI)
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Primary care clinicians are well positioned to promote oral health:

- 96% of children have access to primary medical care.
- Primary care clinicians have regular, consistent contact through well-child visits.
- Clinicians see children for well and acute care at least 8 times by age 2, and frequently thereafter.
- Few preschool children from low-income families receive regular dental care.
Prevalence of Tooth Decay—Primary Teeth

- ~37% of children aged 2–8
  - ~14% untreated
- ~23% of children aged 2–5
  - ~10% untreated
- ~56% of children aged 6–8
  - ~20% untreated

Data from the National Health and Nutrition Examination Survey, 2011–2012.
Prevalence of Tooth Decay—Primary Teeth

Data from the National Health and Nutrition Examination Survey, 2011–2012.
Prevalence of Tooth Decay—Permanent Teeth

- ~21% of children aged 6–11
  - ~14% age 6–8
  - ~29% age 9–11

- ~6% of children aged 6–11 with untreated caries
  - ~3% age 6–8
  - ~8% age 9–11

Data from the National Health and Nutrition Examination Survey, 2011–2012.
Prevalence of Tooth Decay—Permanent Teeth

Data from the National Health and Nutrition Examination Survey, 2011–2012.
Prevalence of Tooth Decay—Adolescents

- ~58% of children aged 12–19
  - ~67% age 16–19
  - ~50% age 12–15

- ~15% of children aged 12–19 with untreated caries
  - ~19% age 16–19
  - ~12% age 12–15

Data from the National Health and Nutrition Examination Survey, 2011–2012.
Prevalence of Tooth Decay—Adolescents

Dental caries experience

Total: 58.2%
12–15 years: 50.1%
16–19 years: 67.1%
Non-Hispanic white: 55.9%
Non-Hispanic black: 59.6%
Hispanic: 60.6%
Non-Hispanic Asian: 58.6%

Untreated dental caries

Total: 15.3%
12–15 years: 11.9%
16–19 years: 19.1%
Non-Hispanic white: 13.4%
Non-Hispanic black: 20.6%
Hispanic: 17.9%
Non-Hispanic Asian: 12.0%

Data from the National Health and Nutrition Examination Survey, 2011–2012.
Reducing Tooth Decay: Strategies in DTI Domain 4 Pilot Program

- Ensure caries risk assessment (CRA) for children 0–20.
- Ensure fluoride varnish application for children 0–20.
- Ensure individualized care plans for high-risk children.
- Educate and engage families in caries risk management.
Individual Caries Risk Assessment

- Fosters the treatment of the disease process instead of treatment of the disease outcome (caries).
- Gives an understanding of the disease factors for each specific child and aids in individualizing preventive discussions (motivational interviewing).
- Individualizes, selects, and determines frequency of preventive treatment for a patient.
  - Fluoride varnish frequency.
- Anticipates caries progression or stabilization.

Individual Care Plans

- Provide dietary counseling.
- Guide and support parents and patients in self-management goals.
- Deliver preventive interventions.
  - Dental referrals
  - Fluoride varnish application
  - Recare based on caries risk
Caries Risk Assessment Tool

- Developed by the Department of Health Care Services CRA Workgroup for DTI.
- An adaptation of a nationally recognized caries risk assessment tool.
- Provides Oral Health Care Coordinators with a form to gather information for classifying children into high, moderate, or low caries risk categories.
- Identifies key clinical, risk, and protective factors for management of caries.
- Helps to set self-management goals and motivate patients.
Caries Risk Assessment Tool

Patient Name: ____________________________________________________________
ID# ________________________ Age: ________________________ Date of Birth: ________________________
Assessment Date: ________________________

Please indicate whether this is a BASELINE assessment or a FOLLOW-UP VISIT ________________
Provide follow-up visit #) ________________________

Ensure that the top portion is completed with all the information.
Section 1 items (a)–(g) are completed via interview with caregiver.

Factors that predispose a child to dental caries.

Indicators for moderate risk.
Fluoride Exposure—Is Your Water Fluoridated?

To determine if a water system is fluoridated, visit the California State Water Resources Control Board at http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml.
Section 2 items (a)–(c) are completed by visually inspecting the child’s mouth for signs of disease.

Signs that the disease process has affected tooth structure automatically place a child into a **high risk** category.
How to Spot Dental Disease

- Look for obvious white spots, decalcifications, enamel defects, or obvious decay.
How to Spot Dental Disease

- White spot lesions and decalcifications occur in areas where plaque builds up.
Dental Plaque and Inflamed Gums
CRA Results

- YES to any one indicator in the HIGH RISK COLUMN = **HIGH RISK** [Presence of disease or recent disease experience].

- YES to one or more factors/indicators in the MODERATE RISK COLUMN in the absence of any HIGH RISK indicators = **MODERATE RISK** [Presence of a risk indicator; no disease].

- Absence of factors in either high or moderate risk categories = **LOW RISK**.
## CRA Summary

<table>
<thead>
<tr>
<th>Moderate Risk</th>
<th>High Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequent carbohydrates</td>
<td>White spot lesions</td>
</tr>
<tr>
<td>Visible plaque</td>
<td>Active caries</td>
</tr>
<tr>
<td>Low fluoride exposure</td>
<td>Restorations previous 12 months</td>
</tr>
<tr>
<td>Low saliva flow</td>
<td></td>
</tr>
</tbody>
</table>

**Low risk** indicated by absence of factors in either category
Last Step—Self Management Goals & Plans

- We’ll talk about this more next month.

- [https://www.cda.org/Portals/0/pdfs/tyke_self_mgmt_goals_for_parent.pdf](https://www.cda.org/Portals/0/pdfs/tyke_self_mgmt_goals_for_parent.pdf).
Questions?