Effectiveness of Primary Care Interventions to Address Childhood Obesity
A Review and Directions for the Future

Session III: Supporting and Promoting Involvement
Diane Dooley, M.D., M.H.S.
Co-authors: Patricia Crawford, Dr.P.H., R.D.
Nicolette Moultrie R.D.H.A.P., M.S.
Elbeth Sites, B.S.
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Disclosure and Presentation Support

Diane Dooley M.D., M.H.S., FAAP
- Pediatrician, Contra Costa Health Plan
- Associate Clinical Professor of Family and Community Medicine, UC San Francisco

Patricia B. Crawford Dr.P.H., R.D.
- Senior Director of Research, Nutrition Policy Institute, University of California

Nicolette M. Moultrie R.D.H.A.P., M.S.
- Professor and Program Director of Dental Programs, Diablo Valley College

Elsbeth Sites, B.S.
- Program Associate, Healthy and Active Before 5

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What are non-oral-health professionals in practice and in public health settings currently doing to effectively address childhood obesity and reduce consumption of sugar-sweetened beverages?

Session Objectives

1. Describe the clinical pathway presently used in primary care offices to manage pediatric obesity
2. Outline effective interventions to reduce pediatric obesity identified in our literature review
3. Present recommendations for policies and initiatives to advance oral health-primary care efforts to reduce pediatric obesity

Jason

- 13 year old Latino boy
- Lives with parents and his brother in a small apartment
- High density neighborhood with few parks
- Spanish-speaking household
- Father has pre-diabetes
- Medicaid insurance coverage
- Participates in school lunch program
Jason

- Seen annually for well child visits; follow-up visits every 3-6 months
- Each visit: weight, height, BMI percentile for age, BP, physical exam, counseling
- Seen intermittently by community dentists
- Lab testing for lipids, glucose, liver function every 2 years
- Referred to patient educator, dietician, group appointments, pediatric obesity disease management program, specialty program

Stage 1 Prevention Plus
Goal: Weight maintenance or decrease in BMI acceleration

2007 Expert Committee Recommendations

Persistently abnormal BMI (obese)
- Pre-diabetes
- Elevated lipids
- Recent efforts to improve lifestyle risks

BMI Chart
Eureka!

Debate and Discussion

- How has care for children evolved since the 2007 Expert Committee Recommendations established a framework for addressing this epidemic?
- What evidence do we have that these interventions are effective? sustainable? Real-world ready? Tested in at-risk populations?
- What are the common interests of oral health and medical professionals in addressing both childhood caries and pediatric obesity?
Conclusions

- Integrated care needed, not traditional visits
  - Motivational interviewing (MI)
  - Family-based programs
- Practice tools improve care
  - Electronic health systems
  - Language tools
- Professional oversight and influence is essential
  - Conflict of interest
  - Community environment
- Convene an oral health-primary care partnership to advance a collaborative effort to reduce childhood caries and pediatric obesity

Integrated Care, Not Traditional Visits

Motivational Interviewing

- A patient-centered counseling style used to encourage families to adopt healthier lifestyle habits and build motivation for change
- Resnicow et al, 2015:
  “Overweight children, whose parents received MI counseling from their PCPs supplemented by RD counseling, showed a significant reduction in BMI percentile over 2 years...”
- MI requires provider and staff training, repeated visits with long-term support

“Primary care providers managing pediatric obesity regularly express frustration with their seemingly limited ability to impact what appears to be an inevitable trajectory of unhealthy weight gain among patients in their practice.”
Family-Based Programs

- Clinically-based programs for overweight/obese children and their families that occur in health care or community settings
- Interactive, culturally relevant curriculum focused on dietary changes, physical activity, and parent support
- Requires group space, recruitment, incentives, coordination

Berge et al, 2011:
“The majority of the studies, 70%, showed statistically significant moderate to large effect size changes in child BMI”

Active and Healthy Families Interactive Activities

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Electronic Health Systems (EHS)

- EHS prompts and BMI percentile calculation increase diagnosis and follow-up for patients with abnormal weight gain
- Tavares, et al. 2015: “An intervention that included computerized clinical decision support (CDS) for pediatric clinicians and support for self-guided behavior change for families resulted in improved childhood BMI. Both interventions improved the quality of care for childhood obesity”
- Primary care providers using BMI growth-for-age curves, CDS, and health information exchange have enhanced capacity to impact childhood weight and improve quality of care for childhood obesity

Addressing Communication Gaps

- Improved communication results in improved outcomes
  - Language services for adults with diabetes
  - “Teach-Back” for adults trying to reduce SSB consumption
- Communication barriers correlate with increased rates of childhood obesity and dental caries, limited access to care, and decreased parental care satisfaction
- Providers would need:
  - Training on identification and management of language barriers
  - Access to, and payment for language services
Professional Oversight and Influence

Conflicts of Interest

- Research conclusions often reflect the funding sources for the analysis
  - Bes-Rastrollo et al, 2013: “Systematic reviews with stated sponsorship or conflicts of interest with food or beverage companies were five times more likely to report a conclusion of no positive association between SSB consumption and weight gain or obesity.”
- Providers should assure professional organizations have strong conflict of interest policies for published articles and industry financial support of professional meetings

Environmental policies

- Providers increasingly see themselves as effective advocates for change
  - Boyle et al, 2009: “88% of the providers surveyed thought that health care professionals should advocate for policies to reduce obesity”
- Providers can advocate for improved local food environments by modeling healthy hospital and clinic food policies
- Altering school and community environments in conjunction with counseling and education may produce the most lasting and meaningful effects
- Providers would need advocacy training and organizational support to improve policies
Sugar-Sweetened Beverage Interventions

- Strong evidence exists that SSBs are unique contributors to childhood obesity and dental caries
- AHA recommends children consume < 25 grams of added sugar daily and that children less than 2 years consume no added sugar
- Many parents remain confused regarding childhood healthy beverages
- No effective clinical interventions were found to significantly reduce SSB consumption
- Need research into both clinical and environmental interventions to reduce SSB consumption

Oral Health Implications

- Many effective practices for pediatric obesity could be, or have been adopted in oral health settings
  - Motivational interviewing
  - EHS with health information exchanges
  - Clinical tools to promote communication
- Present caries risk screening tools (e.g., CAMBRA) have potential to screen for obesity risk
  - SSB intake, bottle and sippy cup use, snacking questions
  - Questions focus on frequency and duration of exposure
  - Would need revision and standardization to comply with AHA recommendations

“Interdisciplinary collaboration is an essential component of tackling the two most prevalent health conditions and health disparities of childhood—dental caries and obesity.”
The primary care community should promote the dissemination of evidence-based clinical interventions in pediatric obesity:

- Motivational interviewing
- Family-based programs
- Low literacy communication
- Use of appropriate language services
- EHS systems with clinical decision support for pediatric obesity
- Strong conflict of interest policies for professional organizations
- Environmental changes to create healthier environments for children and reduce exposure to SSB

Convene an oral health-primary care partnership to identify collaborative strategies to reduce both poor oral health and pediatric obesity

- Develop and study
  - Best interdisciplinary clinical and policy practices shown to reduce these diseases
  - Evidence-based screening tools for sugar consumption
  - Culturally appropriate counseling tools regarding sugar exposure, dietary habits and sippy cup and bottle use in childhood oral and medical health visits
- Advocate for
  - Workforce changes and enhanced reimbursement to increase dietary counseling and interdisciplinary communication in oral health visits
  - Increased access to early childhood oral health care
Collaborative Recommendations  
What Can We Do Together?

Convene an oral health-primary care partnership to identify collaborative strategies to reduce both poor oral health and pediatric obesity

- Identify and advocate for best practice guidelines regarding professional conflicts of interest
- Advocate for policy changes and strategies to decrease childhood exposure to risk factors common to pediatric obesity and poor oral health
  - Social marketing campaigns
  - Pledge the Practice
  - SSB tax
  - Retail and fast food policies
  - WIC, child care and school food policies

Thank You!

Diane Dooley MD, MHS  
Contra Costa Health Plan  
UC San Francisco  
Clinical Professor of Family and Community Medicine

4dianedooley@gmail.com