



The Search for Successful Strategies to Improve Oral Health

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National Conference of State Legislatures

April 20, 2007

CHCS Center for
Health Care Strategies, Inc.



Rationale for Renewed Focus on Oral Health

- Surgeon General's Report "Oral Health in America" (2000) and "Call to Action" (2002)
 - Importance of oral health--general health relationships across the lifespan
 - Significant oral health disparities
 - Need to change perception of oral health and dental care
 - It's about more than 'just teeth' & cosmetics
 - Concept of medically necessary dental services
 - Establish partnerships & networks
 - Build programs based on current science base



Major Issues

- Program Administration / Finance

- Under-financing / low reimbursement rates
- ‘Silos’ between public health & public benefits programs and between public and private sectors
- Lack of consumer awareness of significance of oral health and disparities

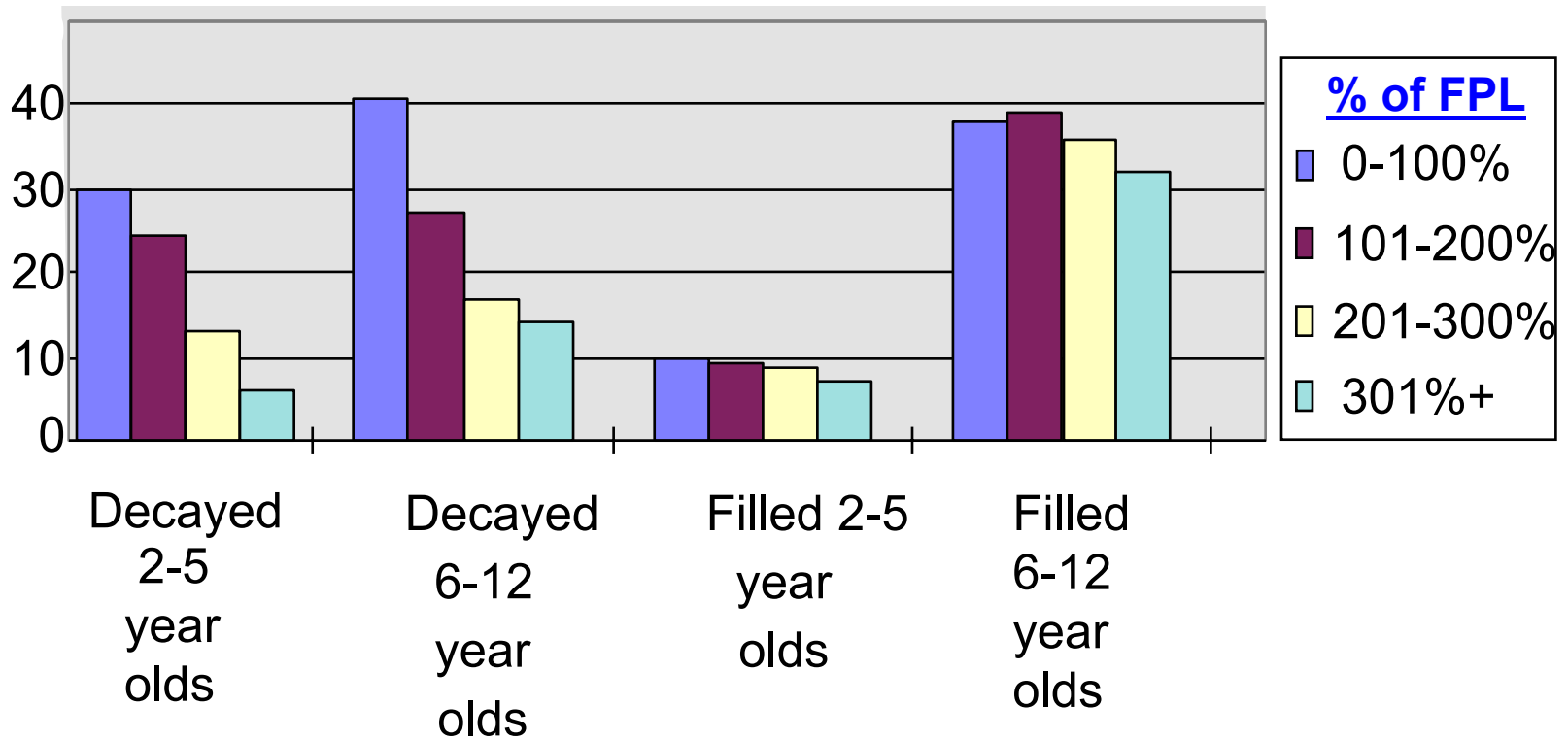
- Workforce

- Supply and distribution of dentists
- Scope of practice and supervision issues
- Coordination among medical and dental providers
- Increase overall workforce diversity, capacity and flexibility

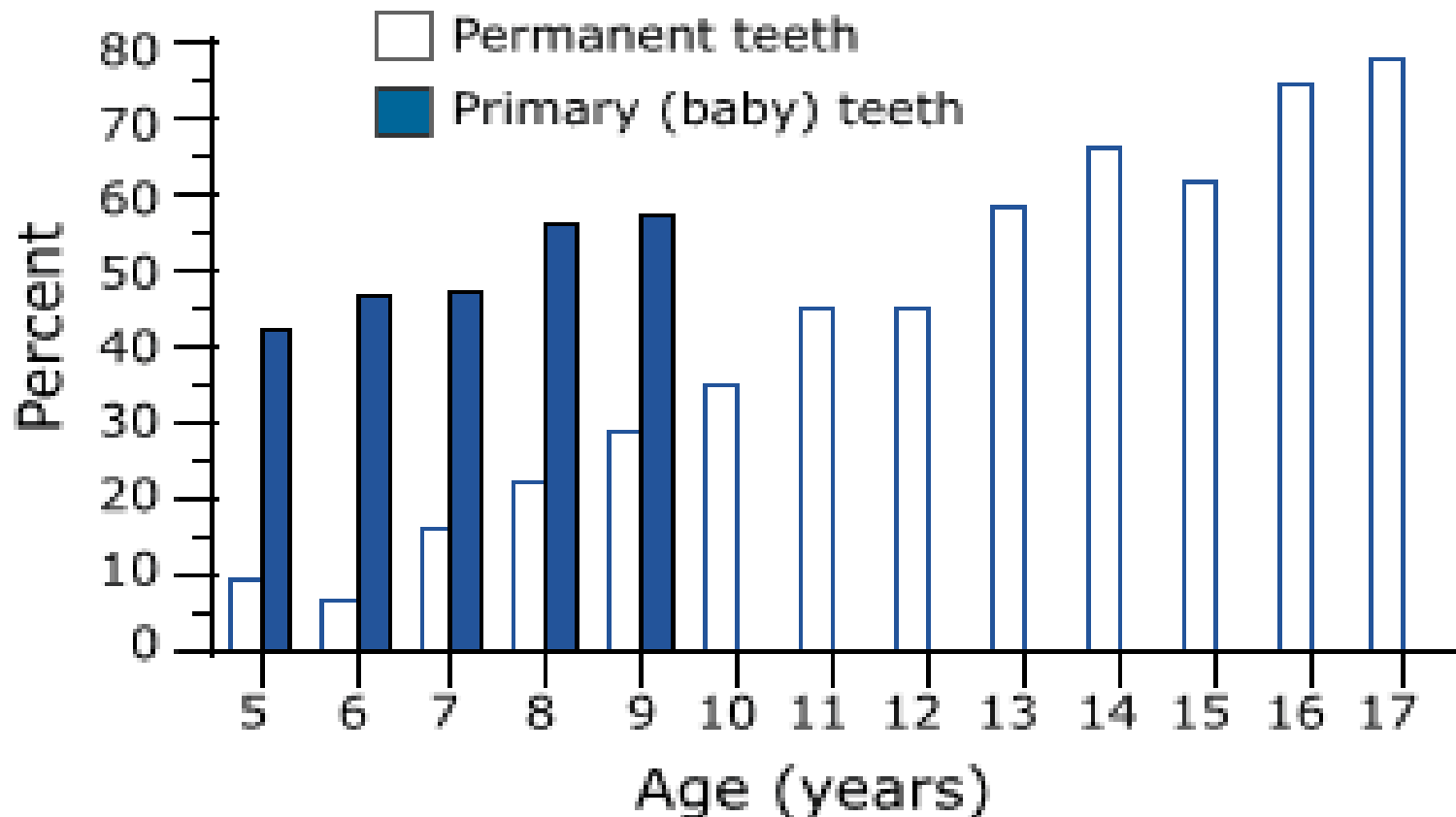


- 75%-80% of dental caries in ~25% of US kids
- Disease levels higher in Medicaid/SCHIP kids

% of Children with Decayed & Filled Primary Teeth by Income (% of FPL)



Childhood Tooth Decay: A Complex, Chronic, Progressive Disease



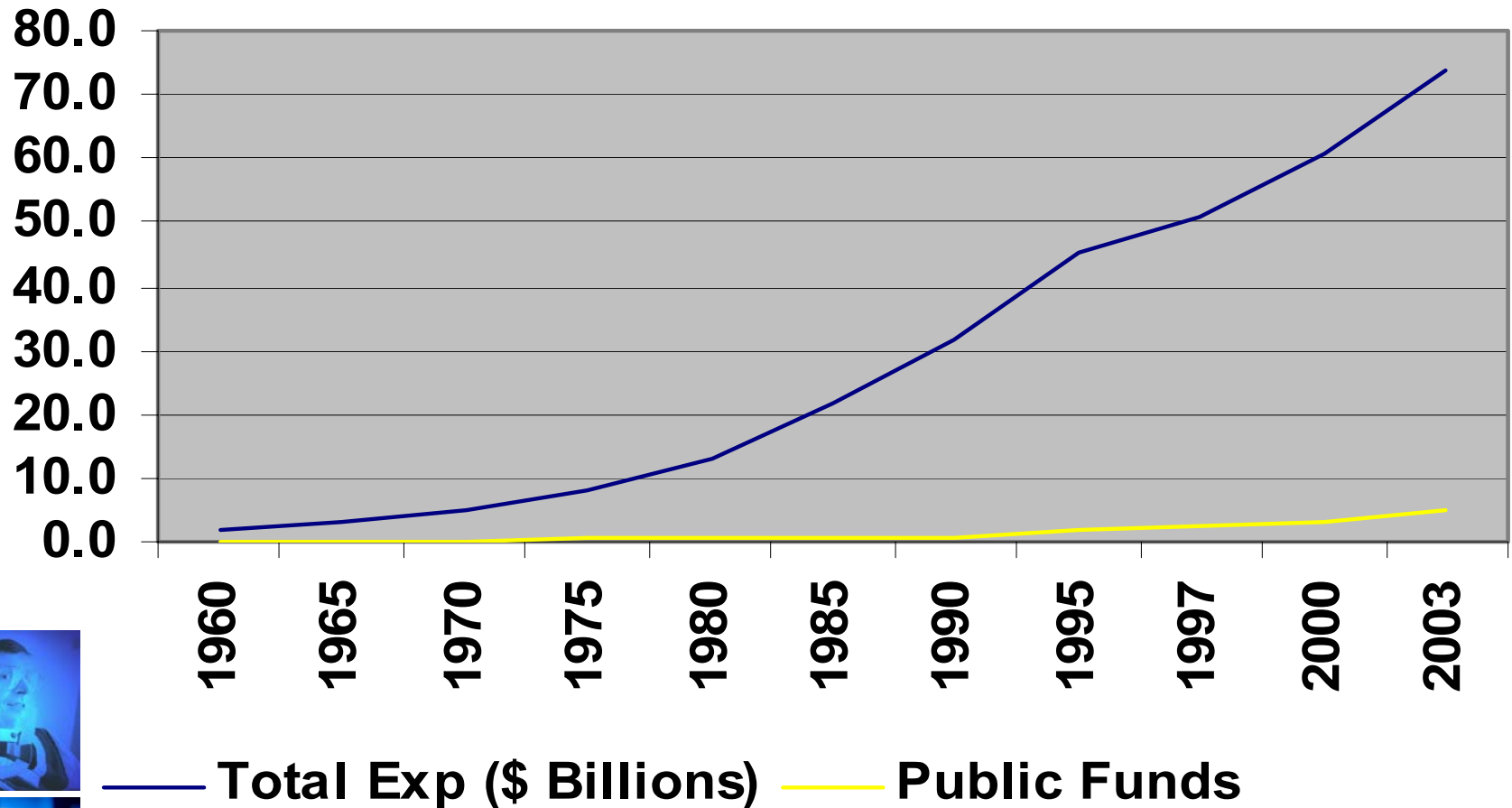
Source: National Center for Health Statistics, CDC. Third National Health and Nutrition Examination Survey, 1988-1994

Medicaid Dental Programs

- Federal-State programs
 - Program administration and financing decisions largely made at the state level
- ~ 24 million children covered by Medicaid
 - Roughly 1/3 of all U.S. children
 - EPSDT benefit for children includes relatively comprehensive coverage for dental services
- (Generally fewer) adult benefits vary by state
- Program administration → Purchaser



U.S. Dental Care Financing Trends: Total and Public Funding (\$ Billions)



Medicaid Fee Comparisons

Procedure Code	Procedure Description	UX 2004 Medicaid Rates	UX Dentists 50th %-ile Fees (2003)	UX Dentists 75th %-ile Fees (2003)	UX Medicaid Rates %-iles
Diagnostic					
D0120	Periodic Oral Exam	\$ 12.08	\$ 25.00	\$ 28.00	<1st
D0150	Initial/Comprehensive Oral Exam	\$ 18.33	\$ 36.00	\$ 40.00	<1st
D0210	Complete X-rays, with Bitewings	\$ 40.83	\$ 65.00	\$ 81.00	26th
D0272	Bitewing X-rays – 2 Films	\$ 12.08	\$ 25.00	\$ 26.00	<1st
D0330	Panoramic X-ray Film	\$ 33.33	\$ 60.00	\$ 65.00	<1st
Preventive					
D1120	Prophylaxis (cleaning)-Child	\$ 20.83	\$ 36.00	\$ 39.00	<1st
D1203	Topical Fluoride (excluding prophylaxis).	\$ 0.00	\$ 18.00	\$ 21.00	<1st
D1351	Dental Sealant	\$ 13.33	\$ 25.00	\$ 29.00	<1st
Restorative					
D2150	Amalgam, 2 surfaces, permanent tooth	\$ 37.50	\$ 76.00	\$ 84.00	<1st
D2331	Resin , 2 surfaces, anterior tooth	\$ 36.67	\$ 95.00	\$ 105.00	<1st
D2751	Crown, porcelain fused to base metal	\$ 200.00	\$		<1st*
D2930	Prefabricated Steel Crown, primary tooth	\$ 64.17	\$ 140.00	\$ 160.00	<1st
Endodontics					
D3220	Removal of tooth pulp	\$ 20.00	\$ 85.00	\$ 104.00	<1st
D3310	Anterior Endodontic Therapy	\$ 116.67	\$ 375.00	\$ 398.00	<1st
Oral Surgery					
D7110	Extraction, single tooth	\$ 37.50	\$ 69.00	\$ 82.00	1st

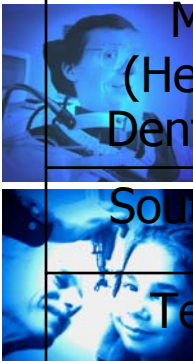
Financing Considerations: Bottom Line

- Most states' Medicaid payment rates are substantially below market rates
- Results of 3 actuarial analyses:
 - \$14-\$20 PMPM for services
 - \$17-\$25 PMPM for premiums
- Programs that don't start with adequate funding cannot succeed in meeting program requirements or the needs of children



Recent Medicaid Financing Innovations

STATE	Adjustments Made to Medicaid Rates (Market-based Benchmarks)	Changes in Dentists' Participation in Medicaid Following Rate Increases	Intervals (mos.) Between Rate Increases and Changes in Provider Participation
Alabama	100% of Blue Cross rates	+39%	24
Delaware	85% of each dentist's submitted charges	1 pvt. dentist to 108 (of 302 licensed dentists)	48
Georgia	75 th percentile of dentists' fees	+546% (to 1,674 of 4,000)	27
Indiana	75 th percentile of dentists' fees	+58%	54
Michigan (Healthy Kids Dental Program)	100% of Delta Dental Premier rates	+300%	12
South Carolina	75 th percentile of dentists' fees	+73%	36
Tennessee	75 th percentile of dentists' fees	+60%	4



MI Healthy Kids Dental Program Increase in Access: 1st 12 mos.

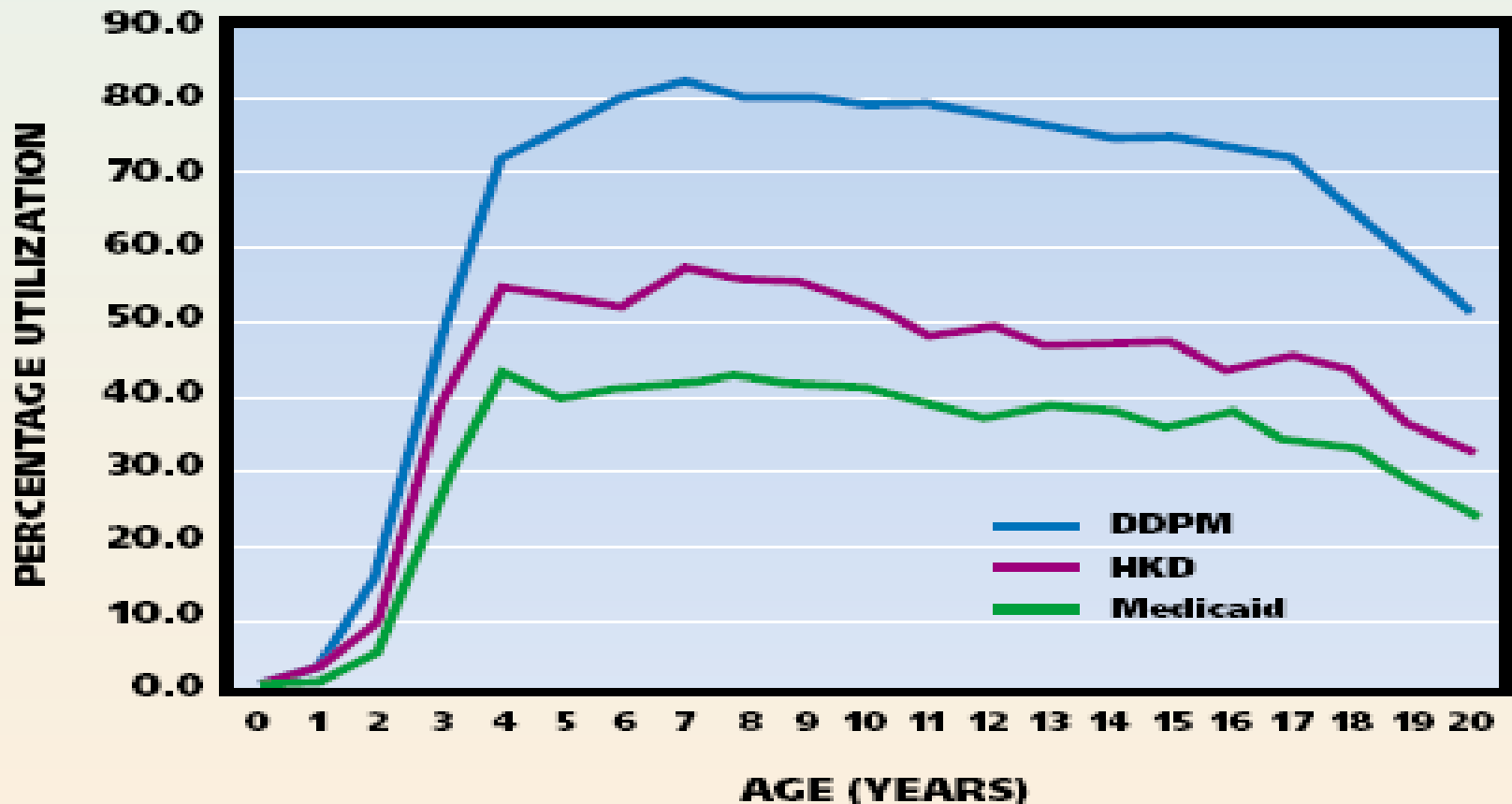


Figure. Utilization in 12 months by continuously enrolled children in 22 Michigan counties. DDPM: Delta Dental Plan of Michigan. HKD: Healthy Kids Dental demonstration program of Michigan Medicaid.

Too much of a good thing???

Switch to PPO rates: “66%-89% higher than traditional Medicaid”



November 01, 2005

Name
Address 1
Address 2
City State Zip

Dear Doctor:

More than 174,000 Michigan children are currently enrolled in the Healthy Kids Dental (HKD) and MICHild programs administered by Delta Dental. Because of the success of these programs, which includes the American Dental Association's selection of Healthy Kids Dental as a national model, the Michigan Department of Community Health (MDCH), Delta Dental, and the Michigan Dental Association (MDA) are committed to continuing these programs.

Enrollment in HKD has increased from 95,000 children in 2000 to over 150,000 today, and the percentage of beneficiaries who use their coverage has also increased. HKD and MICHild are enabling an underserved population to receive high-quality dental care; however, the enrollment and utilization increases are resulting in continually rising costs. These increases necessitate the following changes that will be effective January 1, 2006:

- **HKD AND MICHILD:** Reimbursement to all participating dentists for services rendered to enrollees of the HKD and MICHild programs will be based on Delta Dental's DeltaPreferred Option (DPO) fee schedule. Counties will no longer be designated as DeltaPremier-only or DeltaPreferred Option-only. Eligible enrollees will be able to receive treatment from any DeltaPremier dentist who agrees to accept the lesser of the dentist's submitted fee or the amount in the attached fee schedule. The dentist will not be able to balance bill the enrollee for the difference between the charges and the attached fee schedule. This schedule is, on average, 66 percent to 89 percent higher than traditional Medicaid reimbursement.
- **HKD ONLY:** The Healthy Kids Dental program is designed to deliver medically necessary treatment; consequently, the removal of asymptomatic third molars will no longer be a covered benefit.

DeltaPremier dentists may elect to opt out of only the Healthy Kids Dental and MICHild programs and continue to participate with all other DeltaPremier groups. To opt out, mail or fax a statement to Delta Dental declaring nonparticipation with only these two programs. Please include the doctor's name, tax identification number, license number, and office address. For all statements received after January 1, 2006, nonparticipating status for HKD and MICHild will be effective 30 days from the date Delta Dental receives the statement. Address your request to Provider Records, Delta Dental, P.O. Box 30416, Lansing, MI 48909-7916, or fax to (517) 706-3618. If you opt out of the programs, please inform the Healthy Kids Dental and MICHild enrollees who are in your practice that they will need to find a new dental provider.

Enclosed is an addendum to your current DeltaPremier contract allowing this special reimbursement for Healthy Kids Dental and MICHild enrollees and a fee schedule for covered services.

If you have questions, please contact Delta Dental's Customer Service department at (800) 462-7283.

Sincerely,

Paul Reinhart
Director, Medical Services Administration
Michigan Department of Community Health

Josef Kolling, D.D.S., M.S.
President
Michigan Dental Association

Thomas J. Heszlar, D.D.S., M.S.
President and CEO
Delta Dental Plan of Michigan

- Switch from Delta Premier to Delta PPO effective Jan., 2006
- Fee schedule 66%-89% higher than traditional Medicaid
- Providers can disenroll from Medicaid and still remain Delta Premier providers (for private beneficiaries)



RWJ Foundation Support

Robert Wood Johnson Foundation State Action for Oral Health Access (SAOHA) Program

Development and testing of innovative systematic approaches for improving access to oral health services for low-income, minority and disabled populations.



State Applicants and Awarded Grants

**Funded by The Robert Wood Johnson Foundation (RWJF):
December 1, 2002 to November 30, 2005**

36 States applied

6 States funded, each receiving up to \$1 Million:

- Arizona
- Oregon
- Pennsylvania
- Rhode Island
- South Carolina
- Vermont



Overall Goal and State Strategies

- **Overall Goal – Improve access to oral health services for low-income, minority and disabled populations**

PROPOSED STRATEGIES	AZ	OR	PA	RI	SC	VT
<i>Developing state financing and purchasing strategies</i>				X		X
<i>Broadening provider networks</i>	X	X	X	X	X	X
<i>Expanding the dental safety net</i>	X		X	X	X	X
<i>Enhancing consumer and provider education</i>	X	X			X	X



SAOHA State Strategies

- Arizona:

- Train general dentists to treat individuals with special needs
- Affiliated practice arrangements among dentists and hygienists
- Align MCO dental contracts with state public health goals

- Oregon:

- Focus on Early Childhood Caries
- Develop community-based system to provide dental homes for pregnant women and children (Klamath County model)
- Goal of cavity-free 2-year olds

- Pennsylvania:

- Expand special needs services to rural location;
- Special needs Hot line for location of dentists
- Increase training for expand duty dental assistants



SAOHA State Strategies

- Rhode Island:

- Performance-based Dental Benefit Manager for new program targeted to providing dental homes for young children
- Partnership with community foundations for expansions of safety-net and pediatric dentistry residency training programs
- Welfare to work dental assistant training program

- South Carolina:

- Develop medical practice linkages to dentists;
- Faith-based partnerships for consumer education
- Dental school partnership for dental and medical provider education

- Vermont:

- Partners with dentists to define economic modeling to increase MA capacity;
- School-based dental hygienists assess children with referral linkages to community dentists



Outcomes

- At a time when a report¹ from the Centers for Disease Control and Prevention (CDC) revealed a sharp increase in dental decay among the nation's poorest children:
 - All 6 States made progress;
 - 4 States significantly reduced the percent of children with teeth extracted before their 6th birthday;
 - 5 states significantly increased the percent of Medicaid and SCHIP children receiving dental care.

- ¹ Beltrán-Aguilar ED, et al. Surveillance for Dental Caries, Dental Sealants, Tooth Retention, Edentulism, and Enamel Fluorosis --United States, 1988--1994 and 1999--2002. National Center for Chronic Disease Prevention and Health Promotion. August 2005



Earlier Interventions → Lower Costs???

Savage MF, et al. Early Preventive Dental Visits: Effects on Subsequent Utilization and Costs. *Pediatrics* October, 2004.

Early Preventive Dental Visits: Effects on Subsequent Utilization and Costs

Madeline F. Savage, DDS, MS¹; Jessica T. Lee, DDS, MPH, PhD^{2,3}; Jonathan B. Keith, MD, MPH⁴; and William F. Vann, Jr., DMD, PhD⁵

ABSTRACT: **Objective:** To determine the effects of early preventive dental visits on subsequent utilization and costs of dental services among preschool-aged children.

Design: This investigation studied North Carolina children whose parents enrolled them in Medicaid from birth for a 3-year period. The primary endpoint was a large national oral health study that led to a 4-year follow-up denture dataset, including North Carolina comprehensive records from 1992. Medians of dental visits before 1 year, 1 to 2 years, 2 to 3 years, 3 to 4 years, and 4 to 5 years were compared. Outcomes included types of care and dentally related costs.

Results: Of the 20,004 Medicaid-enrolled children born in 1993, 9284 were available to be enrolled for 3 years, and another 10,920 became enrolled. Twenty-three percent had their first preventive dental visit before 1 year of age, 24% between 1 and 2 years, 20% between 2 and 3 years, 18% between 3 and 4 years, and 15% between 4 and 5 years. Children who had their first preventive dental visit by age 1 were more likely to have subsequent preventive visits but were not more likely to have subsequent restorative or emergency visits. Those who had their first preventive visit at all ages 1 to 5 were more likely to have emergency restorative, restorative, and emergency visits. The age at the first preventive dental visit had a significant positive effect on dentally related expenditures, with the average dentally related costs being less for children who received earlier preventive care. The average dentally related costs per child according to age at the first preventive visit were as follows: before age 1, \$283; age 1 to 2, \$299; age 2 to 3, \$285; age 3 to 4, \$415; age 4 to 5, \$416.

Conclusions: Our results should be interpreted cautiously, because of the potential for selection bias. However, we concluded that preschool-aged, Medicaid-enrolled children who had an early preventive dental visit were more likely to use subsequent preventive services and preventive services dentally related costs. In addition, children from racial/ethnic minority groups had significantly more difficulty in finding, access to dental care, or did those for overall restorative services. *Key words:* Medicaid; Pediatrics; 2004; 114 and 8-1220. DOI: 10.1199/peds.2003.114.8.1220

preventive dental visit, cost, first dental visit, Medicaid dental use.

KEY WORDS: ECC, early childhood caries, Medicaid, North Carolina, Medicaid, Medicaid enrollment, population-based study, costs of dental services.

Early childhood caries (ECC) is defined as dental decay among children <5 years of age.¹ It is estimated that 2% of children 12 to 23 months of age in the United States have at least 1 tooth with spontaneous decay, whereas 19% of children 24 to 60 months of age meet the criteria for ECC.²

ECC is much more prevalent among children from low-income families; for example, among children 3 to 5 years of age in Head Start, the prevalence of ECC has been reported to be as high as 80%.^{3,4} Uninsured rates in nonurban and disproportionately among children from the lowest family income levels, and the incidence decreases as income increases.⁵ Among children 3 to 5 years of age whose living situation is below the federal poverty level, almost 80% of their decayed primary teeth have not been restored.⁶ Dental care is the most prevalent unmet health care need of poor US children of all ages, with preschool-aged children being especially vulnerable.⁷

ECC has deleterious effects beyond the consequences of decayed teeth. Children with ECC are significantly more likely to weigh <80% of their ideal body weight and to experience failure to thrive.⁸ Tooth decay not only affects children's overall health, it has other ramifications, including children's loss of time from school and parents' loss of time from work. The low-hour disproportionately burden lower-income, minority, and uninsured children.⁹

Anticipatory guidance is the process of providing practical, developmentally appropriate information about children's health to prepare parents for significant physical, emotional, and psychologic milestones.¹⁰ It is well accepted among physicians that using anticipatory guidance during well-child medical visits is an effective tool for educating parents about how to ensure the best possible health for growing children. Recently the American Academy of Pediatrics adopted new recommendations regarding the inclusion of oral health in anticipatory guidance during well-child visits.¹¹ The recommendations specify that the first dental risk assessment should occur beginning at 6 months of age and that the establishment of a dental home should occur by 1

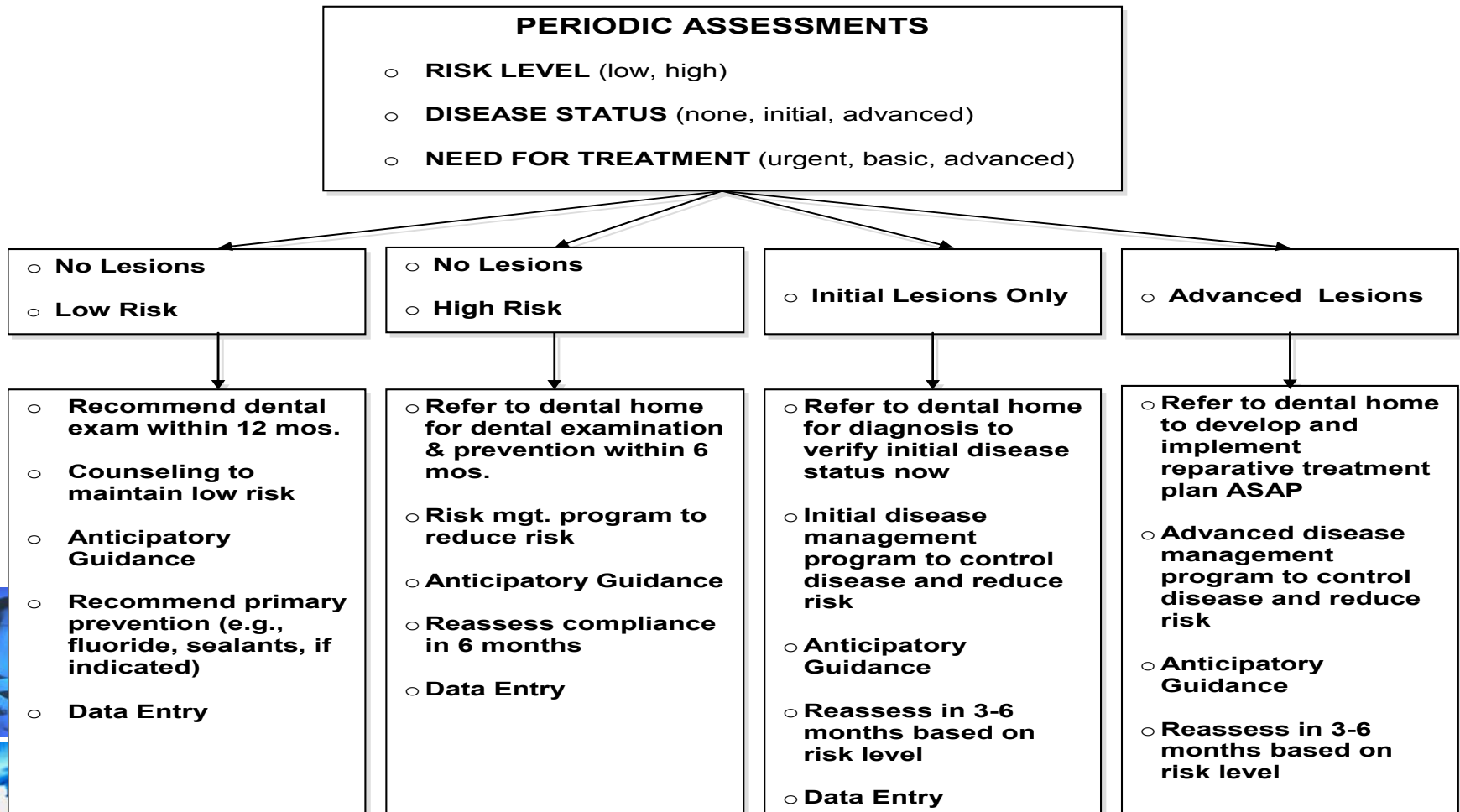
- “The age at the first preventive dental visit had a significant positive effect on dentally related expenditures.”

- **1st dental visit / Total cost:**
 - Before age 1 **\$262**
 - Age 1-2 **\$339**
 - Age 2-3 **\$449**
 - Age 3-4 **\$492**
 - Age 4-5 **\$546**

From ¹Charlotte, North Carolina oral Clinician and Clinician of Pediatric Dentistry, ²Blacksburg, Virginia, and ³Medical and Child Health, University of North Carolina at Chapel Hill, ⁴Chapel Hill, North Carolina, and ⁵Department of Pediatrics, University of North Carolina at Chapel Hill, ⁶Chapel Hill, North Carolina.

Responding to Changing Paradigms: Risk-based Interventions for a Chronic Disease

DIAGRAMATIC REPRESENTATION OF A MODEL SYSTEM



'Spill Over' Into Medical Sector Costs: The effects of a dental infection are wide-ranging and long-lasting....

A week or more of pain and sleeplessness, her parents' lost work days and productivity, her own missed schooling, a futile and expensive use of a hospital emergency room, and a life-long external scar are among the ripple effects of this preventable infection.



Consequences of Limited Oral Health Access

For want of a dentist

Maryland boy, 12, dies after bacteria from tooth spread to his brain



NBC VIDEO



A deadly toothache?

Feb. 28: A 12-year-old Maryland boy is dead after a dental infection spread to his brain. NBC's John Yang reports.

Nightly News

Linda Davidson / The Washington Post

Deamonte Driver, aged 12, is shown with his mother, Alyce, at Children's Hospital in Washington, D.C., after emergency brain surgery.

By Mary Otto

washingtonpost.com

Updated: 2:20 p.m. ET Feb. 28, 2007

WASHINGTON - Twelve-year-old Deamonte Driver died of a toothache Sunday.



Consequences of Dental Infections

March 2, 2007

6-year-old boy dies from abscess

The Associated Press

GULFPORT — A 6-year-old boy who collapsed on a Harrison County school bus Thursday died from an abscess where two teeth had been removed from his lower jaw, county coroner Gary Hargrove said.

Alexander “Alex” Callender, a kindergartner at Lizana Elementary, went into shock from the infection and his body shut down, Hargrove said after Friday’s autopsy.

Callender collapsed on the bus after leaving school Thursday.

Callender lived in a rural area near Pass Christian.

Grief counselors were available to speak with students at Lizana Elementary today.



Summary

- Medicaid/SCHIP children have 3-5x more disease [NHANES]
- Access to dental services for children covered by Medicaid has been a chronic problem [OIG, 1996; GAO, 2000] -- funding is not the only issue, but it IS a major issue
- Adult Medicaid benefits meager, but potentially important because of oral health-general health relationships
- Dental decay is highly preventable, but not simply or uniformly preventable [SGROH, 2000]
- EPSDT requires prevention AND (not instead of) treatment [Federal statutes, regulations and guidelines]
- Dental workforce is busy and declining relative to the population, but the population is increasing, especially groups at higher risk for dental disease [HRSA & Census Data]

