Reducing Early Childhood Tooth Decay: Approaches in Medicaid

Wednesday, May 27, 2015

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What State Policymakers and Staff Need to Know About Early Childhood Tooth Decay

May 27, 2015

Burton Edelstein, DDS, MPH
Columbia University Professor of Dentistry and Health Policy
Question 1 for Burt Edelstein

• What do state policy makers and Medicaid directors and managers need to know about early childhood caries (ECC)?
ECC Disease “Take-Homes”

• Early childhood caries (ECC) – tooth decay in children under age 6 is:
  ✓ Common
  ✓ Consequential
  ✓ Taxing on Medicaid & Delivery System

• Yet is:
  ✓ Overwhelmingly preventable and if not prevented, manageable and suppressible
  ✓ Amenable to changes in healthcare delivery & financing
ECC is Common

1-in-10 at age 2 years

1-in-5 at age 3 years

1-in-3 at age 4 years

1-in-2 at age 5 years
ECC Matters

- Death
- Avoidable ER use
- Pain, infection, dysfunction
- Social stigmatization
- Family disruption
- Excess Medicaid cost
Can ECC be prevented? Once ECC takes hold, can it be stopped?
Caries is a chronic disease process that leads to cavities. It is an \underline{imbalance} between destructive and protective oral forces.
Distinguishing Caries Process from Cavities?

Cavities are the holes in teeth that result from the underlying chronic caries process.
Treating the Caries Process

The Caries Process can be treated using tools borrowed from medical chronic disease management:

- Parent education
- Family engagement
- Adoption of beneficial behaviors
- Community & health system support

Wagner’s Chronic Disease Management Model
(Improving Chronic Care.org)
ECC Management Strategies

• **Fluorides**
  • Community water fluoridation
  • Professionally applied fluoride varnishes and gels
  • Use of fluoride toothpastes at home

• **Counseling**
  • Motivational interviewing; tailored family-level action planning

• **Professional care**
  • PCP screening, counseling, & referral
  • Dental prevention visits – pharmacologic & behavioral approaches
  • Aggressive combined therapies for affected children
Most Cost-Effective Strategies

• **Fluorides**
  - Community water fluoridation
  - Professionally applied fluoride varnishes and gels
  - Use of fluoride toothpastes at home

• **Counseling**
  - Motivational interviewing for family-level action planning to manage diet and enhance fluoride use
  - Professional care
  - PCP screening, counseling, & referral
  - Dental prevention visits – pharmacologic & behavioral approaches
  - Aggressive combined therapies for affected children

Question 3 for Burt Edelstein

- Whom does ECC typically affect?
Who has ECC?

- Those at highest risk are:
  - Children who are socially disadvantaged
  - Children of affected parents & siblings
  - Children exposed to destructive feeding & eating
  - Children who don’t benefit from fluorides
How is ECC typically treated?
ECC is Treated with Counseling & Repair

- Counseling aims to improve health behaviors.
- Repair fixes cavities but doesn’t stop the underlying disease process.
- That’s why 1/2 to 4/5ths of children undergoing extensive, expensive repair in the OR have new cavities within two years.

5% of Children account for 30% of Medicaid dental-related expenditures, substantially due to ECC repair
Managing ECC Before and After it Begins

- **Prevention:** Works by assuring balance from the start of a child’s life.

- **Management:** Works by restoring balance through intensive family education & engagement changing diet and eating patterns, using therapeutic fluorides appropriately, enhancing oral hygiene, & developing oral health valuation.

Centers for Medicare & Medicaid Services

ORAL HEALTH Initiative
In your profession, how has thinking evolved about how medical and dental providers should approach ECC?
Beginning to shift from...

- **Surgical Management:** Corrects damage with little impact on underlying disease process – to...

- **Chronic Disease Management (CDM) Focus:** Stops the disease process. Involves:
  - Triage
  - Care paths
  - Tailored counseling
  - Interprofessional care
Supportive Governmental Actions

- **US Preventive Services Task Force**
  USPSTF Recommendation on “Prevention of Dental Caries in Children From Birth Through Age 5 Years”

- **NIH/NIDCR, NIMHD**
  Support for ECC Management Research

- **CMS/CMMI**
  Support for ECC Management Demonstration

- **HRSA/BHW**
  Grant Guidance for pre- and post-doctoral primary care dental training

- **HRSA/MCHB**
  MCHB-Sponsored National Maternal & Child Oral Health Policy Center ECC documents for policymakers

- **CMS/OHI**
  Oral Health Initiative; Enhanced 416 monitoring

- **State Medicaid Programs**
  Reimbursing medical providers for certain oral health services
Supportive Provider Actions

- American Academy of Pediatric Dentistry
  “Guideline on Caries-risk Assessment and Management for Infants, Children, and Adolescents”
- American Dental Association
  “Statement on Early Childhood Caries”
- American Association of Public Health Dentistry
  “First Oral Health Assessment Policy”
- American Academy of Pediatrics
  “Preventive Oral Health Intervention for Pediatricians”
  “Smiles for Life Curriculum”
  “Bright Futures Guidelines”
- American Academy of Family Physicians
  USPSTF Endorsement
Question 6 for Burt Edelstein

• Why might there be a disconnect between clinical practice and recommended guidelines?

• How can Medicaid better align practice and clinical guidelines?
Getting to Disease Management

- Reasons for the “disconnect”
  - Dentistry’s surgical heritage
  - Traditional dental education & training
  - Professional Silo-ing
    - Coverage & Benefits
    - Workforce
    - Care sites
  - Pay-for-volume incentives
Past & Future

Traditional Past
• Classic providers
  • Dentists: General, Pediatric
  • Hygienists
  • Primary care medical providers
• Dental Care Focus
  • Repair
• Procedure-based Payment
  • Fee for service
  • Volume incentivized on procedures
• Medicaid Benefit
  • EPSDT Dental
  • Procedures based

Innovative Future
• New Provider Teams
  • “Healing Professions”
  • “Helping” Professions”
  • Lay Health workers
• Oral Health Focus
  • Disease management
• Outcomes-based Payment
  • Value incentivized on outcome metrics
• Medicaid Benefit
  • EPSDT Medical+Dental
  • Outcomes based
Recap

- Early Childhood Caries (ECC) is:
  - Common, chronic, progressive, and significant
  - Disproportionately affects certain populations
  - Largely preventable and completely manageable
  - Not adequately managed by traditional surgical approaches
  - Best managed as a chronic disease by team-based, patient-centered interventions that involve the family, community, & encourage behavior change
Any questions?
How State Medicaid Programs Can Support Prevention and Management of Early Childhood Tooth Decay

Wednesday, May 27, 2015

Laurie Norris, JD, and Susan Ruiz
Centers for Medicare & Medicaid Services
How does a prevention and management approach to Early Childhood Caries align with broader health system reform objectives?
CMS and Health Care Reform

- Affordable Care Act
- CMS Quality Strategy
- Three-Part Aim
Children’s Oral Health and Health Care Reform

**Proportion of Children with Untreated ECC**


Note: FPL = federal poverty level
ECC Pilot Projects and Learning Collaboratives

Source: Survey administered by Children’s Dental Health Project and Columbia University 2014

Key:
- Numbers indicate the number of ECC pilot projects reported
- * Denotes Quest Institute ECC Collaborative reported
- No pilot project or collaborative reported
The Children’s Benefit in Medicaid - EPSDT

- EPSDT = early and periodic screening, diagnostic and treatment benefit
- Prevention oriented
- Dental benefit
  - at a minimum, relief of pain and infections, restoration of teeth, maintenance of dental health, and medically necessary orthodontic services.
- Periodicity schedule
- Individualized care
  - all medically necessary care
### Individual Risk Assessments and Care Plans

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<th>Prevention and management component</th>
<th>Objectives</th>
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| **Individual risk assessment**    | • To determine whether a child is at low, moderate, or high risk of developing ECC, from infancy to age 6  
  —Based on a child’s biological risks, protective factors, and clinical findings  
• To help the health care provider and family understand the disease factors for a specific child and aid in individualizing conversations about prevention and management  
• To anticipate disease progression or stabilization |
| **Individual care plan**           | • To establish the types and frequency of diagnostic, preventive, management, and restorative care for an individual child  
• To recommend dietary counseling that could lead to change in eating and brushing habits and other behaviors  
  —Based on a child’s age, risk level, and level of patient/parent cooperation  
• To promote treatment of the disease process instead of treatment of the disease outcome (that is, cavities) |

Question 2 for CMS

• How can Medicaid and CHIP directors and dental program managers take action?
Action Options for States

• Look at your program manuals.

• Develop provider handbooks based on AAP guidelines.

• Make caries risk assessment a required service for children under 6 at their well-child exams, with fluoride varnish as indicated by their risk level.
Action Options for States

• Make sure doctors know how and where to refer a child who is assessed as high-risk or has observable untreated caries.

• Implement oral health Performance Improvement Projects (PIPs).

• Make sure dentists know they can ask for “extra” services for kids.
Oral Health Measures in Child Core Set

- PDENT – preventive dental service (since 2011)
  - Ages 1-20
  - Enrolled in Medicaid or CHIP for at least 90 continuous days
  - Received a preventive dental service from a dental professional (prophylaxis, fluoride, sealant)

- SEAL – sealant on a permanent molar (begins 2015)
  - Ages 6-9
  - Enrolled in Medicaid/CHIP for at least 180 continuous days
  - At elevated risk
  - Received a sealant on a permanent molar

More information on the Child Core Set is available here:
Question 3 for CMS

- How can states encourage Medicaid and CHIP medical and dental providers to implement these prevention and management approaches?
Percentage of children, age 1-5, who received any oral health service provided by a medical provider, FFY 2013

Source: FFY 2013 CMS-416 reports, Line 1b, 12f
Note: Data reflects updates as of 10/22/14.
Partner with Providers

- Partnerships
  - American Academy of Pediatrics
    - State chapter oral health advocates (COHAs)
  - American Academy of Pediatric Dentistry
    - State chapters
  - American/National/Hispanic Dental Associations
    - State chapters
- Models
  - Into the Mouths of Babes – North Carolina
  - Access to Baby and Child Dentistry – Washington
- National Improvement Partnership Network
Question 4 for CMS

- What Early Childhood Caries resources are available from CMS?
Early Childhood Tooth Decay Issue Brief Series

- Primer: An Overview for State Policymakers
- Leading Steps for State Policy Makers
- Strategies for State Medicaid and CHIP Dental Program Managers

Available at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Benefits/Dental-Care.html

Issue BRIEF

Reducing Early Childhood Tooth Decay: An Overview for State Policymakers

States across the nation are redesigning their health care systems to promote higher quality health care services, healthier populations, and lower per capita costs. Medicaid and the Children’s Health Insurance Program (CHIP) are key players in health system redesign for the 31 million children enrolled in these programs.

One aspect of health care that has been recognized as a key contributor to overall health, both in childhood and into adulthood, is children’s oral health care. Redesigning the way Medicaid and CHIP approach the specific problem of early childhood caries (ECC), the disease that causes tooth decay in infants and young children, is a growing priority. This disease is an oral disease that can be prevented and managed, rather than cured, through the use of evidence-based strategies. These strategies are similar to those already in use to prevent or manage other common chronic diseases.

WHAT IS ECC?

ECC occurs when tooth decay is discovered in a baby or toddler. The disease is infectious and transmittable and it is caused by bacteria in the mouth that erode tooth enamel and create cavities (caries). The bacteria can be transmitted when someone with ECC touches an object that the child puts in his or her mouth. The bacteria spread and the ECC-causing bacteria can and often will infect a baby’s mouth through direct contact.

Flow back to the problem of ECC.

Along with asthma and obesity, ECC is one of the most common chronic diseases of childhood in the United States, affecting about 25 percent of the nation’s 2- to 5-year-olds.

Figure 1. Among 2- to 5-year-olds, one child in four has ECC.
Tools to Help States Improve

- Oral Health Performance Improvement Project (PIP) Manuals and Template for managed care
  - **May 6th** and **May 20th**
  - Tools to be published in June
- Issue Briefs on Cost Effectively Addressing Early Childhood Caries
  - Webinar May 27
- Web-based learning modules on how to report dental data on the Form CMS-416
  - Will be released in September
- Medicaid Dental Contracting Toolkit
  - Will be released in October
Any questions?
Using Periodicity Schedules to Prevent and Manage Early Childhood Tooth Decay

Wednesday, May 27, 2015

Darlene Baker, Dental Policy Analyst
Kelly Close, Preschool Oral Health Coordinator
North Carolina Department of Health and Human Services
Question 1 for North Carolina

• How do periodicity schedules figure into North Carolina’s efforts to prevent and manage Early Childhood Caries (ECC)?
Periodicity Schedules to Prevent and Manage ECC

In 2011, NC revised dental periodicity schedule to outline the joint responsibility of oral health and health care professionals for the oral health of Medicaid enrolled children

- Dental periodicity schedule includes oral evaluation and risk assessment by PCP or dentist by 6 months of age and referral to a dentist recommended by age 1, required by age 3 if deemed high risk

- Oral evaluation by PCP, qualified health care professional, or dentist includes:
  1) Assess patient risk of caries
  2) Provide oral health education
  3) Evaluate and optimize fluoride exposure
  4) Assess pathology and injuries

- Medical periodicity schedule includes oral health risk assessment for all children under age 3½ during well visits
Periodicity Schedules to Prevent and Manage ECC

• Reimbursement for fluoride varnish is available for medical and dental providers

• Recommendations for routine care give providers a roadmap for achieving better oral health in at-risk populations of children
  • Best practices for optimal care of children without special health or developmental issues

• Providers are familiar with best practices recommendations from professional organizations like AAPD and AAP

• Periodicity schedule is a foundation for innovative strategies to begin to shift focus from treatment of disease to prevention
Periodicity Schedules to Prevent and Manage ECC

Changes were intended to promote the State’s focus on:

1. Use of evidence-based preventive services – fluoride varnish and sealants

2. Establishment of a dental home at an early age as recommended by leading dental and medical professional organizations – ADA, AAPD, AAP
3. Integration of medical and dental services in the “Into the Mouths of Babes” or IMB Program:

a) Promotion of oral health care is a joint responsibility between oral health professionals and other health care professionals

b) In the absence of a dental workforce ready and willing to treat the OH needs of all Medicaid children < age 3 Medicaid considers screening/diagnostic and preventive services by PCP a worthy substitute
Question 2 for North Carolina

• When and how did North Carolina change its dental periodicity schedule and what did that change entail?
When and How Did the Changes Occur?

- Legislatively created clinical advisory group*, the NC Physicians Advisory Group (PAG) in lieu of rulemaking for new and revised Medicaid and CHIP clinical policy.

  - Unique to NC—reduces the amount of time normally taken for administrative rulemaking.

- Did not require a State Plan Amendment (SPA).

- PAG Dental Committee is composed of: 4 pediatric dentists, 2 general dentists, 1 orthodontist and 1 pediatrician.

*(NCGS §108A-54.2)
When and How Did the Changes Occur?

• Public comment period of 45 days

• Effective date of the new dental periodicity schedule was November 1, 2011

• Links to the periodicity schedule were published in the HealthCheck (EPSDT) Provider Manual and on the Division of Medical Assistance website

• Medical and dental provider training included important information about the periodicity schedule
When and How Did the Changes Occur?

- Separate HealthCheck EPSDT training sessions for providers included guidance about all periodicity schedules including the OH periodicity schedule.

- Providers were driving force for new periodicity schedule—inquiring from pediatric dentists and pediatricians about adopting standards similar to those set by AAPD.

  - CMS pushed the development and implementation of the periodicity schedule along by making inquiries about NC Medicaid’s progress.
### Question 3 for North Carolina

- How did medical and dental providers respond to the revised dental periodicity schedule?
Response of Dental and Medical Providers

• Utilization of dental services steadily increasing since a 2003 lawsuit settlement increased reimbursement rates
  • Bottom 20% of CMS 416 metrics (Line 12a/line 1) to top 20% in a little more than a decade

• During periodicity schedule implementation in 2011:
  • 49% of children ages 1-20 had received a dental service in FFY 2011 and $216 million was spent on children’s dental services compared to 25% of children receiving a service and $45 million in expenditures in pediatric dental services in FFY 2001
  • Dental professionals learned the science behind preventive techniques in part due to efforts from UNC SoD and Area Health Education Centers
Response of Dental and Medical Providers

- Teamwork approach to fighting ECC in many initiatives across provider types & stakeholder groups
  
  - **Early Childhood Oral Health Collaborative**—grew out of IMB Operations Committee
  
  - **Carolina Dental Home**—HRSA funded project in Eastern NC where an RA tool—Priority Oral Health Risk Assessment and Referral Guidelines Tool or PORRT) was tested in participating PCP practices: [http://www.ncdhhs.gov/dph/oralhealth/partners/CarolinaDentalHome.htm](http://www.ncdhhs.gov/dph/oralhealth/partners/CarolinaDentalHome.htm)
  
  - **CHIPRA Oral Health**—PORRT was disseminated and tested in a larger cohort of PCP practices along with several partners including Community Care Network of North Carolina (CCNC): [http://www.mchoralhealth.org/pdfs/H47MC08654.pdf](http://www.mchoralhealth.org/pdfs/H47MC08654.pdf)
Response of Dental and Medical Providers

• Teamwork (cont’d)


• NC Oral Health Collaborative—DentaQuest Foundation funded broad-based stakeholder group aimed at increasing fluoride varnish and sealant rates: [http://oralhealthnc.org/](http://oralhealthnc.org/)

• East Carolina School of Dental Medicine—the state’s newest dental school has an innovative educational model with community service learning centers (CSLCs) throughout underserved areas of NC; ECU SoDM cares for disadvantaged children who previously lacked access
Numerous resources for health care professionals to learn about ECC prevention. Two prime examples:

- “Into the Mouths of Babes/Connecting the Docs” Tool Kit—information about NC’s fluoride varnish program, risk assessment and referral guidelines tool or PORRT, published studies, helpful videos, etc.: [http://www.ncdhhs.gov/dph/oralhealth/partners/IMB-toolkit.htm](http://www.ncdhhs.gov/dph/oralhealth/partners/IMB-toolkit.htm)

- Baby Oral Health Program or bOHP—resources designed to educate dental professionals to feel comfortable and competent in delivering preventive services to young children--[http://www.bohp.unc.edu](http://www.bohp.unc.edu)

North Carolina will continue lead efforts to prevent the spread of ECC among at risk infants and toddlers
Question 4 for North Carolina

- How does Medicaid track children’s use of preventive services, risk assessment, and so forth?
Tracking Utilization of Services

- **Beneficiary Focused Reports**
  - **Internal CMS 416 data by county**—track gaps in the delivery of services & target areas where provider engagement is needed
  - **HEDIS ADV**—two versions—with and without PCP fluoride varnish services—statewide data by race/ethnicity: [http://www.ncdhhs.gov/dma/quality/index.htm](http://www.ncdhhs.gov/dma/quality/index.htm)
  - **County Specific Snapshots**—average cost per recipient of services tracking and reporting utilization rates and for the state and each county: [http://www.ncdhhs.gov/dma/countyreports/index.htm](http://www.ncdhhs.gov/dma/countyreports/index.htm)
  - **Ad Hoc Reports**—design reports to meet the data needs of collaborators
Tracking Utilization of Services

• **Provider Focused Reports**

  • **Significant Billing Providers**—public and private providers with paid claims $\geq$ $10K$/year broken down by county, specialty and patient demographics.

  • **Quarterly reports for the “Into the Mouths of Babes” Program**—tracks expenditures to PCP practices, # of unduplicated children receiving services & services at well visits

• **Future Plans**

  • Consider adding risk assessment into the mix if CDT codes are adopted and/or ICD-10 fields are required on electronic claims
Tracking Utilization of Services

• **Provider Focused Reports**

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• **Future Plans**

  • Consider adding risk assessment into the mix if CDT codes are adopted and/or ICD-10 fields are required on electronic claims
Question 5 for North Carolina

- Does your agency facilitate communication and coordination between a child’s physician and dentist?
Communication Between Physicians and Dentists

- Difficult since Dental is carved out of the current primary care case management model—Community Care of North Carolina (CCNC)
  - Dentists do not have access to CCNC’s Provider Portal
  - HealthCheck (EPSDT) care coordinators can interface with both PCPs and dentists so they can bridge that gap
- Long term plans to add Dental to the CCNC networks, but state Medicaid agency is in the middle of reform and the end result is not clear—may be an ACO, MCO or hybrid model.
  - Dental providers would have been added to CCNC after behavioral health and medical specialty providers
Communication Between Physicians and Dentists

- Carolina Dental Home pilot project and CHIPRA OH workgroup focused on identifying children at high risk for caries and referring to dentist when necessary
  - The PORRT form has a section for the dental office to complete to return to the PCP to close the loop on the referral
  - More work needed to coordinate care; failed appointments are concerning
    - In Carolina Dental Home, broken appointments for referral from PCP to general dentist approached 50%
    - Motivating parents/caregivers to take children without obvious disease to dental appointments was a barrier to referral
    - Some PCPs were reluctant to refer if they felt the parent/caregiver would not keep the appointment
Communication Between Physicians and Dentists

- NC Oral Health Collaborative, CCNC, and others focus on medical-dental integration to facilitate the dental home at an early stage in life
  - CCNC founded by leading pediatricians & proponents of Bright Futures
  - CCNC uses the HEDIS ADV measure throughout its 14 networks to gauge access early in life
  - Provider groups have used “mixers” in key areas of the state to facilitate communication between participating PCPs and dental providers
- This is just a start. Much depends on Medicaid reform in North Carolina.
Any questions?
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- Leading Steps for State Policy Makers
- Strategies for State Medicaid and CHIP Dental Program Managers

Available at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Benefits/Dental-Care.html
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