



**Healthy Mothers, Healthy Babies**

*Coalition of Georgia*

**aetna<sup>®</sup>**

Quality health plans & benefits  
Healthier living  
Financial well-being  
Intelligent solutions

## **Maternal and Child Health Disparities: *What Does the Research Say...***

### **...About Connections Between Oral Health and Pregnancy Outcomes?**

***Mary Lee Conicella, DMD, FAGD***  
***Chief Dental Officer, Aetna***  
***October 6, 2015***



# Periodontitis and adverse pregnancy outcomes

## Consensus report of the Joint EFP/AAP Workshop on Periodontitis and Systemic Diseases

### Biological mechanisms

Two major pathways have been identified:

- Oral microorganisms and/or their components reach the placenta
- Inflammatory mediators circulate and impact the fetus and placenta

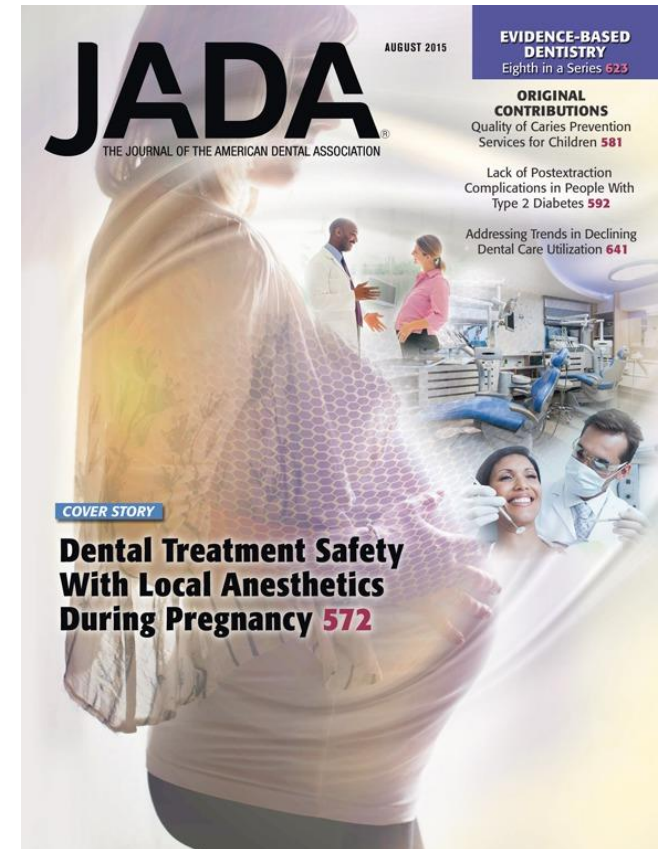
### Interventions

- Periodontal therapy has been shown to be safe and leads to improved periodontal conditions in pregnant women
- Periodontal therapy, with or without systemic antibiotics does not always reduce overall rates of pre-term birth and low birthweight.

# JADA August, 2015

## Conclusions:

This study's results suggest that use of dental local anesthetics, as well as dental treatment during pregnancy, do not represent a major teratogenic risk.



# Better health through integration

<http://aetnastory.com/>



**At Aetna, our Mission is empowering people to live healthier lives.**

# Aetna-Columbia Chronic Condition Research

Published study investigates the correlation between periodontal treatment and systemic health

*– “There is evidence that an individual’s systemic condition can affect their oral health, and a mounting body of evidence that oral health, particularly periodontal status can also affect an individual’s general health status.”*

**– “An Examination of Periodontal Treatment and Per Member Per Month (PMPM) Medical Costs in an Insured Population”**

- David A. Albert, DDS, MPH<sup>1</sup>
- Donald Sadowsky, DDS, PhD<sup>1</sup>
- Panos Papapanou, DDS, PhD<sup>1</sup>
- Mary L. Conicella, DMD, FAGD<sup>2</sup>
- Angela Ward, RDH, MA<sup>2</sup>
- Published Aug 2006 in






# Study Results:

## Retrospective Claim Analysis, Chronic Conditions




*ERG™ is a modeling tool to predict current and future health utilization*

### Episode Risk Group™ (ERG) scores for Diabetes, CAD & CVD participants

<b>ERG™ Risk Scores</b>	<b>Periodontitis Risk Score</b>	<b>No Dental Services Risk Score</b>	<b>Reduction in Risk Score</b>
Diabetes	3.39	4.79	 29.2%
Coronary Artery Disease (CAD)	4.68	6.49	 27.9%
Cerebrovascular Disease (CVD)	6.23	8.26	 24.6%

### Medical PMPM Costs: Considers cumulative costs for 2 year period

Total Medical costs for members who received periodontal treatment beginning in the first year vs. members who received treatment in the second year but not in the first

<b>Medical PMPM Costs</b>	<b>Individuals receiving Periodontal treatment Yr1</b>	<b>Individuals with Periodontal treatment Yr2</b>	<b>Associated reduction in overall medical costs</b>
Diabetes	141.07	155.76	 9.4%
Coronary Artery Disease (CAD)	131.99	156.13	 15.5%
Cerebrovascular Disease (CVD)	118.84	133.86	 11.2%

# Aetna-Columbia Pregnancy Research

## American Journal of Public Health Publishes Aetna, Columbia University Study on Oral Health Care and Pregnancy Outcomes

- *“This study shows the importance of preventive dental treatment for women who are planning to start a family,” said David Albert, DDS, MPH, associate professor at the Columbia University College of Dental Medicine, who led the study. “Women can help improve the overall quality of life for themselves and their child by staying in good dental health.”*

- **“An Examination of Periodontal Treatment, Dental Care, and Pregnancy Outcomes in an Insured Population in the United States”**

**David A. Albert, DDS, MPH**

**Howard F. Andrews, PhD**

**Angela Ward, RDH, MA**

**Virginia Rauh, ScD**

**Panos N. Papapanou, DDS, PhD**

**Melissa D. Begg, ScD**

**Sharifa Z. Williams, MPH**

**Mary Lee Conicella, DMD**

**Janet L. Thomson, RPh**

**Published January 2011 in:**



# Study Results:

## *Retrospective Claim Analysis, Pregnancy*

Treatment Group Variable	No.	Observed Probability of Low Birth Weight,*		Observed Probability of Preterm Delivery,*	
		No.	(%)	No.	(%)
Received periodontal treatment	1086	28	2.6	85	7.8
Received prophylactic treatment	8010	260	3.3	609	7.6
Received other dental treatment	2024	94	4.6	190	9.4
No dental treatment of any kind	12321	612	5.0	1241	10.1

\*P < .001

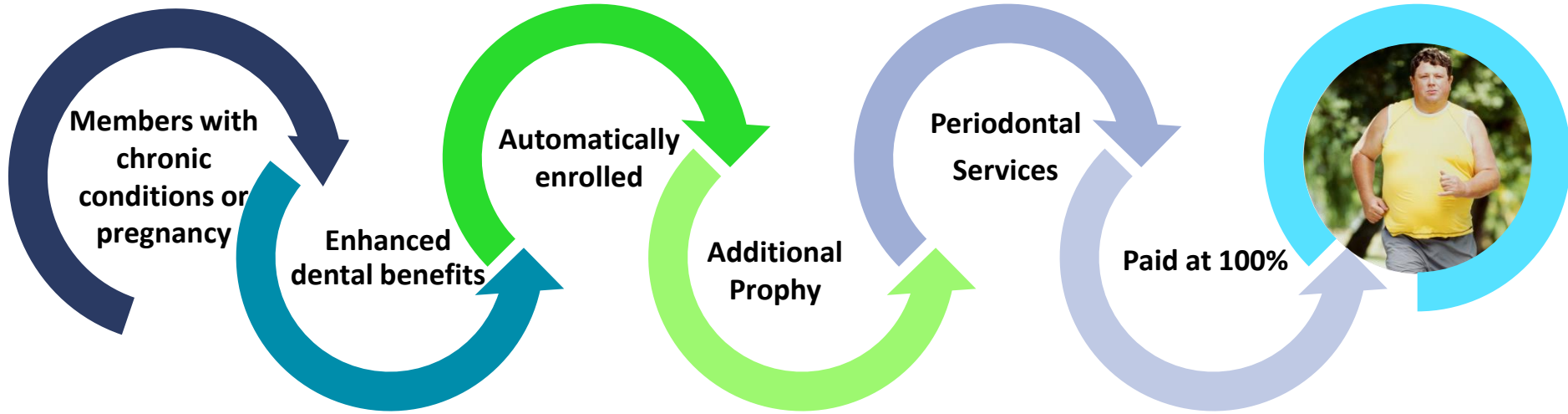


# Follow-Up:

## *Retrospective Claim Analysis, Pregnancy (Abstract)*

- Presented March, 2015 at IADR, Boston, MA
- This retrospective cohort study examined 34,759 pregnant women
- We examined linked medical and dental claims to analyze associations between maternal periodontal treatment and IUGR
- IUGR rates were highest for women who had a periodontal treatment code prior to the birth event or recently after the birth event
- **Conclusions:** In this insured population, IUGR was associated with periodontal treatment codes, a proxy for periodontal disease

# Dental/Medical Integration<sup>SM</sup> Program



## With Dental/Medical Integration:

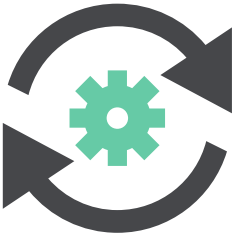
- Up to **20% of employees** are eligible
- Over **2 million members** have been identified
- Enhanced benefits encourage **Preventive and Periodontal services**

# DMI in Beth's life

Opportunity

Beth is 33, expecting her first baby and **hasn't had a dental visit in a while.**

Claims analysis shows Beth's pre-natal visit **and no dental claim.**



**Medical:** Pre-natal visit

**Dental:** **NONE**

# DMI in Beth's life

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## Intervention



Beth receives extra help from Aetna. An educational mailing is sent that describes how good dental care can help her have a healthier pregnancy and delivery.

An outreach call is made by Aetna's Dental Care Coordinator **who helps Beth schedule a dental appointment.**



# DMI in Beth's life

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Outcome



**Beth delivers a healthy baby boy.**



# MOMentum Health Suite Available in 2016



Life begins with Mom

Happy begins with Mom

Family begins with Mom

M&Mentum begins with Mom

familyM&Mentum

A health suite designed for moms and families



Thank you

**aetna**<sup>®</sup>