Oral Health: Evidence and Strategies to Improve Care and Reduce Costs

National Academy for State Health Policy webinar
April 24, 2015
2:00 – 3:00 PM Eastern Time

Presented with support from the Washington Dental Service Foundation.
Why is oral health care an issue?

- Most common chronic disease of childhood
- Long-standing, persistent barriers to low-income people accessing care
- 108 million Americans without dental coverage
  - 15 states with extensive Medicaid adult dental benefits
- Effects on nutrition, education, employability, quality of life
- Linked to avoidable emergency room visits, systemic conditions like cardiovascular disease, stroke, diabetes
How is oral health linked to overall health and health costs?

- Gum disease and chronic conditions
  - “2-way relationship” with glycemic control for diabetes
- Maternal and child health
  - Mother-to-child transmission of cavity-causing bacteria
  - Some evidence of links between gum disease and poor birth outcomes
- Emergency room utilization
  - $800M - $2B in dental-related ER costs per year
New NASHP Report and Toolkit

- Explores steps states can take
  - Targeted approaches for pregnant women, diabetics
  - Provider education, training
  - Medical-dental integration

- Online toolkit
  - Topical resource library
  - Case studies

- More to come
  - State experience with adult Medicaid dental benefits
Today’s Presenters

• Dr. Marjorie Jeffcoat, Professor and Dean Emeritus, University of Pennsylvania School of Dental Medicine

• Julie Bluhm, Clinical Program Manager, Hennepin Health

• Dr. Bob Russell, Dental Public Health Director, Iowa Department of Health
Evidence can be used to improve insurance products

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Insurance data bases and clinical trials

- If the results of Clinical Trials are similar to results from ins data bases they support the hypothesis under study
- Design new insurance programs to save the patient or employer money and enhance wellness
  - use funds for health care i.e. vaccines
  - use for company/individual purchases
Example of evidence from databases

• Based on more than a million records of insurance claims

• Example
  – Compare cost of medical care in patients who received periodontal treatment versus untreated patients

• Outcome: Cost and number of hospitalizations
## Total medical costs

<table>
<thead>
<tr>
<th>condition</th>
<th>annual total medical costs per subject</th>
<th>periodontal disease</th>
<th>difference</th>
<th>significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>type 2 diabetes (T2D)</td>
<td></td>
<td>untreated $7,056</td>
<td>treated $4,216</td>
<td>$2,840 (40.2%)</td>
</tr>
<tr>
<td>cerebral vascular disease (CVD)</td>
<td></td>
<td>untreated $13,895</td>
<td>treated $8,214</td>
<td>$5,681 (40.9%)</td>
</tr>
<tr>
<td>coronary artery disease (CAD)</td>
<td></td>
<td>untreated $10,222</td>
<td>treated $9,133</td>
<td>$1,089 (10.7%)</td>
</tr>
<tr>
<td>rheumatoid arthritis (RA)</td>
<td></td>
<td>untreated $9,218</td>
<td>treated $8,637</td>
<td>$581 (6.3%)</td>
</tr>
<tr>
<td>pregnancy and delivery</td>
<td></td>
<td>first instance</td>
<td>untreated $3,299</td>
<td>treated $866</td>
</tr>
<tr>
<td></td>
<td></td>
<td>second instance</td>
<td>untreated $3,301</td>
<td>treated $1,754</td>
</tr>
</tbody>
</table>
An example clinical study – preterm birth

• Randomized controlled clinical

• All patients randomly received scaling and root planing

• Incidence of PTB was compared in patients with successful or unsuccessful scaling.
Incidence of PTB when scaling is successful or unsuccessful

Pregnancy outcome among women treated for moderate to severe periodontal disease

Successful Periodontal Treatment

- Full Term Birth: 91.8%
- Pre-Term Birth (<35 weeks): 37.8%

Refractory (unsuccessful) Periodontal Treatment

- Full Term Birth: 49 subjects
- Pre-Term Birth (<35 weeks): 111 subjects

Total: N = 160

\( \chi^2 = 48.67, p < 0.00001 \)
In print


• Available free through Science Direct: 
  *Courtesy of United Concordia*
Thank you!

supported by a grant from United Concordia Companies, Inc.

Jeffcoat DMD 2012-2014
What is Hennepin Health?

Minnesota Department of Human Services (DHS) &
Hennepin County
Collaborative Demonstration for Healthcare Innovation Started in 2012

Hennepin County Accountable Care Partners:
Hennepin County Medical Center (HCMC)
Human Services and Public Health Dept. (HSPHD)
Metropolitan Health Plan (MHP)
NorthPoint Health and Wellness Center

Jointly contract with DHS to provide the full Medicaid benefit to a population of complex residents on a full risk prospective total-cost-of-care basis

+ Over 100 Additional Network Providers
Population Served

- Current Enrollment ~ 10,000 members
- Medicaid Expansion in Hennepin County
- 21 - 64 year-old Adults, without Dependent Children
- At or Below 133% of the Federal Poverty Level (< 75% prior to 2014)
- Not Certified as Disabled
Population Characteristics

• 75% Male
• 70% Racial/Ethnic Minority
• Common Overlapping Issues:
  – Mental Health Conditions
  – Chemical Dependency
  – Homelessness/Unstable Housing
  – Chronic Physical Conditions
  – Lack of Social Support
• Frequent Use of the Emergency Department (ED) to Access Care
Factors Impacting Health Outcomes

- **20%** - Access to and Quality of Health Care

- **80%**
  - Social and Economic Factors (40%)
  - Health Behaviors (30%)
  - Built Environment (10%)

Adapted from [http://www.countyhealthrankings.org/our-approach](http://www.countyhealthrankings.org/our-approach)
Premise

• Need to Meet Individuals’ Basic Needs Before We Can Meaningfully Impact Health

• Social Challenges Often Result in Poor Health Management and Costly “Revolving Door” Care

• By Financially Aligning and Coordinating Systems, we can Improve Health Outcomes and Reduce Costs
Care Model: Care Coordination

- Based on a Primary Care Medical Home with a Strong Community Health Worker Role
- Referral to “Ambulatory ICU” Clinic for Most Complex
- Supplementing Clinic Care Coordination with Targeted Behavioral Health and Social Service Interventions
Outcomes: Continuously Enrolled Members
Jan 2013 – Jun 2014 (n=932); Epic EHR Data

- ConSnuously
- Enrolled Members

![Graph showing ED Visits per 1000 Members]

![Graph showing IP Admissions per 1000 Members]
Dental In-Reach

- Two Community Health Workers (CHW’s)
- Located in the ED and Urgent Care
- Working with individuals in need of dental services to provide education and establish care.
- Goals: reduce ED visits at HCMC by 60%. Connect at least 40% of the patients to a dental home for ongoing care.
- Funded by Delta Dental grant and Hennepin Health reinvestment funds.
Dental In-Reach

• Individuals with dental pain are diverted to Urgent Care (UC) during business hours (9am-9pm).
• UC medical team ensures temporary pain management.
• Find and set-up same or next day appointments for dental care.
  – Within our partner network: NorthPoint Health and Wellness or HCMC dental clinic (co-located w/ ED)
  – Community providers with openings for dental care.
• Work with the individual to ameliorate barriers to attending their appointment.
Dental In-Reach Progress

• Ability to access internal resources for dental has improved.
• Community clinics require the patient be with the CHW when the appointment is made due to high no show rates.
• Since September 2014, approximately 45% appointment completion rate.
Dental In-Reach: Lessons

• Keep an up-to-date list of dental clinics that will take MA and uninsured.
• It helps when the CHW can explain the treatment options that clinics offer, eg: which clinics will pull a tooth and which will help save it.
• Access to the ED and Urgent Care patient track boards helps CHWs identify which patients to target.
• Education is often on the fly and we are working on tools that will help patients understand the importance of oral health. It is important that the CHW working out of the ED/Urgent Care setting be knowledgeable about dental care options.
• Limited phone minutes, inaccurate contact information and health information exchange are barriers.
Thank You!

Videos and more information:
www.hennepin.us/hennepinhealth
State Reactions

Dr. Bob Russell, Dental Public Health Director, Iowa Department of Health
Questions, Answers, and Discussion

Use the chat box on the left of your screen to type in your question.
Resources

Download NASHP’s “Oral Health and the Triple Aim” brief, toolkit, and webinar recording at:
www.nashp.org/oral-health-toolkit

For more information contact Andy Snyder, asnyder@nashp.org

And join us at NASHP’s Annual State Health Policy Conference – October 19-21, Dallas TX

Thank you!