

# Integrating Self-Management Strategies into Dental Training

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Meeting of the Advisory Committee on Training in Primary Care Medicine and  
Dentistry (ACTPCMD), HRSA

June 29, 2016

10:30-12:00



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# Objectives

- Discuss
  - What does it mean to integrate behavioral health content into primary care medicine and dentistry training programs?
  - What are some best practices that demonstrate the integration of behavioral health content into primary care medicine and dentistry education and training programs?
  - What are some challenges and barriers?
  - How can the challenges and barriers be addressed?



# Disclosures



I will be presenting work and results that have received grant funding support from:

DentaQuest Institute

DentaQuest Foundation

Health Resources Services Administration



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# Early Childhood Caries

*But aren't they just baby teeth?*



## Struggles of Hospital-based Dental Clinics/Training Programs

- We care for a large number of children with ECC
- Many of these children are treated surgically
- High rate of decay after treatment
- Long wait-time for operating room care
- High cost of operating room treatment
- **Caries is a highly preventable disease**

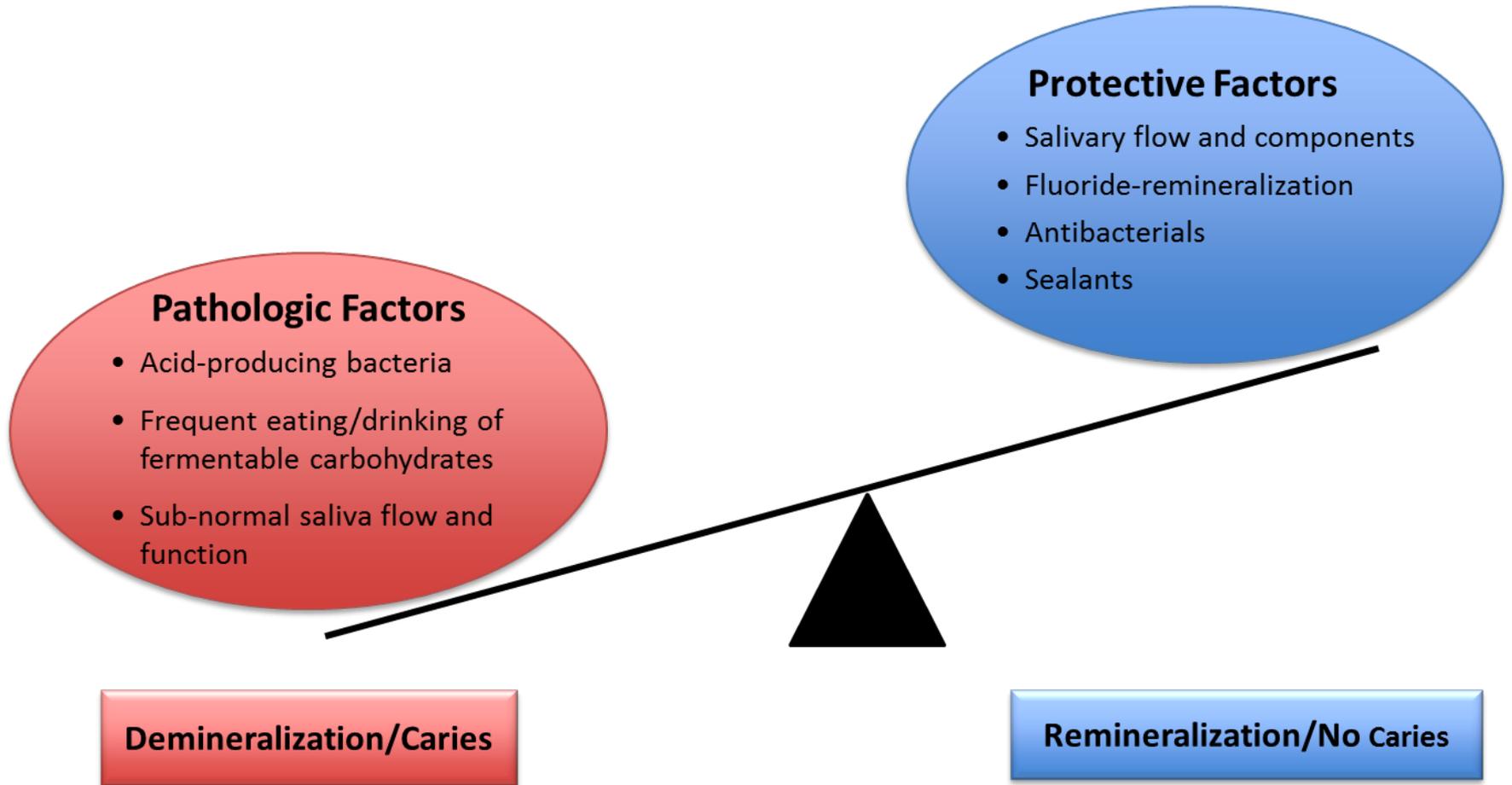


# Historically...

Dentistry, with its surgical tradition, commonly approaches dental caries... as an acute **surgical** problem requiring restoration and repair *rather than* as a chronic **medical** disease process requiring individually-tailored management of etiologic factors, Chronic Disease Management (“CDM”).



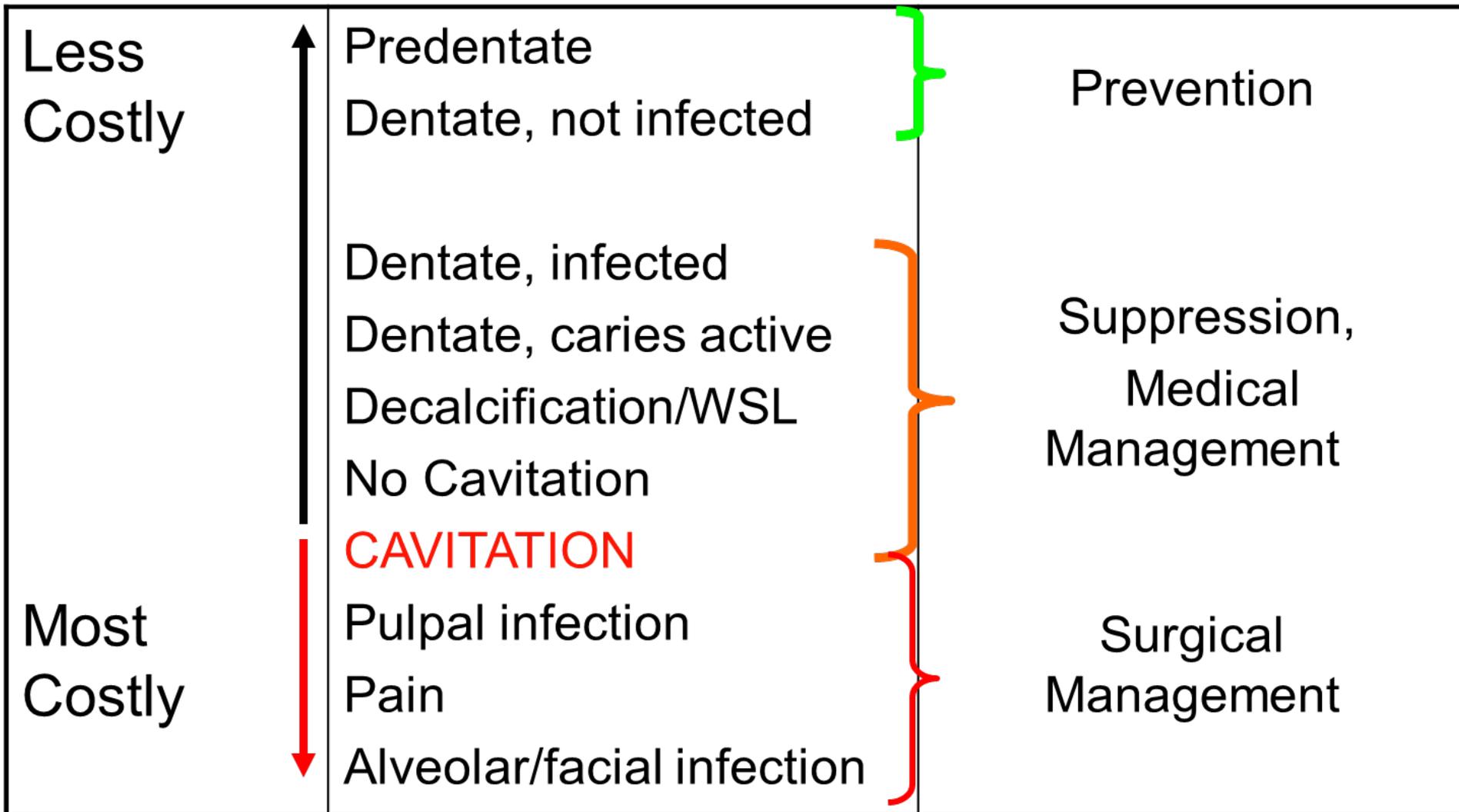
# The Caries Balance



Adapted from Featherstone JDB. Caries prevention and renewal based on the caries balance. *Pediatr Dent* 2006; 28:129.



# Why “Chronic Disease Management” is needed

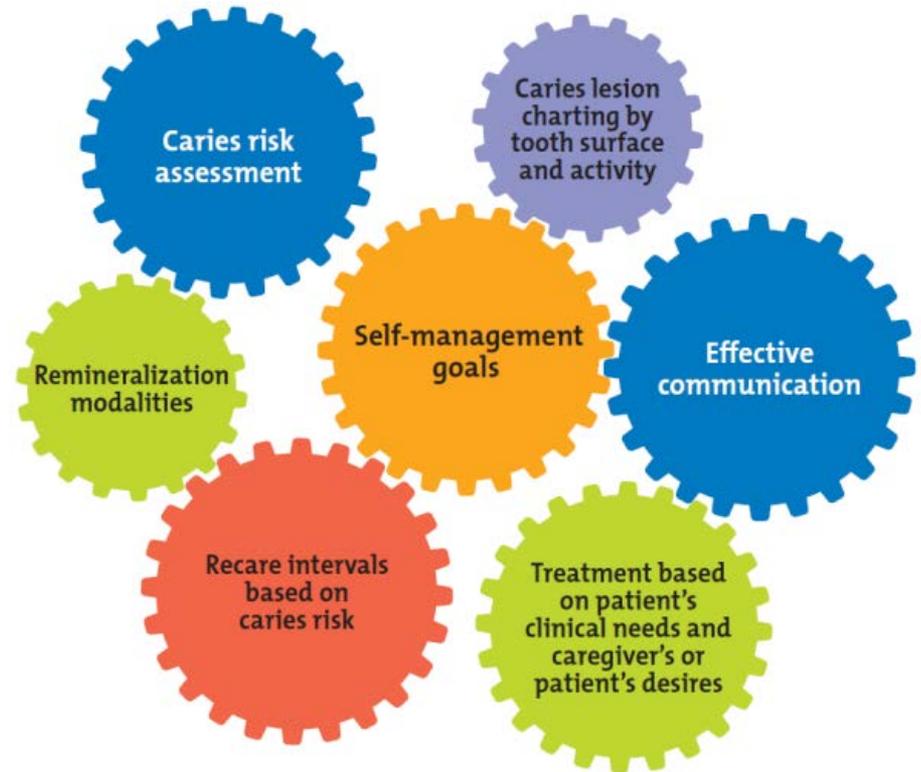


# Opportunity for Improvement



# ECC Collaborative Clinical Protocol\*

Since 2008, over 4 phases, >40 teams nationally have been engaged in testing changes, collecting data, and working with nationally recognized clinical and quality improvement experts to implement the practices and protocols of ECC chronic disease management



\*Funded by DentaQuest Institute



# Caries Risk Assessment

- Should be performed in full or abbreviated at each visit
- Have a dialogue with the parent and patient about their habits and routine, in order to identify protective factors and risk factors
- Use this information to create an individualized treatment plan with self-management goals for the patient and his/her family
- Revisit specific risk factors and protective factors at subsequent visits



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America's leading advocate for oral health

### Caries Risk Assessment Form (Age 0–6)

**CARIES RISK ASSESSMENT FORM FOR AGES 0 TO 5 YRS OLD**

Patient Name: \_\_\_\_\_ I.D.# \_\_\_\_\_ Age: \_\_\_\_\_  
Date: \_\_\_\_\_ Assessment Date: \_\_\_\_\_

**Contributing Co**

	NOTE: Any one YES in Column 1 signifies likely "High Risk" and an indication for bacteria tests			Comments
	1	2	3	
I. Fluoride Exposure (through diet, professional applications, toothp)				
II. Sugary Foods or Drinks (include non-carbonated soft drinks, ene	YES			
III. Eligible for Government Progr (WIC, Head Start, Medicaid or S		YES		Type(s):
IV. Caries Experience of Mother, other Siblings		YES		Type(s):
V. Dental Home: established patie		YES		

**General Health Co**

I. Special Health Care Needs (decal or mental disabilities that preadequate oral health care by the		YES		
---	--	-----	--	--

**Clinical Condi**

I. Visual or Radiographically Evid Cavitated Carious Lesions			YES	Zip Code: _____
--	--	--	-----	-----------------

**Table 2. Caries-risk Assessment Form for 0-5 Year Olds<sup>59,60</sup>**  
(For Dental Providers)

Factors	High Risk	Moderate Risk	Low Risk
<b>Biological</b>			
Mother/primary caregiver has active caries	Yes		
Parent/caregiver has low socioeconomic status	Yes		
Child has >3 between meal sugar-containing snacks or beverages per day	Yes		
Child is put to bed with a bottle containing natural or added sugar	Yes		
Child has special health care needs		Yes	
Child is a recent immigrant		Yes	
<b>Protective</b>			
Child receives optimally-fluoridated drinking water or fluoride supplements			Yes
Child has teeth brushed daily with fluoridated toothpaste			Yes
Child receives topical fluoride from health professional			Yes
Child has dental home/regular dental care			Yes
<b>Clinical Findings</b>			
Child has >1 decayed/missing/filled surfaces	Yes		
Child has active white spot lesions or enamel defects	Yes		
Child has elevated mutans streptococci levels	Yes		
Child has plaque on teeth		Yes	

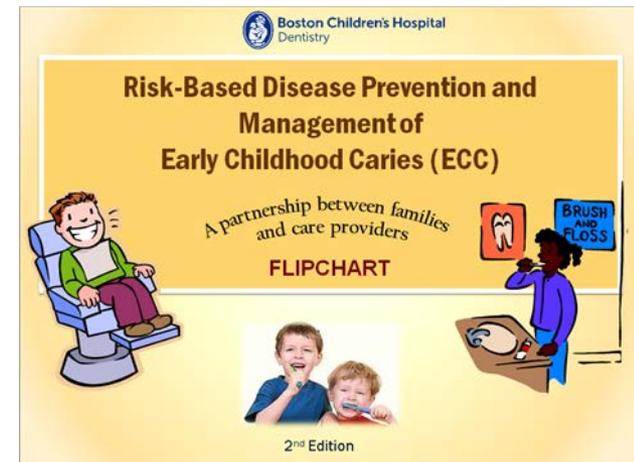
Circling those conditions that apply to a specific patient helps the practitioner and parent understand the factors that contribute to or protect from caries. Risk assessment categorization of low, moderate, or high is based on preponderance of factors for the individual. However, clinical judgment may justify the use of one factor (eg, frequent exposure to sugar-containing snacks or beverages, more than one dmfs) in determining overall risk.

Overall assessment of the child's dental caries risk: High  Moderate  Low



# Effective Communication

- Engage the patient/parent in a dialogue
  - Obtain permission to
    - Ask questions for the CRA
    - Provide coaching on risk/protective factors
  - Ask: What matters to you? Or What is most important to you?
    - Pain, infection, cavities getting worse, appearance, cannot keep coming back...
- Use structured communication strategies such as
  - *Fixing the cavities does not fix the problem*
  - *Without a change in diet and home care, new cavities and broken fillings will result*
  - *Change is hard and won't happen over night*
- Handouts and flipcharts are helpful



# Self-management Goal Setting



- Provide coaching to have the parent/patient to select no more than 1 or 2 goals to work on until the next visit

## Oral Health Self Management Goals for Parents/Caregivers

Patient Name \_\_\_\_\_ DOB \_\_\_\_\_

 Regular dental visits for child	 Dental treatment for family	 Brush twice a day	 Brush with fluoride toothpaste
 Wean off bottle (no bottle for sleeping)	 Less or no juice	 Only water in sippy cups	 Drink tap water
 Healthy snacks	 Less or no junk food and candy	 No soda	 Use xylitol gum, spray, gel, or dissolving tablets

**Important:** The last thing that touches your child's teeth before bedtime is the toothbrush.

Self Management Goals: 1) \_\_\_\_\_  
2) \_\_\_\_\_  
3) \_\_\_\_\_

On a scale of 1-10, how confident are you that you can accomplish these goals? 1 2 3 4 5 6 7 8 9 10

Parent/Caregiver Signature: \_\_\_\_\_

Practitioner Signature: \_\_\_\_\_

Adapted from Ranson-Greene P, Ng MW. Into the future: keeping healthy teeth care free pediatric CAMBRA protocols. J Calif Dent Assoc 2011 Oct;39(10):723-33. Visit [www.saf.org/oralhealth](http://www.saf.org/oralhealth) for more information on children's oral health.

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prevention and health promotion for infants, children, adolescents, and their families™

National ~~Interprofessional~~ **Institutive** on Oral Health  
engaging clinicians, educators, and families



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# Risk-Based Recare Intervals

- Patients are recommended to return in:
  - 1-3 months (if high risk)
  - 3-6 months (if moderate risk)
  - 6-12 months (if low risk)
- At the recare/disease management visit
  - Caries risk assessment
  - Self-management goal setting
  - Exam and charting
  - X-rays if indicated
  - Fluoride varnish
- Whenever possible, coordinate CDM activities with restorative tx



# Quality Improvement

- A formal approach of analyzing what we currently do in practice
- It is the testing, implementation, and adoption of *new changes and ideas* that lead to measurable improvements in health outcomes



# Using Technology

The screenshot shows a dental software interface. On the left is a tooth chart with teeth labeled H, I, J, K, L, M and asterisks. To the right is a grid of procedure buttons. A callout box labeled "Quick buttons" points to a section of the grid containing icons for various dental procedures. The grid includes categories like Diagnostic, Preventive, Restorative, Endodontics, Periodontics, Prosth, remov, Maxillo Prosth, E C C, Prostho, Fixed, Oral Surgery, Orthodontics, Adjunct Serv, Conditions, and NOTES. There are also buttons for D2, D1, D1.5, D2-A, D2-B, D2-C, EO, Ex, Tx, Comp, and a plus sign. A "Clear" button is at the bottom of the grid.

The "Select Procedure Code" dialog box displays a list of procedure codes and their descriptions. A red arrow points from the "E C C" button in the main interface to the "D0603 High Caries Risk" entry in this dialog.

Code	Description
1MoDM	One Month DM Visit
3MoDM	Three Month DM Visit
98	ECC Gel Kam
D0601	Low Caries Risk
D0602	Medium Caries Risk
D0603	High Caries Risk
D1310	Nutritional counseling/SMG
D1330	Oral hygiene instruction
D9220	Deep sedat/gen anesth-1st 30m
NC001	New Cavitation
NC002	No New Cavitation
PN001	Pain due to untreated caries
PN002	No pain due to untreated caries

Buttons: OK, Cancel

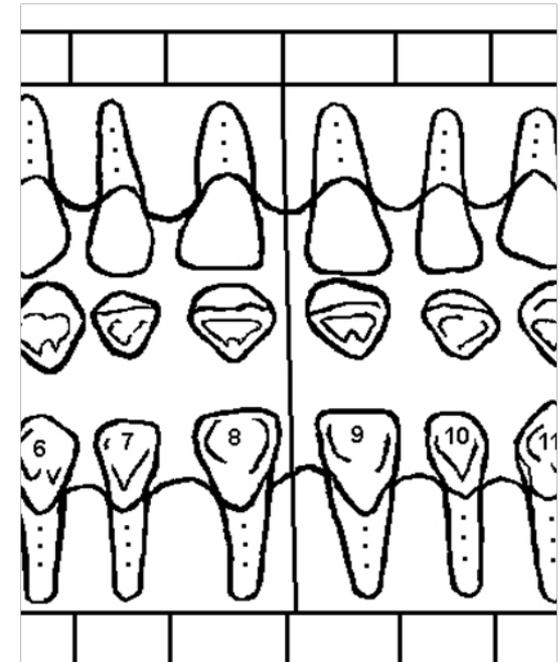


# Using Technology (cont'd)

**Dentrix Chart - (SYSTEMTEST, SYSTEMTEST) [CHB] [MNG] [4496105]**

File Options View Clinical Notes Prim/Perm Procedures Multi-Codes Dental Diagnostics Help

Date	Tooth	Surf	Proc	Prov	Description	Stat	AP	Amount
04/11/2014			D1310	MNG	Nutritional counseling/SMG	C		0.
04/11/2014			DC001	MNG	Discharged	C		0.
04/11/2014			D1330	MNG	Oral hygiene instruction	C		15.
04/11/2014			D1206	MNG	Topical Applic Fluoride Varnis	C		42.
04/11/2014			D0603	MNG	High Caries Risk	C		0.
04/11/2014			1MoDM	MNG	One Month DM Visit	TP		0.
04/11/2014			D1330	MNG	Oral hygiene instruction	TP		15.
04/11/2014			D1206	MNG	Topical Applic Fluoride Varnis	TP		42.
04/11/2014			NC001	MNG	New Cavitation	C		0.
04/13/2014	D	F	D1	MNG	Deminerized enamel (white sp)	CON		
04/13/2014	E	F	D1	MNG	Deminerized enamel (white sp)	CON		
04/13/2014	F	F	D1	MNG	Deminerized enamel (white sp)	CON		
04/13/2014	G	F	D1.5	MNG	Incipient Caries	CON		
06/11/2014			B000	MNG	CARIES RISK ASSESSMENT(0-5 yrs)	CON		



# Telling Success Stories

Lila

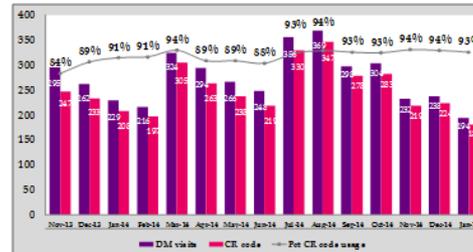
- At age 2, local dentist recommended dental treatment in OR
- Mom sought second opinion
- Mom agreed to CDM protocol & FV and DM visits q3 mos
- At age 3-4, allowed sealants, fillings & crown in clinic
- Continues to be Low Risk



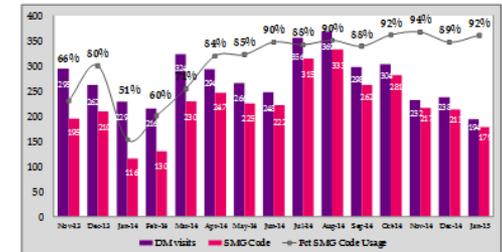
# Using Data in Clinical Practice

- Evaluate practice patterns and practice consistency among care providers
  - Audits
- Evaluate the oral health status of patient population
- Analyze reports in order to
  - Recare patients for CDM visits based on caries-risk
    - High risk within 3 months
    - Med risk within 6 months
    - Low risk within 12 months

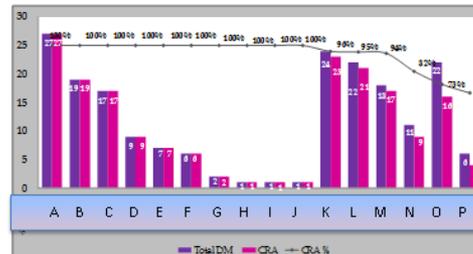
Caries Risk Usage



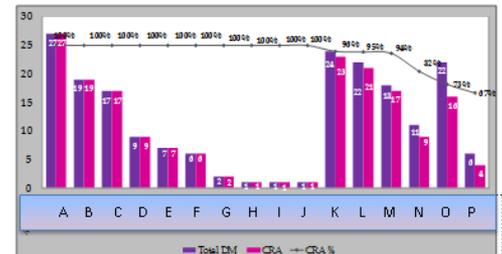
SMG Usage



Caries Risk Usage by Provider



SMG Usage by Provider



# Barriers, Challenges and Opportunities

- Staff buy-in to change
- Time constraints
  - Added time required during patient visits
  - Added time to meet with and train staff
- Challenges with maintaining recare intervals
  - e.g., high no-show rates
- Lack of reimbursement
- Data collection
  - Setting up and using data capture system
  - Using dummy codes in the EDR
  - Reliability with use of codes
- Organizational/Administrative issues
  - EDR implementation
  - Staff or leadership turnover
  - Finding time dedicated to this work
  - Buy-in from other staff/leadership



The screenshot shows a dialog box titled 'select Procedure Code' with a close button (X) in the top right corner. It contains a table with two columns: 'Code' and 'Description'. The table lists various procedure codes and their corresponding descriptions. The first row is highlighted in blue.

Code	Description
1MoDM	One Month DM Visit
3MoDM	Three Month DM Visit
98	ECC Gel Kam
D0601	Low Caries Risk
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NC001	New Cavitation
NC002	No New Cavitation
PN001	Pain due to untreated caries
PN002	No pain due to untreated caries

At the bottom of the dialog box, there are two buttons: 'OK' and 'Cancel'.



# Successes

- Participating sites facilitated spread of chronic disease management of ECC
  - Engaging and coaching patients and families to effectively self-manage their disease
- Introduced quality improvement (QI) methods to oral health professionals
  - In diverse sites
    - FQHC's
    - Hospital-based dental practices
      - Residency training programs
    - Dental Schools
    - Private practitioners
  - Plan-Do-Study-Act cycles
- During regular staff meetings
  - Discuss obstacles and barriers
  - Celebrate successes
  - Share clinical success stories
- Gained knowledge about collecting population health data electronically through electronic dental record systems



# Conclusions

- Early results from CDM interventions have demonstrated that CDM approaches and behavioral health content
  - can be implemented into clinical practice
  - can be incorporated into student/resident education/training
- QI methods have been helpful in facilitating use of risk-based CDM approaches
- Measurement is necessary to improve quality of care and outcomes
- CDM will require and benefit from evolving healthcare delivery and financing systems
- Training programs are excellent sites to test innovative care approaches and to accelerate spread

# Opportunity for Improvements



**Thank you!**

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