Oral Health: A Maternal and Child Health Priority for Massachusetts

Hafsatou Diop, MD, MPH
Director, Office of Data Translation
PRAMS Director, State MCH Epidemiologist
Massachusetts Department of Public Health
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Disclosure Statement

• I have no conflicts of interest to disclose.
Oral health is essential to the general health and well-being of all Americans and... improved oral health can be achieved by all Americans...

Great progress has been made in reducing the extent and severity of common oral diseases... however, not everyone is experiencing the same degree of improvement.”
Objectives

• Describe how Title V selects maternal and child health (MCH) priorities and assures MCH services delivery for women and children

• Describe how the Pregnancy Risk Assessment Monitoring System (PRAMS) data are used to inform the MCH Needs Assessment

• Present oral health experiences among MA women in the perinatal period

• Outline current efforts in the development and implementation of perinatal oral health practice guidelines in Massachusetts
Massachusetts Department of Public Health (MDPH)
Title V Organization in MA

Bureau of Family Health and Nutrition

Nutrition Division
- WIC
- Office of Nutrition
- Growth & Nutrition
- PKU Support

Division of Pregnancy, Infancy and Early Childhood
- Home visiting
- Perinatal
- Early Childhood Services

Division of Early Intervention
- EI Services

Division For Children and Youth with Special Health Needs
- CYSHCN
- Family Initiatives

Office of Data Translation
- PRAMS
- PELL

Center for Birth Defects Research and Prevention
The Maternal and Child Health Services Block Grant

- Pregnant Women, Mothers and Infants
- Children and Adolescents
- Children and Youth with Special Health Care Needs
- Direct services provided to 801,746 individuals in FY 13
Title V Needs Assessment

- Require a 5-year comprehensive needs assessment
- Last needs assessment conducted in 2010
- A Steering Group guided the process
Guiding Principles

• Promote health and well-being of MCH populations
• Eliminate disparities by targeting the increasingly diverse MCH populations in MA
• Integrate life course perspective and social determinants of health into all programs
• Ensure community engagement through essential allies and others
• Ensure parental involvement, including fathers
• Target interventions as early as possible and focusing on teachable moments
• Be nimble
Criteria for Evaluating Priorities

What is the likely impact?
• Incidence & prevalence
• Degree of long-term outcomes
• Disparities whether socio-economic, cultural, geographic, racial, or ethnic.
• Preventable/actionable
• Increases or enhances collaboration

What is the feasibility of success?
• DPH subject matter competency
• Political and organizational will
• Resource availability
• Closeness to the core mission of MCH
• Availability of partners & external resources
• Synergy effect between priorities
• Increases or enhances collaboration
Healthy weight leads in both feasibility and impact

What is the likely impact?

What is the feasibility of success?
Public Hearings Across the State

- Held 4:00-6:00PM
- Review of Findings and Needs
- Open Comments Collected and Reviewed
Pregnancy Risk Assessment Monitoring System

- Surveillance system of the CDC and state-health departments
- Information on maternal attitudes, behaviors, and experiences before, during and shortly after pregnancy
- Initiated in 1987 and adopted by Massachusetts in 2007
- Includes national and state-specific questions

**PRAMS Goals**
- Reduce maternal morbidity and infant morbidity and mortality by impacting:
  - Maternal behaviors
  - Maternal and infant health programs
  - Policies

**PRAMS Objectives**
- Promote collection of population-based data of high scientific quality
- Conduct comprehensive analyses
- Translate results into useable information
- Build state capacity for collecting, analyzing, and translating data
All but 10 States Currently Participate in PRAMS Survey Distribution and Data Collection

Note: PRAMS represents approximately 78% of all US live births
Very Low Rates of Dental Cleaning Before, During, and After Pregnancy

Proportion* of women who reported having their teeth cleaned by time of dental cleaning, MA PRAMS, 2007-2009 (n = 4,385)

* All percentages are population weighted
Black, non-Hispanic and Asian Women Have Lower Rates of Dental Cleaning

Proportion* of women who reported having their teeth cleaned by race/ethnicity, MA PRAMS, 2007-2009

* All percentages are population weighted
Younger Populations have Lower Rates of Dental Cleaning Before and During Pregnancy

Proportion* of women who reported having their teeth cleaned by age, MA PRAMS, 2007-2009

<table>
<thead>
<tr>
<th>Age</th>
<th>Before Pregnancy</th>
<th>During Pregnancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;20</td>
<td>62%</td>
<td>32%</td>
</tr>
<tr>
<td>20-29</td>
<td>58%</td>
<td>37%</td>
</tr>
<tr>
<td>30-39</td>
<td>70%</td>
<td>51%</td>
</tr>
<tr>
<td>40+</td>
<td>76%</td>
<td>60%</td>
</tr>
</tbody>
</table>

* All percentages are population weighted
Nativity, Poverty Level, and Insurance are Risk Factors for Lack of Dental Cleaning

Proportion* of women who reported having their teeth cleaned during pregnancy by select characteristics, MA PRAMS, 2007-2009

Maternal Nativity

<table>
<thead>
<tr>
<th>Category</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-US</td>
<td>32%</td>
</tr>
<tr>
<td>US-Born</td>
<td>49%</td>
</tr>
</tbody>
</table>

Federal Household Poverty Level

<table>
<thead>
<tr>
<th>Poverty Level</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤100% FPL</td>
<td>31%</td>
</tr>
<tr>
<td>&gt;100%</td>
<td>49%</td>
</tr>
</tbody>
</table>

Insurance Type

<table>
<thead>
<tr>
<th>Insurance Type</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>55%</td>
</tr>
<tr>
<td>MassHealth</td>
<td>28%</td>
</tr>
<tr>
<td>Other</td>
<td>40%</td>
</tr>
<tr>
<td>None</td>
<td>36%</td>
</tr>
</tbody>
</table>

* All percentages are population-weighted
Summary of Maternal Characteristics Associated with Low Dental Cleaning Rates

Factors associated with a lower rate of dental cleanings *before* pregnancy:

- Black non-Hispanic and Asian race/ethnicity
- Less than college education
- No insurance
- Having 6+ life stressors
- Fair general health
- No multivitamin use

Reference group: White non-Hispanic, college graduate, privately insured, US-born, in excellent health, taking multivitamin daily, and having no life stressors.
Summary of Maternal Characteristics Associated with Low Dental Cleaning Rates

Factors associated with a lower rate of dental cleanings during pregnancy:

- Black non-Hispanic and Asian race/ethnicity
- Less than college education
- MassHealth or no insurance
- Non-US born
- Having 6+ life stressors
- Fair and poor general health
- No multivitamin use

Reference group: White non-Hispanic, college graduate, privately insured, US-born, in excellent health, taking multivitamin daily, and having no life stressors.
Ten 2010 – 2015 MCH Priority Needs

1. Promote healthy weight

2. Promote emotional wellness and social connectedness across lifespan

3. Coordinate preventive oral health measures and promote universal access to affordable dental care

4. Enhance screening for and prevention of violence and bullying

5. Support reproductive and sexual health by improving access to education and services
Ten 2010 – 2015 State Performance Measures

1. % of pregnancies that are intended

2. Promotion of emotional wellness

3. % of females aged 18 – 45 years reporting binge drinking

4. % of women with a recent live birth reporting that they had their teeth cleaned recently

5. % of school based health center clients for whom an assessment for intimate partner/teen dating/sexual violence was done
Oral Health During Pregnancy

- Pregnancy is a unique period characterized by physiological changes, which may adversely affect oral health.
- Oral health is key to overall health and well-being during pregnancy.
- Preventive, diagnostic, and restorative dental treatment is safe throughout pregnancy.
Presentations

Dental Schools
  Tufts
  Harvard

Medical Schools
  UMass Medical

Public Health Schools
  Boston University
Provider Surveys

Objectives:
To determine current opinions, practices, barriers and referral patterns of providers in Massachusetts regarding dental care during pregnancy.
Increase awareness and education about the importance of good oral health during pregnancy.

Methods: 4 Surveys were sent to providers, 16 questions each

Physicians:
– OB/GYN (146 responses, 12.9%) and Family Medicine (132 responses, 7.5%)

Dental Providers:
- Dentists (140 responses, 5.5%) and Dental Hygienists (120 responses, 5.6%)
Oral Health Advisory Committee

- Establish partnerships
  - Office of Oral Health
  - Clinicians
  - Medicaid
  - Mass League

- Oral health summit June 2013
- Oral health HRSA grant Sept. 2013
- Presentation at MPQC 2014 summit
Perinatal Care Recommendations

2013 Oral Health Recommendations:
• Ask about oral health status, including oral health history and last dental visit.
• Check mouth for problems (e.g., swollen or bleeding gums, dental decay, signs of infection).
• Document oral health history and status in medical record.
• If last dental visit took place more than six months ago or if any oral health problems identified, advise to schedule an appointment with dentist.

For more information, go to www.mchoralhealth.org.
Oral Health Guidelines

• Several states have guidelines for perinatal oral health:
  – California
  – New York
  – South Carolina
  – Washington
Perinatal Oral Health Guidelines

• Steering Committee:
  – Provide overall direction, input, guidance, and resources, and engage stakeholders as appropriate in the development of the Massachusetts Perinatal Oral Health Practice Guidelines for pregnant women and children, and develop a dissemination/implementation plan.
Perinatal Oral Health Guidelines

• Advisory Committee (36 organizations and DPH)
  – Provide clinical/content expertise in the development of the Massachusetts Perinatal Oral Health Practice Guidelines and present the guidelines to their respective organizations for endorsement and assistance with dissemination and implementation.
Perinatal Oral Health Guidelines

• Working Group:
  – Under the guidance of the Steering Committee, draft the Massachusetts Perinatal Oral Health Guidelines.
Acknowledgements

• Oral Health Advisory Committee
• MA Title V Program
• Office of Oral Health
• Mass League
• MassHealth
• CDC PRAMS
• MA PRAMS Advisory Committee
Extra Slides
The 2007-2011 PRAMS Surveys Include Four Oral Health Questions

<table>
<thead>
<tr>
<th>2007-2008 Questions</th>
<th>2009-2011 Questions</th>
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<tbody>
<tr>
<td>• Have you ever had your teeth cleaned by a dentist or dental hygienist?</td>
<td></td>
</tr>
<tr>
<td>– No</td>
<td></td>
</tr>
<tr>
<td>– Yes</td>
<td></td>
</tr>
<tr>
<td>• When did you have your teeth cleaned by a dentist or dental hygienist?</td>
<td></td>
</tr>
<tr>
<td>– Within a year before I became pregnant (Y/N)</td>
<td></td>
</tr>
<tr>
<td>– During my most recent pregnancy (Y/N)</td>
<td></td>
</tr>
<tr>
<td>– After my most recent pregnancy (Y/N)</td>
<td></td>
</tr>
<tr>
<td>○ At any time during the 12 months before you got pregnant with your new baby, did you do any of the following things?</td>
<td></td>
</tr>
<tr>
<td>☐ I had my teeth cleaned by a dentist or dental hygienist (Y/N)</td>
<td></td>
</tr>
<tr>
<td>○ Did you have your teeth cleaned by a dentist or dental hygienist during the time period listed below?</td>
<td></td>
</tr>
<tr>
<td>☐ During my most recent pregnancy (Y/N)</td>
<td></td>
</tr>
<tr>
<td>☐ After my most recent pregnancy (Y/N)</td>
<td></td>
</tr>
</tbody>
</table>
The 2012-14 PRAMS Survey Will Include More Extensive Dental Health Questions

Survey Questions in PRAMS Relating to Oral Health:
• Dental cleaning before pregnancy

One new question:
31. This question is about the care of your teeth during your most recent pregnancy. For each item, check No if it is not true or does not apply to you or Yes if it is true.
   a. I knew it was important to care for my teeth and gums during my pregnancy
   b. A dental or other health care worker talked with me about how to care for my teeth and gums
   c. I had my teeth cleaned by a dentist or dental hygienist
   d. I had insurance to cover dental care during my pregnancy
   e. I needed to see a dentist for a problem
   f. I went to a dentist or dental clinic about a problem