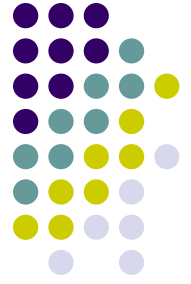


# **New Hampshire Oral Health Forum 2009**



## **Medicine and Dentistry: Partners in Health**

**October 30, 2009**

Amos S. Deinard MD, MPH

Department of Pediatrics/School of Public Health

University of Minnesota

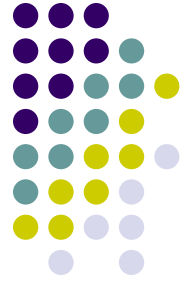
deina001@umn.edu



# **Improving the Oral Health of Children and Youth**

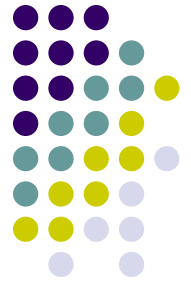
## **The Role of the Primary Care Medical Provider in Primary Caries Prevention Intervention (PCPI)**

# Dental Health Screening and Fluoride Varnish Application

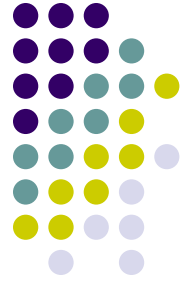


- Dr. Amos Deinard, MD, MPH  
[deina001@umn.edu](mailto:deina001@umn.edu) and  
Suzanne Tessier, RDH, CDHC  
Sue.L.Tessier@HealthPartners.org

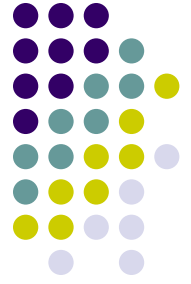
- This program and the personnel involved with it have no financial association with any company that manufactures or markets fluoride products or dental supplies; however, we do recommend that medical providers use the unit dose fluoride varnish product. We do use a 3M Omni Fluoride Varnish product in presentations and as part of a “starter kit” that we provide to clinics which are in the process of integrating the primary caries prevention intervention into the menu of well-child services because 3M has donated the product for use with high-risk children. As part of the “starter kit”, we also provide information on other fluoride varnish products.



# Apology



For some or many of you in the audience, some of the information will be well known to you as it is information that I present to primary care medical providers.

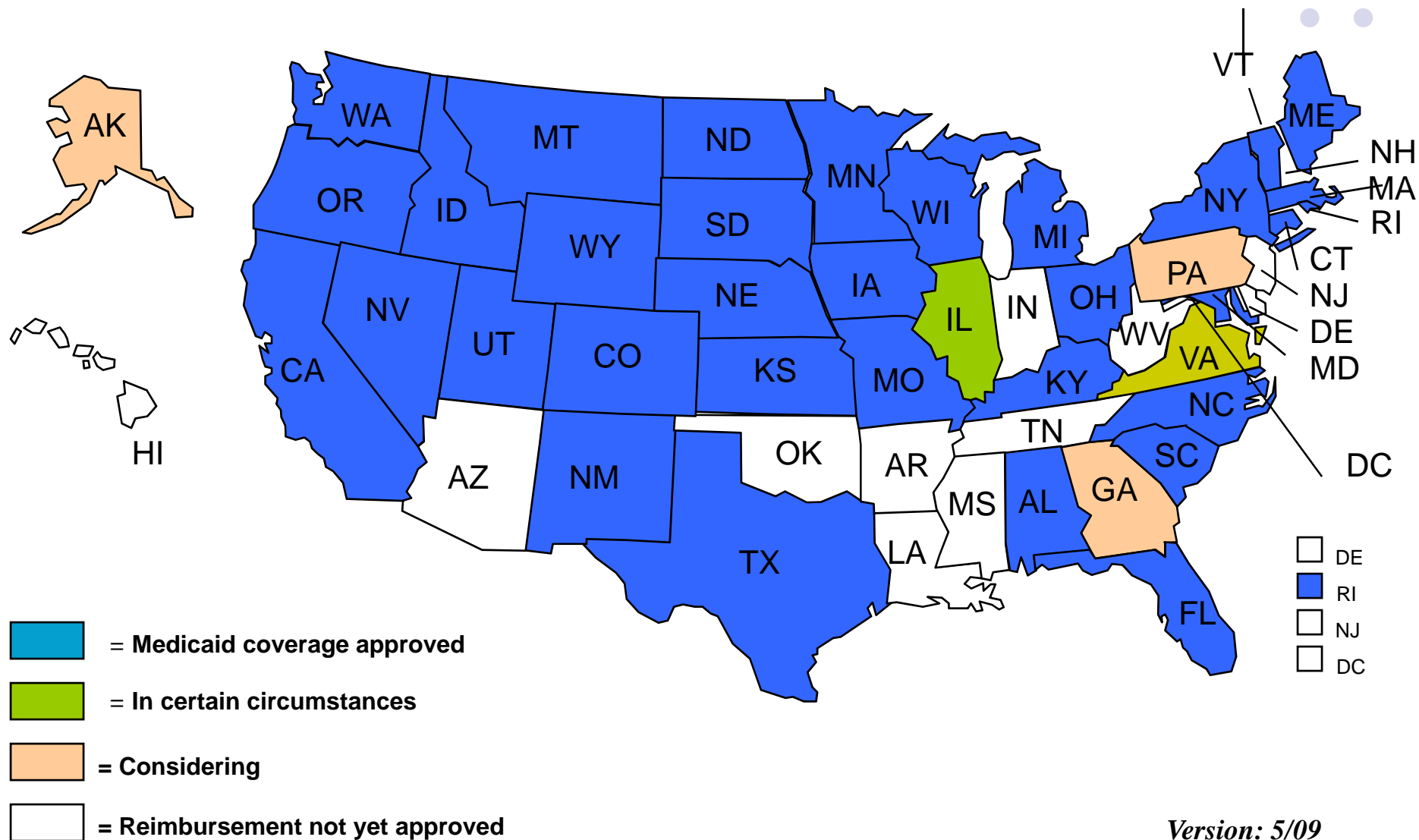


“You are not healthy without good oral health.”

-Dr. C. Everett Koop  
Past Surgeon General



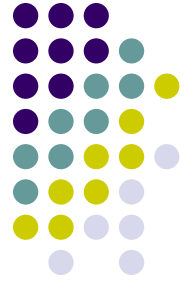
# STATES with MEDICAID Funding for Physician Oral Health Screening and Fluoride Varnish



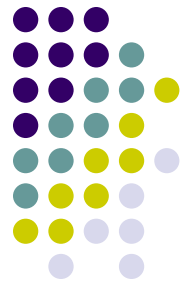
Version: 5/09

# Background

## Surgeon General's Report, 2000



- **THE MOUTH IS PART OF THE BODY**
- Oral Health is part of overall health
- Childhood caries is the most common chronic disease of childhood (20%-2 yr; 30%-3 yr; 40%-4 yr; 50%-5 yr)
  - 5 times more common than asthma
  - 7 times more common than hay fever
- Called for non-dental practitioners to become involved in promoting oral health and to integrate oral health care into overall health care
  - In response, the American Academy of Pediatrics issued a policy statement urging physicians to become more involved in primary prevention of dental pathology, particularly for children covered by public programs (Medicaid and SCHIP) or those who are uninsured, all of whom have difficulty gaining access to dental care.
  - American Academy of Family Practice
    - 2003 resolution
    - Residency training requirement



- Dental care is the most common health need of high-risk children (Newacheck et al., 2005)
  - SES
  - Ethnicity
  - Geography
  - CSHCN
- Children are 2.6 times more likely to have medical coverage than dental coverage
- Only 20-30% of Medicaid-eligible children receive preventive health care
- Based on 2005 enrollment levels in Medicaid, GAO estimated that 6.5 million Medicaid-eligible children 2-18 years of age had untreated tooth decay and more than 5 percent had urgent conditions (fractures, chronic pain)



- 1.1 million children 2-18 years of age had conditions that warranted seeing a dentist within two weeks
- Compared to those with private insurance, children on Medicaid/CHIP were more than 4 times as likely to be in need of urgent dental care
- Recent ADA survey of all children showed that most American children didn't see a dentist until 2-3 years of age (average – 2.6 years) (by one, or within 6 months of first tooth – AAP/AAPD policy)
- Reasons: child too young (62%), not enough teeth, no insurance (22%)



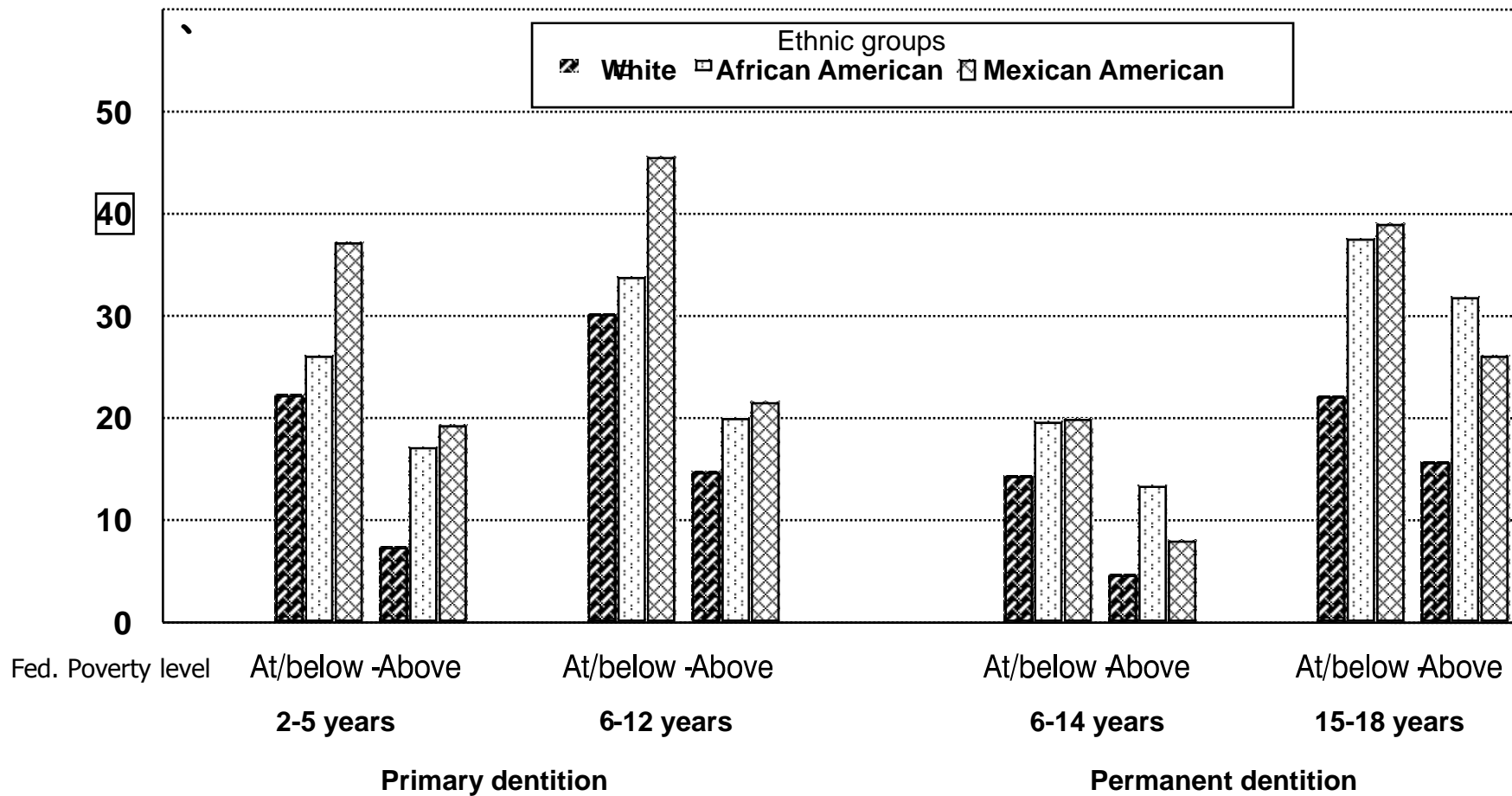
## Sad Reality:

- 50% of tooth decay in low income children goes untreated
- 1 in 8 children never see the dentist (while more than half of children with private insurance received dental care in the preceding year (GAO))
- According to GAO, only about one third of the 20 million children covered by Medicaid/SCHIP received any dental care in 2007

# 'Minority children' are more likely to have untreated tooth decay (regardless of family income)



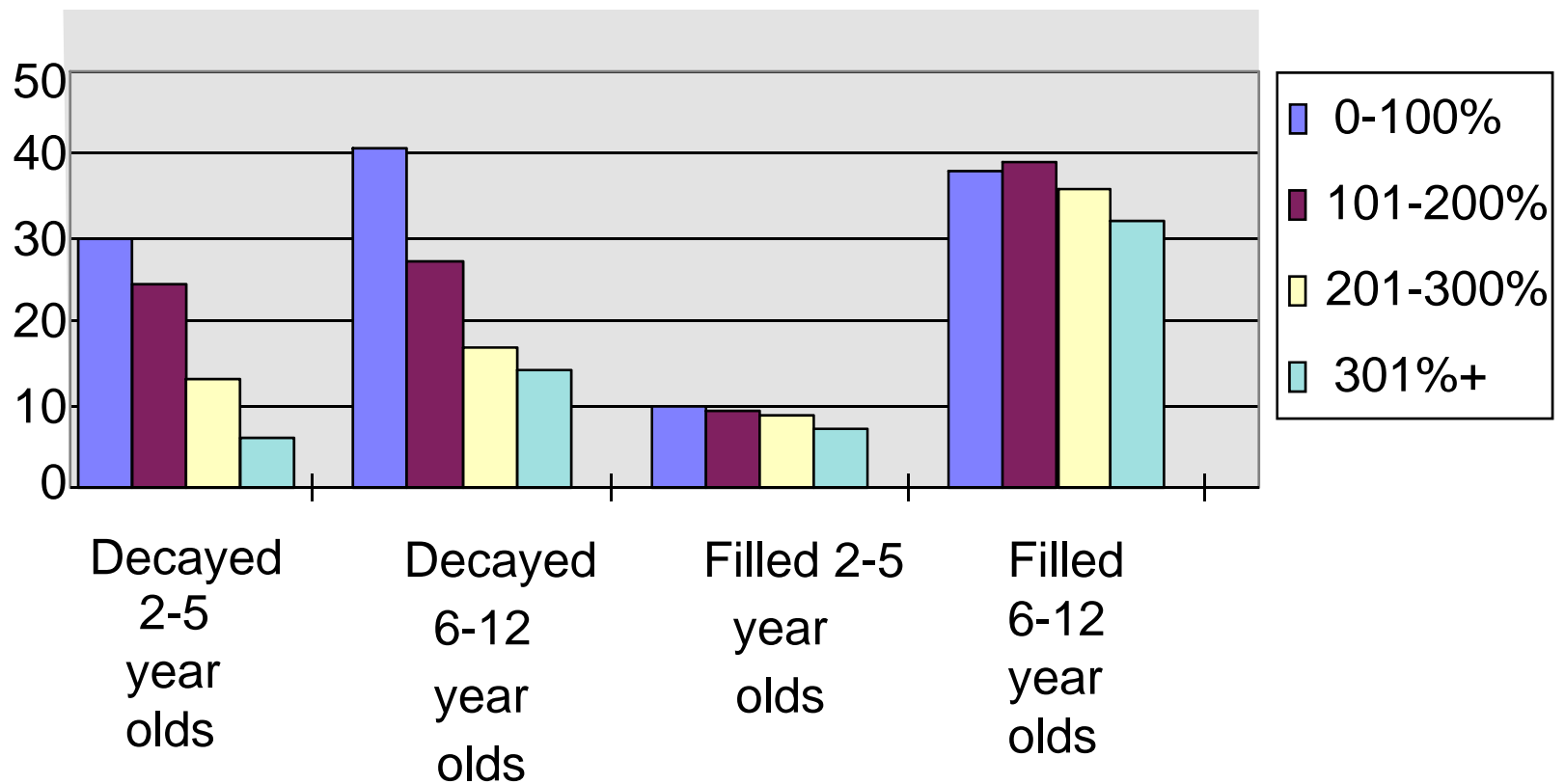
Percent of children



Vargas, Crall, Schneider: JADA 1998;129:1229-1238.

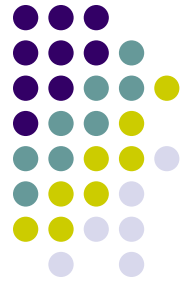
# Percent of Children with Decayed and Filled Primary Teeth by Household Income Level

## (% of Federal Poverty Level)



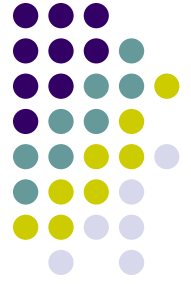
Vargas, Crall, Schneider. Analysis of NHANES III data. JADA, 1998.

# Symptoms/Signs/Consequences



- Cavitation with acute pain, cellulitis, abscess, tooth loss, failure to thrive, dysfunctional speech patterns, diminished facial appearance
- Lost school days ( $51 \times 10^6$  hrs -1999); lost work days ( $150 \times 10^6$  - 1999)
- Loss of wages and potential loss of job
- Low income children missed 12 times more days than children from more affluent families
- If in school with tooth decay and associated pain, poor school performance, disruptive behavior affecting other's learning
- High cost of hospital outpatient surgery (\$12,000/case)
- Emergency room visits; antibiotics; pain medications; "See your dentist in the morning" (\$400-\$500/visit)
  - But alas, for most there is no dentist in the morning

# Change in Paradigm for Dealing with Dental Caries

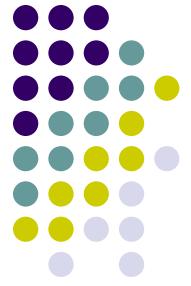


- Old Paradigm → Surgical / ‘Drill and Fill’  
(deal with the consequences of the disease)
- Later Paradigm → Prevention!!!  
(but generally “one size fits all”)
- “Current” Paradigm → Early Intervention, Risk Assessment, Anticipatory Guidance, Individualized Prevention and Disease Management

## **PREVENTION IS KEY!**

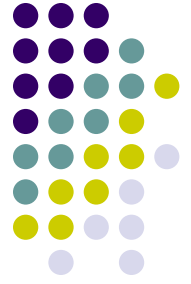
- Early, consistent dental health screenings
- Prevention education

# Why it is necessary to educate primary care medical providers



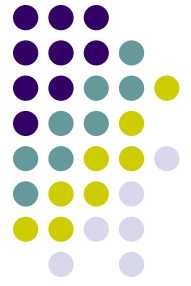
## Pre-Mid-Nineties Experience

- Gaps in medical training (but no need to train)
  - Medical School
  - Pediatric residency and, by report, Family Medicine residency (until the past 3-4 years)
- Community private practice dentists saw all patients including Medicaid (late 60's) and CHIP (more recently)
  - Dental caries is a covered service for Medicaid and CHIP



# Post – Mid- Nineties Experience

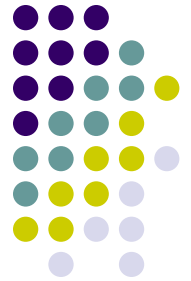
- Private practice dentists began to refuse to see Medicaid/CHIP and few if any dentists in private practice offer care on a sliding-fee schedule for the working-poor, uninsured
- Exceptions
  - Federal Children and Youth and Maternal and Infant Care programs (late 60s to 80s)
    - Dental care – required, either on site or by contract
  - Federally Qualified Health Care Centers
    - Dental care – required, either on site or by contract



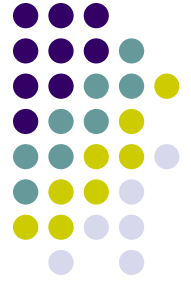
## Complicating factors

- Matriculation: Retirement = 5: 7
- More care, especially in rural areas, is provided by general dentists who, because they have had little if any exposure to screaming infants and toddlers in dental school, don't want to see 1-3 year olds (fear), despite AAP and AAPD policies of 2005 that every child should have a dental home by age 1
- What's wrong here?
  - “The true rewards of this (dental) profession are the real-life experiences of patients who are so elated with their smiles” (a quote from an ad in a Minnesota publication advertising the practice of a local dentist (Dr. \_\_\_\_\_ “He's the Dentist Behind those Beautiful Smiles”))
    - Is this where the focus of dental practice should be?

# Background - Confession

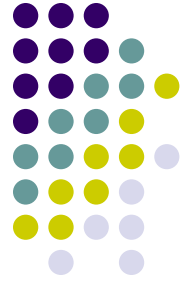


- Developed oral health focus in 1995 with no knowledge of HP 1990, 2000, 2010 or Letterman's Top 10 solutions to the Oral Health Crisis
- Caries had become a silent epidemic, with a disproportionate share found in Medicaid or CHIP-covered children or those from working poor, uninsured families
- My interest was a result of having cared for high-risk children since 1969
- Because of CY/MIC programs of the Johnson administration, all received dental care for over 30 years
- 1995: community dentists rarely cared for Medicaid/MNCare children (MN's CHIP)



# Idea

- Old anonymous Latin adage – “Necessity is the mother of invention.”
- Provide oral health care at well-child examinations
- “Does your child have a dental home”  
If “No,” child received:
  - Oral Exam
  - Swab for Streptococcus mutans
  - Fluoride varnish
  - Caregiver education
  - Restorative care if time permitted, or future appointment



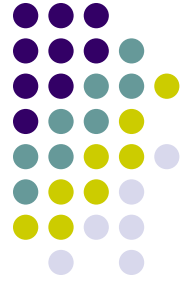
# 2000 Surgeon General's Conference

- Dr. Olson Huff
  - “Into the Mouths of Babes” in North Carolina
  - Train pediatricians and family medicine physicians to offer primary caries prevention
  - Challenge: replicate program in Minnesota

# Back in Minnesota . . .



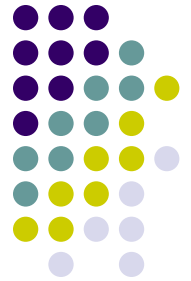
- The Department of Human Services and the nine health plans which cover 90% of children agreed to reimburse primary care medical providers (MD, NP, PH, PHN) over and above what providers would routinely be reimbursed for a Child and Teen Checkup (EPSDT)
- Budget Neutral



- Poll of MN's American Academy of Pediatric membership was conducted to determine their interest in being trained

**-They were interested-**

# **MN Chapter of the American Academy of Family Medicine 2003 Convention**

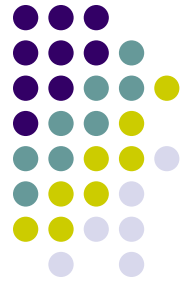


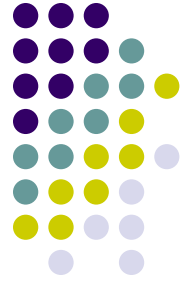
- **Resolution passed:**
  - Family Medicine physicians should be doing primary caries prevention as part of well-child care**
- **Residency training program**

To the editors:

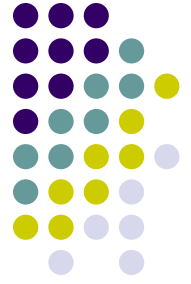
Recently we learned that medical healthcare professionals can be reimbursed by many health plans and by the Minnesota Department of Human Services for applying fluoride varnish to pediatric patients to prevent caries. Historically, parents take their young children to a pediatrician rather than a dentist sooner and more often. So, when I heard that non-dental professionals could be paid for applying fluoride varnish, I was very pleased. But, I also recognized that some dentists may at first have wondered what these medical professionals were doing: Were they “encroaching” on dentists’ turf? In fact, physicians and other medical and nursing professionals are within their respective legal scopes of practice when they apply fluoride varnish. The application itself is very simple; in fact, lay people in some settings are trained to do this and manage quite well.

As dentists, we need to appreciate the value of interdisciplinary oral disease prevention and encourage our medical colleagues to help us promote children’s oral health. It is unfortunate – and costly in so many ways – that by the time a child is first seen by a dentist their oral health may be critical and quite possibly require hospitalization. So, work *together* with your local pediatricians to help them learn the importance of applying fluoride varnish and educating parents about ECC.





- Website created to train medical providers
- Atlas of Common Dental Pathology developed to aid in identification of abnormalities in the mouth (Spanish version)
- Print material written to inform providers, caregivers, and ancillary clinic staff about caries etiology and prevention



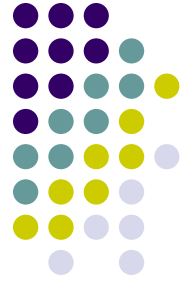
- D-1203/1206 code
- Trained all 87 counties' PHN agency supervisors
- Small-scale effort to train MN primary care providers about PCPI (UCare, Medica Foundation, Delta Dental) (discussed later)
- Larger scale state-wide effort (NCOF) (discussed later)

# American Academy of Pediatrics and its Oral Health Initiative



- Move PCPI concept Nationwide
- Two years ago: 14 states reimbursing physicians for primary caries prevention
- Today: 35 states
- Goal – 12/31/2010 – 50 States and D.C.

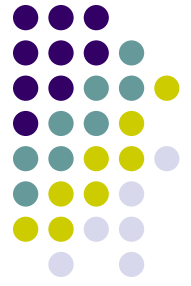




# Procedure

- Oral exam (eyeballing)
- Paper/pencil risk assessment (30 seconds)
- Advising caregivers about caries etiology and their role in prevention
- Applying fluoride varnish
- Advising the caregiver about the importance of finding a dental home for the child by age one.

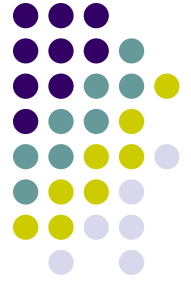
# Primary caries prevention intervention for those without a dental home



- Who
  - Medical providers (MD, NP, PA, PHN)
  - Other providers (WIC clinic and Head Start/Early Head Start Program staff)
- Why
  - Importance of primary/secondary prevention
    - Cornerstone of primary care of children
    - Fill void/address need
- When
  - Well-child care visits (2 weeks through 5 years ( $N = 12$ ))
  - OB clinics (ideal time to start caregiver education)



- What
  - AAP Policy (Tooth Decay Prevention)
    - Medical providers to assess patients' dental health (gross examination of teeth) and add caries prevention (risk assessment, parent education about caries etiology and caregiver's role in prevention, fluoride varnish application quarterly (ADA recommendation), advise about finding dental home (whenever/whatever) to well-child care menu of services
  - Dental "Home" (age 12 mo., not 3 years)
    - But, is it really a "home"? (inconsistency of coverage). Rather, emphasize regular care (medical and dental)
    - Health Home



# Oral Risk Assessment (beginning at age 2 weeks)

- Preexisting risk factors
  - Early tooth eruption (<6 months)
  - Overlapping/crowded incisors
- White spots (none; 1; >1) – lift-the-lip
- Plaque (none; present on anterior front teeth)
- Gingivitis (absent; present)
- Past caries experience of child
- Past caries experience of primary caregiver
- Past caries experience of older siblings
- Bottle to bed (nap; night) containing sugared liquids
- Frequent/continual access to bottle/sippy cup containing sugared liquids during day when awake
- Snacking (none; 1-2 times between meals; >2 times between meals)

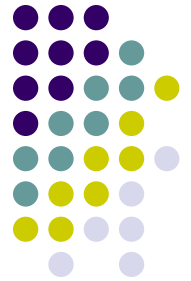


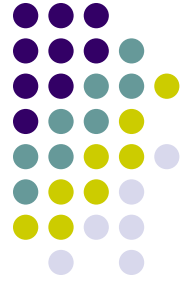
- Failure to clean the child's teeth 1-2 times/day
- Inadequate exposure to fluoridated water (**reverse osmosis filter**); fear of water (dysentery- Hispanics)
- Nonuse of fluoridated toothpaste (ADA seal of approval)
  - Fluoride supplements
  - Fluoride-rich foods
- Inability to maintain good oral hygiene (dental or orthodontic appliances)
- Continual exposure to sugar-containing medications (chronic illnesses)
- Xerostomia (Dry Mouth) (drugs for chronic illness)
- Pacifier use (caregiver wets with own saliva)
- Pretasting/prechewing of food (caregiver saliva)
- Bottle sharing (saliva)
- Infrequent or no regular dental care

Complete AAPD Policy Statement with Caries Risk Assessment Tool available at:  
<http://www.aapd.org/pdf/policycariesriskassessmenttool.pdf>

# Education/Varnish

- Discuss caries' etiology and caregiver's role in prevention (a balance between risk and protective factors)
- Caries is a transmittable infectious disease and is thus theoretically preventable
- The cariogenic bacteria (primarily streptococcus mutans) of primary caregiver can be transferred to child by:
  - Wetting pacifier with saliva
  - Prechewing the child's food
  - Tasting the child's food
  - Kissing child on the lips
  - Sharing Bottle (older siblings)





# Education/Varnish

- Offer anticipatory guidance to caregivers of all children (across risk continuum) (fluoridated water; proper feeding practices; risk for dental decay; oral hygiene instructions; dental home by age 1)
- Discuss behavior modifications for caregivers of children identified as high-risk
- Apply fluoride varnish according to ADA risk status (low – not needed; mid – 2 times/year; high – 4 times/year)
- Describe benefits of retention of primary teeth
  - Proper chewing – good nutrition
  - Speech development
  - Space for permanent teeth
  - Attractive smile – feel good, easier to get a job



# Dental Plaque

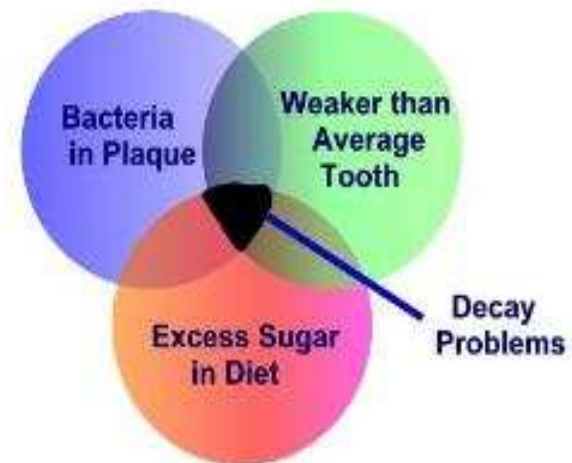
- Dental Plaque contains:
  - Bacteria
  - Food debris
  - Dead mucosal cells
  - Salivary components





# Tooth Decay

- Plaque + sugars + microorganisms (primarily streptococcus mutans) → acid that etches the enamel of the teeth which results in the beginning of caries (the process), leading to a cavity (the hole).





# Sugar in 12 ounce can of pop



Soda Pop:

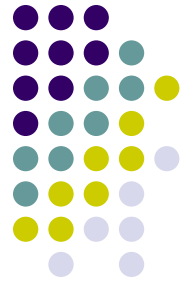
Sugar: (in teaspoons)

- Orange Slice 11.9
- Minute Maid Orange 11.2
- Mountain Dew 11.0
- Barq's Root Beer 10.7
- Pepsi 9.8
- Dr. Pepper 9.5
- Coca-Cola 9.3
- Sprite 9.0



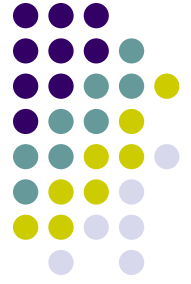


# Not Just What You Eat, But How Often



- Increased acidity produced by bacteria after sugar intake persists for 20 to 40 minutes
  - With each ingestion of sugar, another wave of increased acidity lasting for 20-40 minutes
- Frequency of sugar ingestion is more important than quantity
  - Better to drink 16 oz. of Cola in one long gulp than continually over 8 hours.

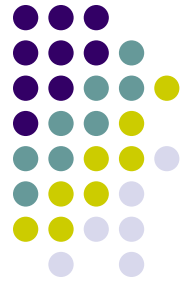
# Fluoride\*: What does it do?



- A lacquer-based product containing fluoride (NaF) (2.6% fluoride)
- Retards growth of cariogenic bacteria, thereby inhibiting the process by which cariogenic bacteria metabolize carbohydrates to produce acidic excrement
- Localizes in the enamel where it releases fluoride ion into the enamel in high concentration, remineralizing the enamel of the tooth (e.g., white spot)
- Decreases enamel solubility
- Offers protective effect (as does fluoridated water) that is more from topical exposure than from ingestion (i.e., supplements; fluids)
- Extends exposure time of fluoride in the mouth compared to other topical fluorides

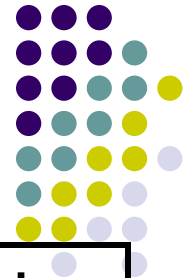
\* Fluoridated community water should have 0.7-1.2 ppm fluoride to be effective

# Fluoride: Who is in need?



- Fluoride supplements should be considered if the water supply does not have adequate fluoridation (naturally (wells); lack of public fluoridation; home reverse osmosis filter; bottled). Consider, however, other sources of fluoride (e.g., foods)
- Infants younger than six months do not require fluoride supplements
- Infants six months and older who are breast-fed may have the greatest need for dietary fluoride supplements

# Fluoride Supplement Schedule



Age	Fluoride Concentration in Community Drinking Water		
	<0.3 ppm	0.3–0.6 ppm	>0.6 ppm
0–6 months	None	None	None
6 mo–3 yrs	0.25 mg/day	None	None
3 yrs–6 yrs	0.50 mg/day	0.25 mg/day	None
6 yrs–16 yrs	1.0 mg/day	0.50 mg/day	None

MMWR: Recommendations for Using Fluoride to Prevent and Control Dental Caries in the US (2001): <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5014a1.htm>.

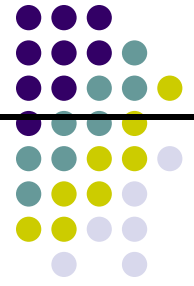
# Evidence-based Recommendation for Professionally Applied Topical Fluoride ADA, 2006



Age

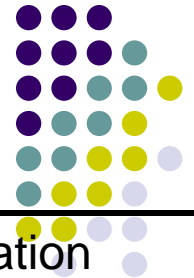
Risk Category	<6	6-18	18+
<b>Low</b>	None	None	None
<b>Moderate</b>	Varnish or Foam at 6 month intervals	Varnish or Gel at 6 month intervals	Varnish or Gel at 6 month intervals
<b>High</b>	Varnish or Foam at 3 or 6 month intervals	Varnish or Gel at 3 or 6 month intervals	Varnish or Gel at 3 or 6 month intervals

## Difference Between AAP and AAPD Policies

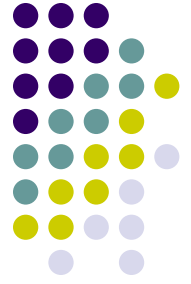


	Policy derived from AAP definition of a "medical home" (care should be comprehensive, continuously accessible, family-centered, coordinated, compassionate and culturally effective, consistent with the 5 As of Public Health: affordable, accessible, available, accountable, and culturally appropriate)	Dental home by 12 months	Acute and preventive services according to a periodicity schedule	Comprehensive assessment for oral diseases and conditions	Individualized preventive dental health program based on caries-risk assessment and periodontal risk assessment
AAP	X	X	X		X
AAPD	X	X	X	X	X

## Difference Between AAP and AAPD Policies

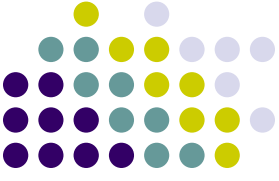


	Anticipatory guidance (growth and development issues)	Plan for acute dental trauma	Information about teeth and gingivae	Nutrition / dietary counseling	Referrals to dental specialists as needed	Education regarding future referrals to a dentist who is knowledgeable and comfortable with adult oral health issues
AAP	X	X	X	X	X	
AAPD	X	X	X	X	X	X



# Oral Screening

- Identify abnormalities and refer children with suspicious findings (false positives are OK)
- Try to establish a working relationship with community dentists: prevention (Medicine); restorations (Dentistry)
- No different from other screenings done as part of well-child care
- Oral health screening/risk assessment checklist (handout)
- Risk assessment questions can guide caregiver education



## Normal Oral Structures



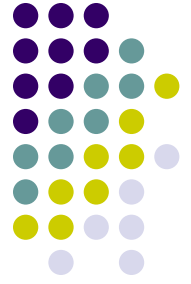
# Lift the Upper Lip

- Look for presence of plaque on maxillary central and lateral incisors

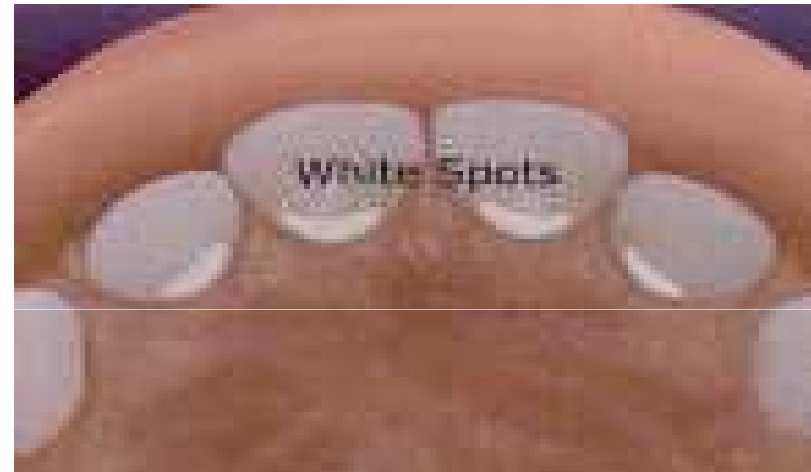
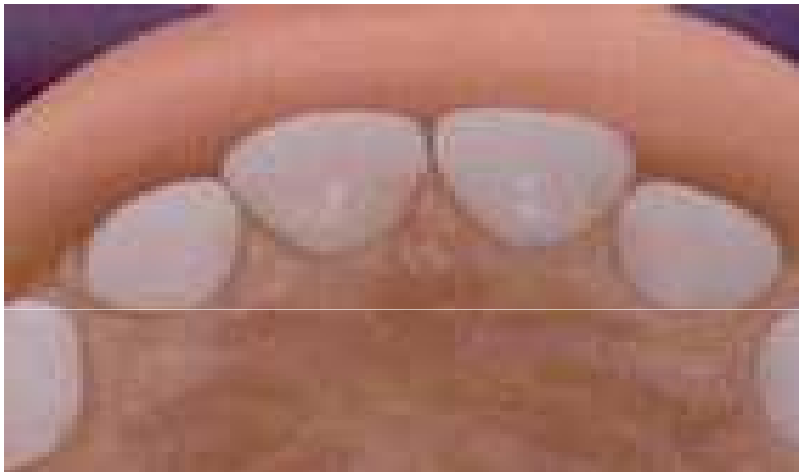


- Run gloved fingernail along gum line of child's incisors (plaque OR white spot)

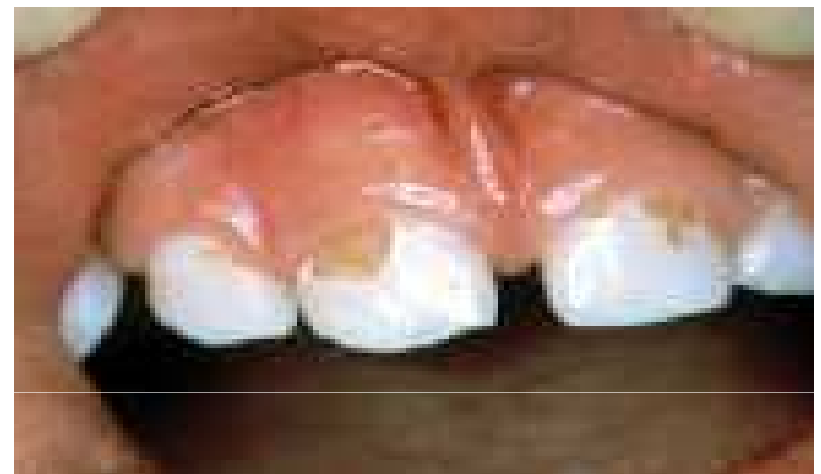
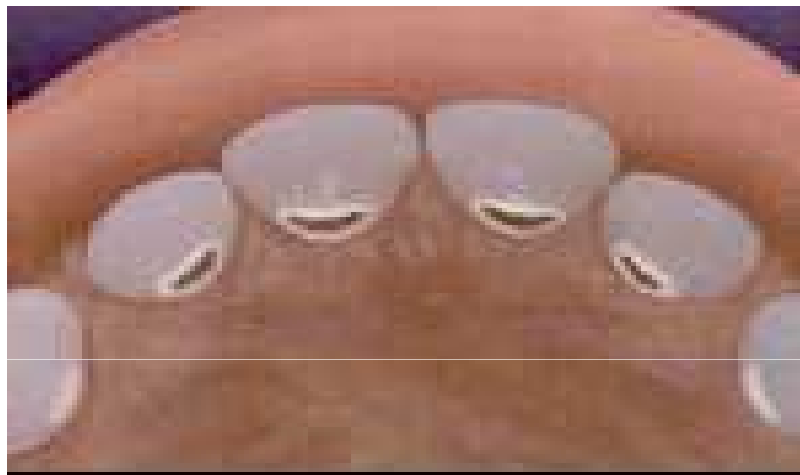




- White spots (first visual evidence of demineralization) where tooth meets gums of maxillary central and lateral incisors (buccal and lingual aspects)

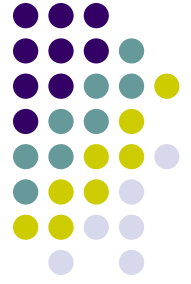


# Brown Spots - Advancing decay process

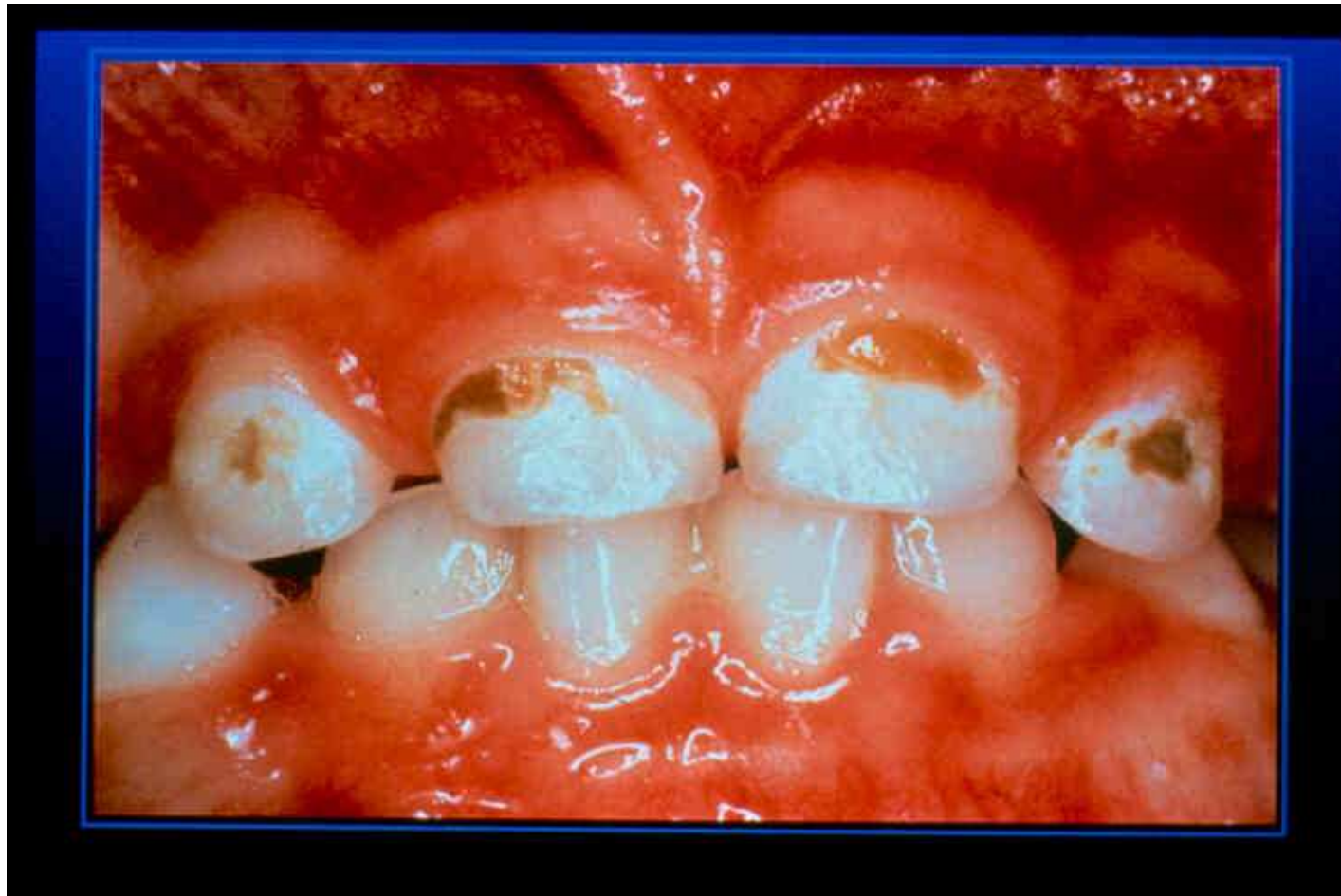
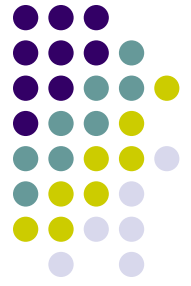


# Check for Advanced/Severe Decay

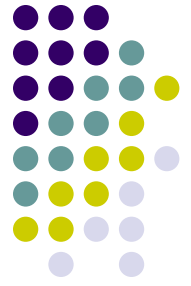
(continuous dissolution of the outer enamel surface)



# Decay process advances



# Decay process advances



# Facts about Fluoride Varnish

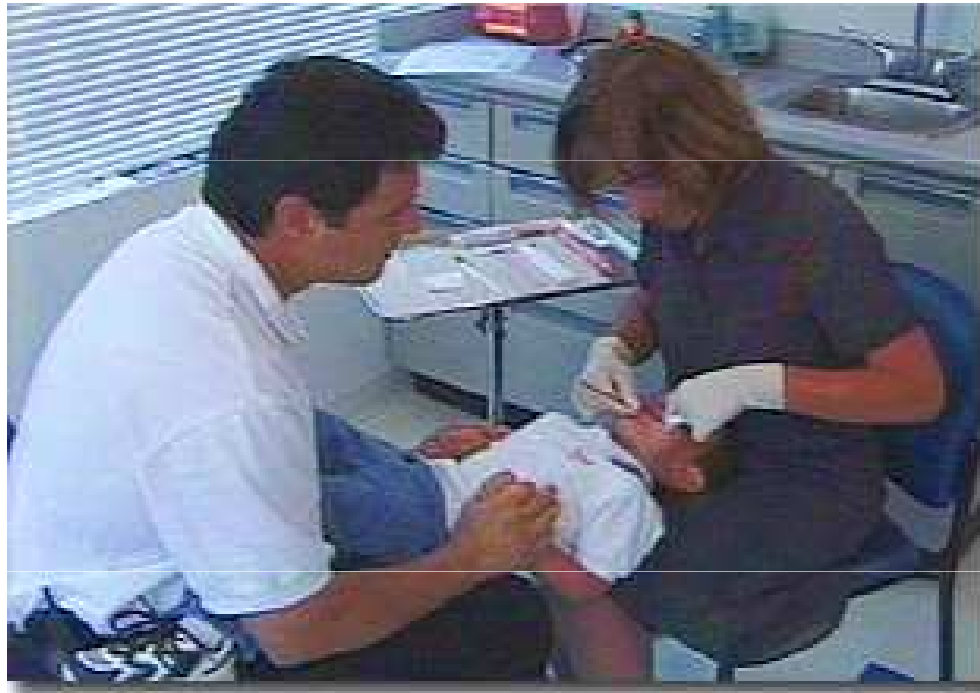


- Easy to apply protective coating that is painted on the surfaces of teeth. It adheres to the enamel and slowly releases the fluoride in high concentration. Its presence prevents new cavities from forming and helps stop the caries process that may have started (white spots)
- Because it adheres, there is no concern that child will swallow the product (compare gel trays). Can be used on babies' teeth. Protective effect will continue to work for several months
- Fluoride varnish will have a yellow color to it when it sets up (Vanish Varnish (3M Omni) is white)
- Parent can be involved by assisting in holding the child in the knee-to-knee position
- Children may cry because they do not like to be held down and to have foreign objects in their mouth (however, makes application easier) (but easier to varnish than if child is clenching teeth)
- To prevent being bitten, tongue blades taped together
- Used “off label” but so is aspirin and most drugs given to children



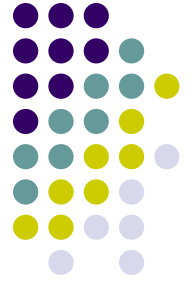
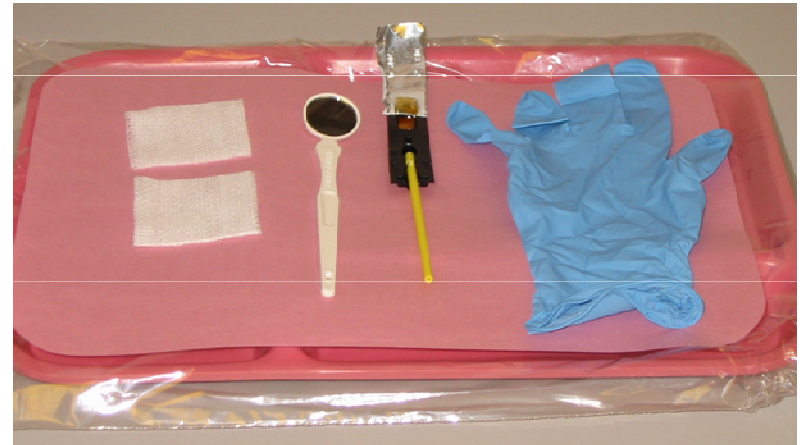
# How to Position the Child

Place the child in knee-to-knee position or whatever works best



# Supplies

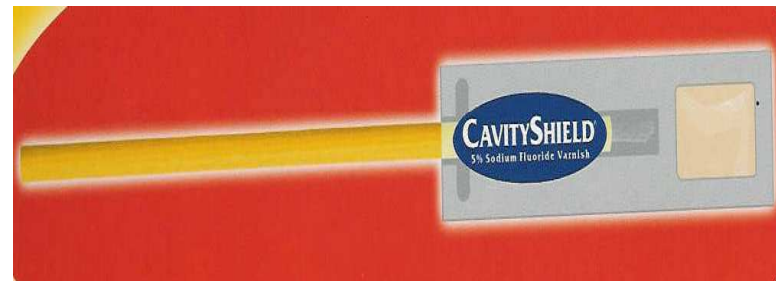
- Microbrush applicators
- 2 x 2 gauze squares
- Gloves
- Disposable mirror (not critical since all surfaces will be painted)
- Direct light source
- Toothbrush (optional)





# Supplies

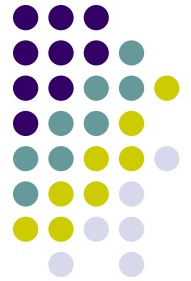
- Forms
  - Multiply dose tube
  - Unit dose
- Brands
  - Duraphat—10 ml tube (\$26.00/tube)
  - Duraflor – \$32.00/16 unit doses
  - Omni – unit dose (ecru; white) – (ecru \$155.00/200 unit doses; white (Vanish Varnish) - \$495.00/300 (unit doses)



## Sources:

- Colgate Pharmaceuticals Inc. 1-800-225-3756
- Sullivan-Schein Dental 1-800-372-4346
- Omni Pharmaceutical 1-800-445-3386

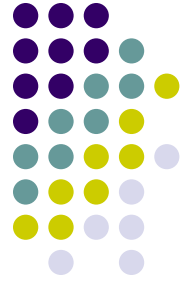
# Applying Fluoride Varnish



- Step One: Drop of varnish in small dish or on gloved hand (multidose tube) or from unit dose container



# Applying Fluoride Varnish

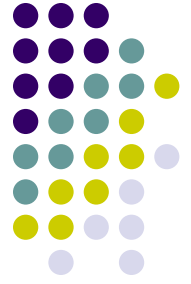


- Use gentle downward finger pressure against the labial sulcus on lower incisors to open the child's mouth

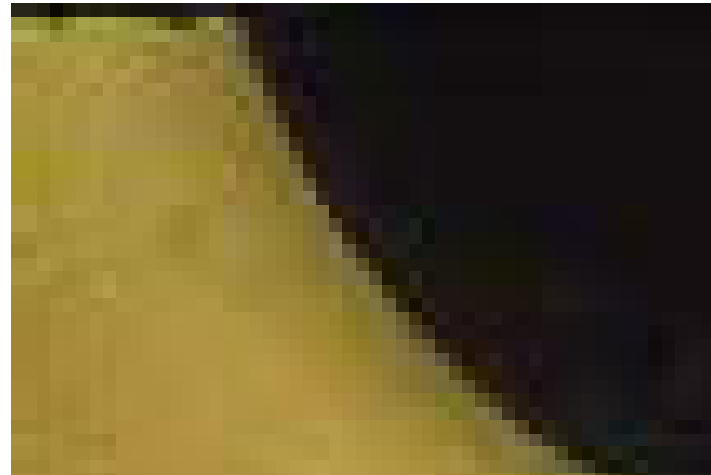


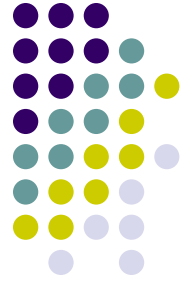
- If child has a lot of plaque present, brush or wipe with gauze

# Applying Fluoride Varnish



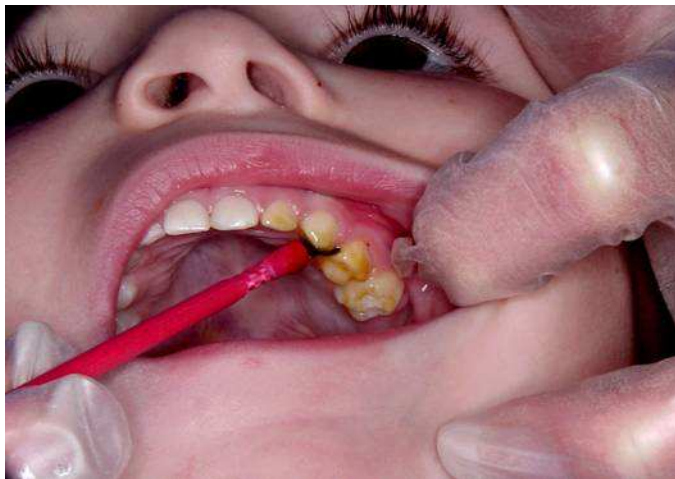
- Step Two: Dry quadrant of teeth with gauze square





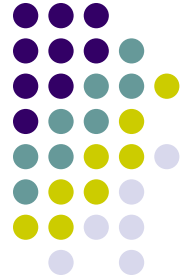
# Applying Fluoride Varnish

- Step Three: Apply a thin layer of varnish to all tooth surfaces in dried quadrant. Do not wipe again.



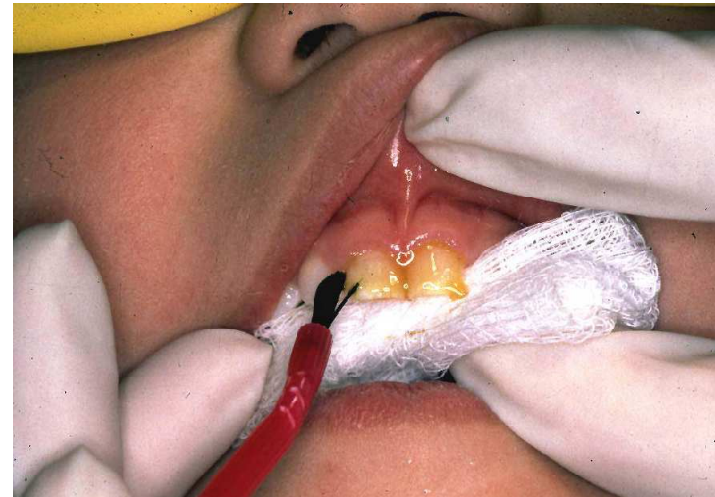
Repeat procedure until all quadrants have been varnished

# Applying Fluoride Varnish



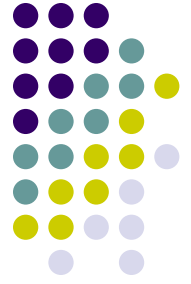
- Once the varnish is applied:

- It sets quickly



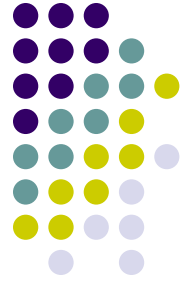
- You need NOT worry about moisture contamination

# Post Application Information/Instructions



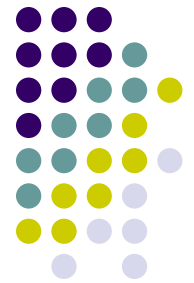
- The applied fluoride varnish will leave a discoloration of teeth (Vanish Varnish is white); it will gradually disappear over several days
- The child may drink immediately after the application but should not eat for 2 hours after the application (soft diet only for the day)
- Do NOT brush the child's teeth until the next morning
- Have varnish applied based on risk assessment at 3-6 month intervals

# Product Safety



- Following application of varnish on the teeth of four children ages 4, 5, 12, and 14, peak plasma fluoride concentrations of 3.2-6.3 micromoles were found within two hours after application.
- These levels were comparable with those found after brushing with a fluoridated toothpaste or after ingesting a 1 mg fluoride tablet and were considerably lower than from use of fluoridated gels.

# How to Bill State-Supported Health Care Programs for the Procedure



- In Minnesota, billing for the procedure has only been arranged for Medicaid and MN-Care patients for whom dental care is a covered service.
  - Commercial insurance coverage is usually determined by the employer
- Minnesota has approved the use of the dental CDT code (D-1206) on the medical CMS-1500 (formerly HCFA- 1500) claim for the application of fluoride varnish. Some payors may require ICD-9 code V07.31 (prophylactic fluoride administration) to be used in conjunction with D-1206.

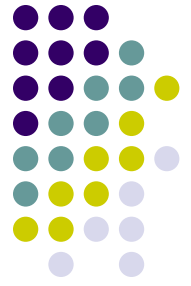


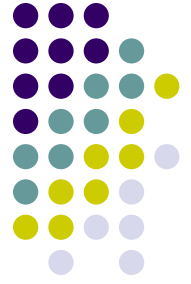
## Places of Service (Minnesota)

- 03 = School
- 04 = Homeless Shelter
- 11 = Office
- 12 = Home
- 20 = Urgent Care Facility
- 22 = Outpatient Hospital
- 31 = Skilled Nursing Facility
- 32 = Nursing Facility
- 33 = Custodial Care Facility
- 54 = Intermediate Care Facility/Mentally Retarded (ICFMR)
- 60 = Mass Immunization Center (e.g. mall or pharmacy)
- 71 = Public Health Clinic
- 72 = Rural Public Health Clinic

# Provider Types (Minnesota)

- 01 = Hospital
- 09 = School District
- 16 = Child and Teen Checkup Clinic
- 20 = Physician
- 22 = Ambulatory Surgery Center
- 30 = Dentist
- 31 = Dental Hygienist
- 51 = Indian Health Facility Provider
- 52 = Federally Qualified Health Center
- 53 = Rural Health Clinic
- 56 = Dental Lab
- 57 = Public Health Clinic
- 58 = Community Health Clinic
- 61 = Public Health Nursing Organization
- 65 = Nurse Practitioner
- 68 = Clinical Nurse Specialist
- 69 = Physician Assistant
- 73 = WIC Clinics
- 74 = Early Head Start and Head Start programs



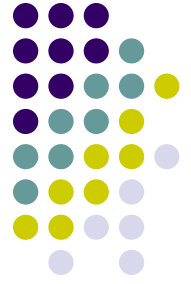


# The Minnesota Experience – Important Moments

## History

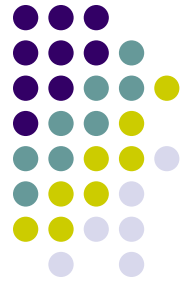
- 1997 – Necessity is the mother of invention.  
FQHC – dental care as part of well-child care visit
- 2000 – Surgeon General’s conference and Dr. Olson Huff’s challenge
- 2001 – Department of Human Services/Health Plans (MN managed care) agree to pay - budget neutral
  - Gained AAP, AAFM, AAPA support
  - Poll of MN’s AAP membership for interest in receiving PCPI training - yes
- 2002 – American Dental Trade Association – grant to design website, produce Atlas of Common Dental Pathology and print material

# The Minnesota Experience



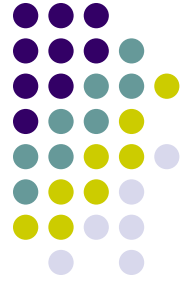
- 2003 - All materials reviewed by 8 dentists (academia, IHS, DHHS, private practice)
- 2006 - 2007 – Education of Public Health Nurses (87 counties) and medical clinic providers
- 2008 Plan: Work with medical clinics (Pediatrics and Family Medicine) from large urban, second-tier urban and rural counties to help them identify and overcome barriers so they become “poster clinics” (NCOHF funding)

# The Minnesota Experience – Expectations



- Who
  - Need for medical oversight if duties assigned to LPN, CMA, volunteer (all of whom need to be trained in infection control and HIPAA)
  - Department of Human Services' requirement: take U of M training (<http://www.meded.umn.edu/apps/pediatrics/FluorideVarnish/index.cfm>) and show proof (critique of course will generate report that will serve as proof) (MN,ND, TX)

# Continuing Medical Education Credit and Course Evaluation



**Course:**Dental Health Screening and Fluoride Varnish Application

**First Name:**

**Last Name:**

**Address1:**

**Address2:**

**City:**

**State:**

**Zip:**

**Are you a physician? Yes No**

**NPI:** \_\_\_\_\_

Please answer the following questions:

4-Extremely Well; 3-Reasonably Well; 2-Adequately; 1-Poorly

1. How well did this training fulfill the stated objectives: 1 2 3 4

Cite the basics of common dental pathology: 1 2 3 4

Understand strategies for prevention of tooth decay: 1 2 3 4

Provide anticipatory guidance to caregivers: 1 2 3 4

Perform a dental health screening: 1 2 3 4

Perform a "Lift the Lip" examination: 1 2 3 4

Perform a fluoride varnish application procedure: 1 2 3 4

Accurately bill medical providers for the fluoride varnish procedure: 1 2 3 4

2. Was the training free of commercial bias? 1 2 3 4

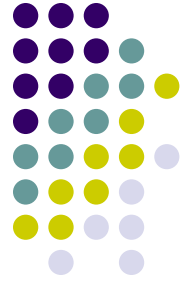
3. How current was the information presented? 1 2 3 4

4. Please rate the clinical applicability of the information presented.

5. Please rate the effectiveness of the online presentation of the material

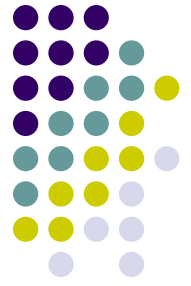
Please describe what changes you will make in your clinical practice as a result of having taken the training:\_\_\_\_\_

# The Minnesota Experience



- Where
  - Medical Offices (MD, NP, PA)
  - Child and Teen Checkups (Early Periodic Screening, Diagnosis and Treatment) clinics – PHN
  - Homes – PHN
  - WIC programs – PHN/WIC staff
  - EHS/HS programs – PHN/program staff

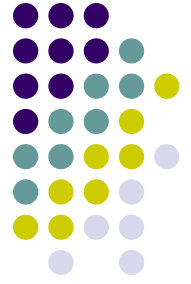
# Primary Caries Prevention Intervention (PCPI) – Clinic Integration Project



- 1) Funding – UCare, Medica Foundation, Delta Dental, National Children’s Oral Health Foundation
- 2) Goal- identify, with assistance from Health Plans, hospital networks, community networks (e.g., Partners in Pediatrics), 40-50 clinics (large urban, second-tier urban, rural, with special focus on seven county metro area since 3M is located in St. Paul).
- 3) Requirement - each clinic should have 40 percent or more Medicaid/MnCare (MN’s version of SCHIP) - covered children enrolled.
- 4) Focus - primarily 0-6 year olds but 0-20 since MN will cover 0-20.
- 5) Clinic type – Private Group Practice, Community Clinic, FQHC, Health Care Systems, Insurance Companies (HealthPartners; BCBSM)

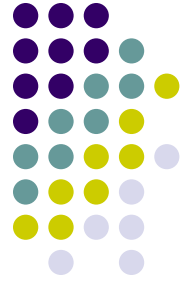


- 6) Provider Type – MD (Peds/FM), NP (Peds/FM), PA
- 7) Delegation: CMA, LPN, Volunteer
- 8) Approach
  - a) engage at least one medical provider (usually medical director) and one administrative person for 1st conference call
  - b) during that call, identify perceived barriers to integration of PCPI
  - c) subsequent call, discuss solutions to overcoming barriers and their implementation of solutions
  - d) provide “starter kit” – 100 doses FV (donated) with applicator brush, Atlas of Common Dental Pathology, print material to educate providers, caregivers, and ancillary clinic staff about caries etiology and prevention, risk assessment tool, link to website (film clips of a lift-the-lip examination and application of fluoride varnish)
  - e) show data collection tool to clinic administrators to confirm that clinics will be able to provide data when requested
  - f) periodic conference calls to check on progress
  - g) analyze data
  - h) prepare report for nationwide distribution



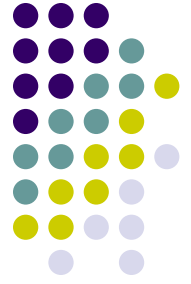
# Long Term Goals

- Involvement of medical providers will lead to referrals and increased participation of dentists
- Involve OB
- Determine how better to motivate medical providers, i.e., drink the water
- Color all states blue



# But Other Issues

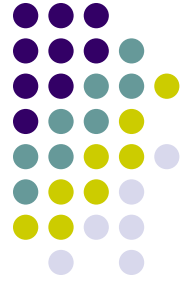
- Near term, at least, dentists unwillingness to see the poor will continue
- Physicians: “Dentist’s responsibility”
- Physicians’ inertia
- Another Deamonte Driver?
- General dentist’s fear of 1-2 year olds and who should train them?



# Without Action . . .

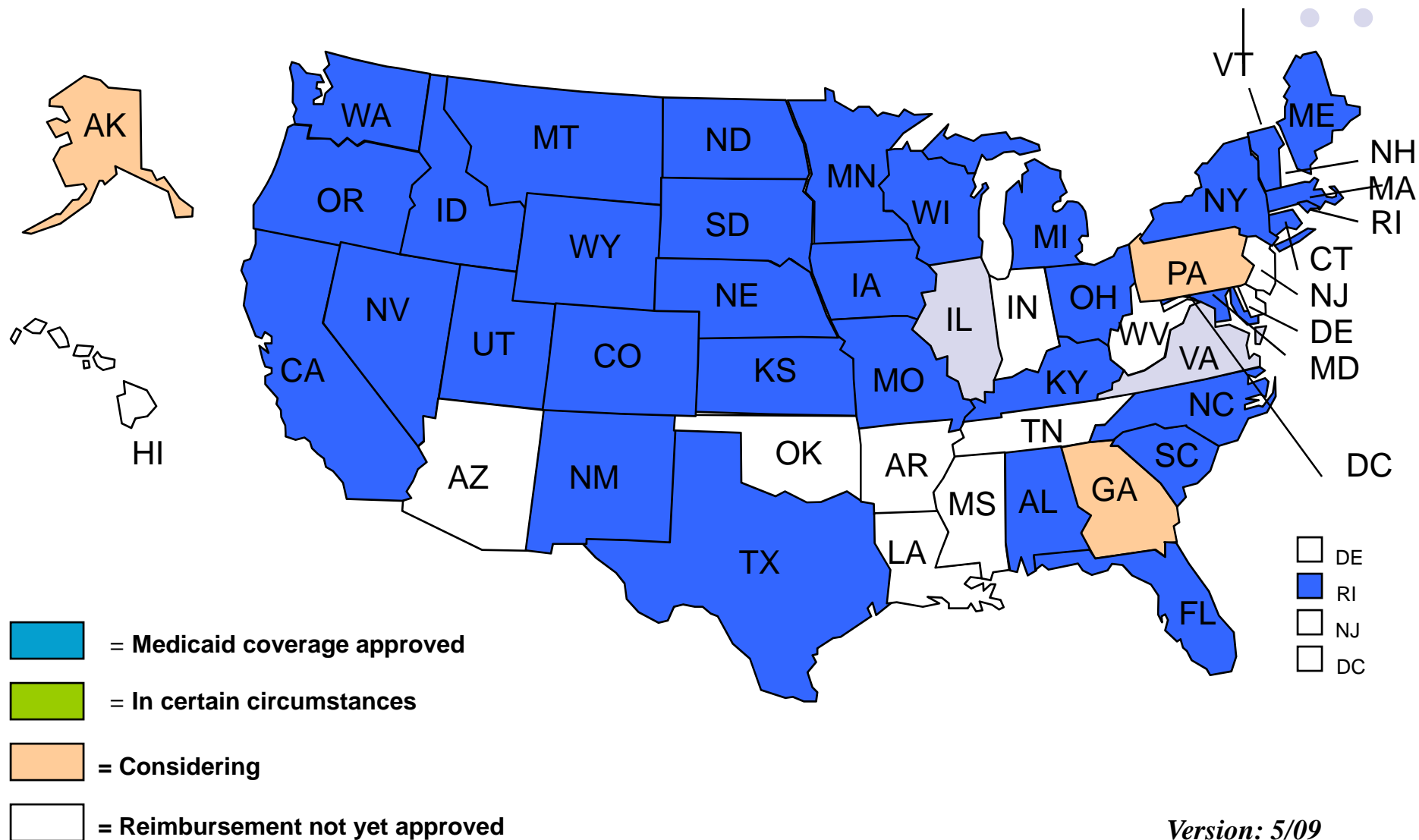
- More hours of school and work time lost
- \$400 - \$500 ER visits that treat only pain and infection
- Costly restorative procedures done on young children in ambulatory surgery
  - In Minnesota, average cost for hospital ambulatory surgery suite, anesthesiologists' group and dentists for 121 cases were determined, average cost: **\$12,000**
- Real, though slight, risk of an anesthetic death

# My Call to Action

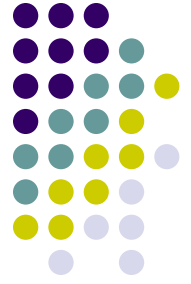


- 1) Get the remaining 15 states and DC which are currently not reimbursing to do so (avoid high-cost procedures and risk of anesthetic death and ER visits for incomplete care)
- 2) Tools exist but so does provider inertia (25% participation)
- 3) Analogy- get all trained providers to “drink the water” i.e. eliminate inertia
- 4) Consider:
  - a) How to motivate trained medical providers
  - b) NCQA – Vegas odds
  - c) State Law – MN Experience

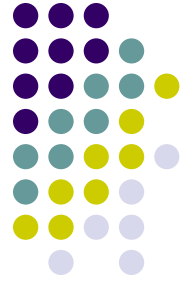
# STATES with MEDICAID Funding for Physician Oral Health Screening and Fluoride Varnish



Version: 5/09

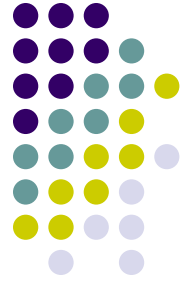


- 5) Involve OB (ideal early education)
  - 6) Teach Internists to consider the oral health of their patients (especially those of low economic status) (e.g. diabetes)
  - 7) Train PHNs
  - 8) Use multiple venues to educate caregivers (irrespective of SES or education). By itself, fluoride varnish has limited efficacy.
  - 9) Involve AAP, AAFP, ACOG, AAIM
  - 10) Find ways to create better collaboration between dentists and physicians
- Ideal result:** healthy child → healthy adults → healthy seniors



What information does NH's Medicaid program need to decide that the best interests of high-risk children will be best served if PCPI is begun?

- fewer visits to emergency rooms (\$400-\$500; incomplete care)
- less need for restorative care of young children in ambulatory surgery at the risk of an anesthetic death (small but real) and at a charge of \$10,000 - \$12,000 depending on city - rural vs. urban.



- Questions

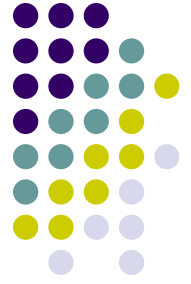
- Who should get paid for doing the task?
- How much should the reimbursement be?
- Should reimbursement be in addition to EPSDT fee
- Number of times per year varnish may be applied?
- Age range of those on whom varnish is applied?
- Required training of those who will do the application?
- Extent to which the tasks of risk assessment, anticipatory guidance, and varnish application can be delegated?

# 50 State Survey

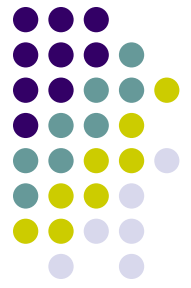


State Name	Current Reimbursed Providers \$/Service(s)	Procedure Code(s)	Age Limit	# Varnishes Reimbursed Annually	Training Required ?	Delegation Allowed *	If no, plan/time line/barrier(s)	Payors (DHS; MCOs)
Alabama	MD, NP \$18.00(OE/AG) \$15.00 (FV)	D-0145 D-1206	6-36 mos. (moderate high risk)	3/yr; between 6-35 months	Yes (RA, AG, DH & FV)	LPN RN	Start 1/09	Single
Arizona	None		≤ 3 yrs.				Approved pending funding.	
Arkansas	None						No	
California	MD, NP FFS-\$18.00 MCO-variable FV	D-1203	<6 yrs.	3	No, but encourag ed	CMA LPN RN		Multiple
Colorado	Dental and Medical \$15.37 (FV) \$29.20 (OE) \$20.49 (OE)	D1206 D0145 D0120	Under 5	4	Yes for medical	limited	As of July 1, 2009	Medicaid fiscal agent-Fee for service

# Plea



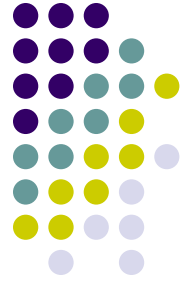
If your practice is in one of the states which is currently not reimbursing primary care medical providers, I hope you will urge your Medicaid program to promote PCPI by reimbursing primary care medical providers



## Hawkins v. Commissioner of N.H. DHHS Consent Decree (pg.7) VII-Dental Screening, Diagnosis and Treatment

- The Department shall arrange for provision of dental screenings using a periodicity schedule of every six months beginning at three years of age. The Department shall use its effort to ensure that a *Class Member*, age three or older, who contacts the Department's Medicaid Client Services Unit to request a dental screening, receives a dental screening from a provider within ninety (90) days of the initial request for such service.
- **Prior to age three**, oral health screening shall occur in the context of a well-child visit. The Department shall use its best efforts to provide primary care providers with the education and training they need – and to encourage them to take the actions necessary – for the delivery of appropriate oral health screenings to Class Members under the age of three including but not limited to information about the prevention of transmission of caries causing bacteria from parent to child, prevention of early childhood caries, fluoride supplementation, oral hygiene practices tailored to young children, diet and nutrition, and when and how to refer *Class Members* under age three for a dental screening.

# Acknowledgement



- DTAF
- Santa Fe Group
- Ruben-Bentson Chair in Pediatric Community Health
- Delta Dental
- Medica Foundation
- UCARE Minnesota
- National Children's Oral Health Foundation



“Knowing is not enough, we must apply.  
Willing is not enough, we must do.”  
- Johann Wolfgang von Goethe