Integration of Dental Services within your Rural Health Clinic

Eli Schwarz KOD
DDS, MPH, PhD, FHKAM, FCDSHK, FACD, FRACDS

Rural Health Conference
Sunriver, October 2017
Miranda

Age 47
6 children ages 15-32
No GED/diploma, no employment, criminal history
In recovery from severe substance use
Chronic pain, cancer, multiple surgeries,
No teeth or dentures
Multiple psychiatric medications

birth
Tumultuous, violent relationship between parents, unstable housing

5 yo
Parents split, dad got “left behind”, lived with multiple caretakers

11 yo
Moves back in with mom, daily sexual abuse from stepfather

15 yo
First child is born, father is her stepbrother, begins drug use, drops out of school

18 yo
Two more children born, all while she is using

21 yo
Goes to prison on drug charges, children in DHS custody

27 yo
Suicide attempt

47 yo
Three more children born
Heavy alcohol use, drug relapses
Cancer diagnosis
Multiple car accidents, chronic pain
Today's topics

- Oral Diseases impact on health and wellbeing
- Oral Diseases and other chronic diseases share common risk factors
- The role of primary care and dental care providers in addressing all chronic diseases through expanded integration of medical, behavioral, and oral health care
The case for integration

- Emerging best practices and evidence-based guidelines conclude that integration of oral health into primary care practice is essential to promoting and maintaining the health and well-being of patients.
Is the mouth really a part of the body?
## Pregnant mothers oral health situation

<table>
<thead>
<tr>
<th>QUESTION:</th>
<th>2008</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>During your most recent pregnancy -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Needed to see a dentist for a problem</td>
<td>30%</td>
<td>70%</td>
</tr>
<tr>
<td>- Went to a dentist or a dental clinic</td>
<td>51%</td>
<td>49%</td>
</tr>
<tr>
<td>- A dentist or dental health worker talked to me about how to care for my teeth and gums</td>
<td>51%</td>
<td>49%</td>
</tr>
<tr>
<td>- Were in WIC</td>
<td>47%</td>
<td>53%</td>
</tr>
<tr>
<td>I had my teeth cleaned by a dentist or dent hygienist</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>After your new baby was born, did a doctor, nurse, or other health care worker talk with you about how to prevent your baby from getting tooth decay?</td>
<td>34%</td>
<td>66%</td>
</tr>
<tr>
<td>Do you ever put your baby to bed with a bottle?</td>
<td>10%</td>
<td>Discontinued</td>
</tr>
</tbody>
</table>

Oregon Pregnancy Risk Assessment And Monitoring System, 2008; 2012

Eli Schwarz - School of Dentistry
Dental cavities in 6-9 year old Oregon children

†6- to 9-year-olds, primary and permanent teeth
*Statistically different from the statewide average of 52%

OHA 2012: Smile survey
Percentage with a dental visit in the past year
Oregon children and adults
Dental caries experience of New Zealand birth cohort from age 9 to age 38 (n=1000)

Decayed, Missing, and Filled Teeth over life-course

- Age 9
- Age 15
- Age 18
- Age 26
- Age 32
- Age 38


Eli Schwarz - School of Dentistry
### 1976 South Australia birth cohort

<table>
<thead>
<tr>
<th>Year</th>
<th>Decayed, Missing, and Filled Teeth</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982</td>
<td>0.16</td>
</tr>
<tr>
<td>1983</td>
<td>0.45</td>
</tr>
<tr>
<td>1984</td>
<td>0.78</td>
</tr>
<tr>
<td>1985</td>
<td>1.09</td>
</tr>
<tr>
<td>1986</td>
<td>1.35</td>
</tr>
<tr>
<td>1987</td>
<td>1.67</td>
</tr>
<tr>
<td>1988</td>
<td>2.06</td>
</tr>
<tr>
<td>1989</td>
<td>2.37</td>
</tr>
<tr>
<td>1990</td>
<td>2.67</td>
</tr>
<tr>
<td>1991</td>
<td>3.00</td>
</tr>
<tr>
<td>1992</td>
<td>3.33</td>
</tr>
<tr>
<td>1993</td>
<td>3.67</td>
</tr>
<tr>
<td>1994</td>
<td>4.00</td>
</tr>
<tr>
<td>1995</td>
<td>4.33</td>
</tr>
<tr>
<td>1996</td>
<td>4.67</td>
</tr>
<tr>
<td>1997</td>
<td>5.00</td>
</tr>
<tr>
<td>1998</td>
<td>5.33</td>
</tr>
<tr>
<td>1999</td>
<td>5.67</td>
</tr>
<tr>
<td>2000</td>
<td>6.00</td>
</tr>
<tr>
<td>2001</td>
<td>6.33</td>
</tr>
<tr>
<td>2002</td>
<td>6.67</td>
</tr>
<tr>
<td>2003</td>
<td>7.00</td>
</tr>
<tr>
<td>2004</td>
<td>7.33</td>
</tr>
<tr>
<td>2005</td>
<td>7.67</td>
</tr>
<tr>
<td>2006</td>
<td>8.00</td>
</tr>
</tbody>
</table>

**Note:** Linear increase.

**Source:** AIHW Child Dental Health Survey - SA; DAI; Young Adults Study; 4th Decade study

Eli Schwarz - School of Dentistry
How do Oregonian adults view their oral health?

Low income adults are most likely to report having problems due to the condition of their mouth and teeth.

The top oral health problem for low income adults is difficulty biting and chewing.

- 48% of low income adults avoid smiling due to the condition of their mouth and teeth.
- 19% of high income adults experience pain due to the condition of their mouth and teeth.
- 19% of middle income adults feel embarrassment due to the condition of their mouth and teeth.
- 33% of low income adults reduce participation in social activities due to the condition of their mouth and teeth.
How do Oregonian adults view their oral health?

Overall Condition of Mouth and Teeth

- **Very Good**: 24%
- **Good**: 39%
- **Fair**: 25%
- **Poor**: 11%

By Household Income:
- **Low**:
  - Very Good: 15%
  - Good: 30%
  - Fair: 34%
  - Poor: 20%
- **Middle**:
  - Very Good: 17%
  - Good: 41%
  - Fair: 29%
  - Poor: 14%
- **High**:
  - Very Good: 44%
  - Good: 43%
  - Fair: 12%
  - Poor: 12%

1 in 5 low income adults say their mouth and teeth are in poor condition.
How do Oregonian adults view their oral health?

- Life in General is Less Satisfying Due to Condition of Mouth and Teeth

- Appearance of Mouth and Teeth Affects Ability to Interview for a Job
How do Oregonian adults view their oral health?

Oral Health and Well-Being in Oregon

Reasons for Not Visiting the Dentist More Frequently, Among Those Without a Visit in the Last 12 Months

- **Cost**: 59%
- **Afraid of Dentist**: 26%
- **Inconvenient Location or Time**: 21%
- **Trouble Finding a Dentist**: 11%
- **No Original Teeth**: 13%
- **No Perceived Need**: 6%
- **No Reason**: 13%
- **Other**: 19%
Prevalence of Periodontal diseases – selected variables

NHANES 2009-10; Eke 2012
Non-Communicable Diseases - Common risk factors contribute to morbidity and premature deaths

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>Condition</th>
<th>CVD</th>
<th>Diabetes</th>
<th>Cancer</th>
<th>Chronic obstructive pulmonary disease</th>
<th>Oral/dental diseases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco use</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Alcohol use</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Physical inactivity</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nutrition</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Obesity</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Raised blood pressure</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dietary fat/ blood lipids</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sugar</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Integration – referral opportunities

Figure. Visits to dentists and physicians in the course of one year among U.S. patients. Analysis by the American Dental Association Health Policy Resources Center, based on data from 2011 (the most recent year for which data are available) from the Medical Expenditure Panel Survey of the Agency for Healthcare Research and Quality.

Vujicic, JADA 2014
THE ROAD AHEAD
Integration briefs

Contents
Introduction
Background
Oregon’s Payment and Financing
Data and Measurement
Overall Challenges and Lessons Learned
Future Opportunities and Implications

Oral Health Integration in Statewide Delivery System and Payment Reform

By Stacey Chazin and Maia Crawford, Center for Health Care Strategies

IN BRIEF
As state Medicaid programs move toward value-based payment, states interested in improving adult oral health care access and outcomes are testing creative strategies to integrate dental care into primary care delivery. Through State Innovation Model (SIM) grants from the federal Center for Medicare and Medicaid Innovation, for example, participating states can include oral health integration in statewide delivery system and payment reform efforts. States without SIM grants are also identifying ways to incorporate dental services into primary care models. This brief explores a robust range of approaches to oral health integration that states are considering, including: (1) Medicaid benefit design and expansion; (2) practice-level oral health reforms; and (3) statewide delivery reform models.
Predominant integration models

• Full Integration
• Shared Financing
• Virtual Integration
• Co-location
• Facilitated referral
Oral Health Integration in Oregon – Key findings

- The oral health status of Oregonians is improving, but further work remains;
- A limited oral health workforce continues to be a challenge;
- Local oral health integration efforts are ahead of other states; but there is more to do including consensus on the definition of integration;
- Some national models of oral health integration and local efforts for behavioral health integration can be applied;
- Potential innovative payment models could further oral health integration.
## Oral health assessments in primary care

Percentage of oral health assessments for children ages 0-6 that were provided by a medical practitioner.

In mid-2016, medical practitioners in eight CCOs provided oral health assessments.

<table>
<thead>
<tr>
<th>CCO</th>
<th>Number of children receiving an oral health assessment by a...</th>
<th>Total # of children receiving oral health assessment in primary care</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>...physician:</td>
<td>...advanced practice nurse or physician assistant:</td>
</tr>
<tr>
<td>AllCare Health Plan</td>
<td>672</td>
<td>155</td>
</tr>
<tr>
<td>Eastern Oregon CCO</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>FamilyCare</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Health Share of Oregon</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>Jackson Care Connect</td>
<td>170</td>
<td>3</td>
</tr>
<tr>
<td>PacificSource Gorge</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Trillium</td>
<td>132</td>
<td>81</td>
</tr>
<tr>
<td>Yamhill Community Care</td>
<td>34</td>
<td>23</td>
</tr>
</tbody>
</table>

_oral health in Oregon’s CCOs_
# Oral health assessments in primary care

Percentage of oral health assessments for children ages 0-6 that were provided by a medical practitioner in mid-2016.

## By CCO

<table>
<thead>
<tr>
<th>CCO</th>
<th>Percent of Oral Health Assessments Provided by a Medical Practitioner</th>
</tr>
</thead>
<tbody>
<tr>
<td>STATEWIDE</td>
<td>9.3%</td>
</tr>
<tr>
<td>AllCare Health Plan</td>
<td>16.2%</td>
</tr>
<tr>
<td>Cascade Health Alliance</td>
<td>0.0%</td>
</tr>
<tr>
<td>Columbia Pacific</td>
<td>0.0%</td>
</tr>
<tr>
<td>Eastern Oregon</td>
<td>0.1%</td>
</tr>
<tr>
<td>FamilyCare</td>
<td>0.4%</td>
</tr>
<tr>
<td>Health Share of Oregon</td>
<td>0.6%</td>
</tr>
<tr>
<td>Intercommunity Health Network</td>
<td>0.0%</td>
</tr>
<tr>
<td>Jackson Care Connect</td>
<td>26.1%</td>
</tr>
<tr>
<td>PacificSource - Central</td>
<td>0.2%</td>
</tr>
<tr>
<td>PacificSource - Gorge</td>
<td>0.0%</td>
</tr>
<tr>
<td>Primary/Health of Josephine County</td>
<td>10.5%</td>
</tr>
<tr>
<td>Trillium</td>
<td>0.0%</td>
</tr>
<tr>
<td>Umpqua Health Alliance</td>
<td>0.0%</td>
</tr>
<tr>
<td>Western Oregon Advanced Health</td>
<td>0.0%</td>
</tr>
<tr>
<td>Willamette Valley Community Health</td>
<td>19.8%</td>
</tr>
</tbody>
</table>

## By race and ethnicity

<table>
<thead>
<tr>
<th>Race and Ethnicity</th>
<th>Percent of Oral Health Assessments Provided by a Medical Practitioner</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>11.7%</td>
</tr>
<tr>
<td>American Indian / Alaskan Native</td>
<td>6.3%</td>
</tr>
<tr>
<td>Asian American</td>
<td>4.0%</td>
</tr>
<tr>
<td>Hawaiian / Pacific Islander</td>
<td>7.8%</td>
</tr>
<tr>
<td>Hispanic / Latino</td>
<td>4.4%</td>
</tr>
<tr>
<td>White</td>
<td>12.3%</td>
</tr>
</tbody>
</table>
Oral health assessments in primary care

Case study: AllCare Health Plan

AllCare Oral Health Integration Manager Laura McKeane knows something about the importance of oral health in primary care. “Kids that are 0-3 will see their pediatrician 11 times during their first three years of life, but most won’t see a dentist at all,” she says. McKeane is one of a statewide network of trainers for First Tooth, a training-based program managed by the Oregon Oral Health Coalition (www.orohc.org/first-tooth) that helps medical organizations integrate oral health preventive services into current services. In 2015 and 2016 alone, McKeane trained more than 200 providers in Southern Oregon, including providers within and outside of her CCO’s network and service area. In addition to the two-hour, interactive training, participants get a kit and resources to order more fluoride, and they also get continuing education credit, and even support through the implementation period. McKeane makes sure trainees are well fed, too. And McKeane says providers really see the need for these services in their clinics, especially in Josephine County where access to providers is difficult. She says that while many providers began the training wondering how they will fit oral health into already packed visits, by the end they’ve changed their minds. Seeing this transformation “makes it all worthwhile.”
Dental care for adults with diabetes

Percentage of adult CCO members identified as having diabetes who received at least one dental service within the reporting year

Domain: Oral health integration
Service type: Dental
Data source: Administrative (billing) claims
Endorsed by: MAC Oral Health Workgroup, CCO Oregon
2015 n = 36,285 / mid-2016 n = 37,734 (mid-2016)

Oral Health in Oregon’s CCOs

A metrics report
March 2017
Integration in practice

- Early indications are that integration must be preceded by coordinated care/case-management.

- Patient-centered Coordinated care ~ Identification of high risk population ~ Case management ~ Shared responsibility for patient care ~ Mutual recognition of roles in integrated approach.
Integration in practice - examples

- Kaiser Permanente: Medically and dentally insured patients: Care gap analysis – Chronic disease management – EPIC + EPIC WISDOM
- Willamette Dental DCO – Trillium CCO: Chronic Condition Dental Management of tobacco users and diabetics
- Capitol Dental DCO – Samaritan Health: Addressing rural health disparities – Expanded Practice Dental Hygienists co-located with primary care clinics
- FQHCs: Co-located Expanded Practice Dental Hygienists in a Primary Care facility: Case management – warm hand-off - +/- EHR (WISDOM)
- FQHC: Co-located Behavioral Health specialist in dental clinic
Oral Health Integration in Oregon –
Recommendations to further integration

- Increase state and local leaders’ communication about oral health and oral health integration;

- Facilitate and coordinate across oral health activities and develop support tools to improve alignment and maximize the impact and use of limited resources;

- Increase CCOs, health plans, and provider attention on oral health integration;

- Reduce barriers to integration and enhance administrative simplification through streamlining and standardizing processes;

- Enhance data collection, analytics, and surveillance efforts to incorporate oral health.
Rural Oral Health Toolkit

Welcome to the Rural Oral Health Toolkit. The Toolkit is designed to help you identify and implement an oral health program in your community. It also provides you with resources and best practices.
Collaboration ➔ Coordination ➔ Integration

Public Health Advisory Board:

Guiding principles for public health and health care collaboration

Improving Community Health Through Cross-Sector Partnerships:

Improving the Health of Mothers & Babies in Central Oregon

Cross-sector partners worked together to:

- Create a systematized approach for referring women to prenatal health care
- Connect women with prenatal mental health
- Create a regional tracking and coordination system

Background

Health starts—long before illness—in our homes, schools, neighborhoods, and jobs. Public health agencies in Oregon are collaborating with community partners to make communities healthier and ensure that people have access to critical prevention services. Community partnership development is a foundational capability for state and local public health agencies in Oregon and for many decades, local public health agencies throughout Oregon have demonstrated skill and dedication in forming cross-sector relationships with private, public, and governmental organizations that share many of the same goals. The purpose of this case study is to increase understanding of the effective formation and use of cross-sector partnerships to improve community health.

The Project: Improving the Health of Mothers & Babies in Central Oregon

Crook, Deschutes, and Jefferson Counties, and the Central Oregon Health Council collaborated to develop and implement a regional approach to a perinatal continuum of care model.

Case Summaries

Food Security in Hood River

Based on the results from a Community Food Assessment showing that one in five people in the community missed meals regularly, partners implemented the Magic Box program, making fresh fruits and vegetables more available as one approach to reduce food insecurity.

Key Partners:
1. Hood River County Public Health Department
2. PacificSource Community Solutions CCO – Columbia Gorge Health Council
3. Gorge Grower Food Network

Addressing Childhood Obesity in the Columbia Gorge

Partners focused on policies, systems, and environmental change in order to identify a set of strategies for a multi-faceted approach to help children grow up at a healthy weight.

Key Partners:
1. North Central Public Health District (Wasco, Sherman, & Gilliam Counties)
2. North Wasco County School District
3. Mid-Columbia Medical Center
4. PacificSource Community Solutions CCO
5. Eastern Oregon Coordinated Care Organization
6. Oregon Solutions

Increasing Access to Physical Activity & Healthy Food in Eastern Oregon

Partners collaborated on a Community Needs and Readiness Assessment primarily focused on strategies related to physical activity and diet.

Key Partners:
1. Umatilla County Public Health Department
2. Umatilla County Department of Land Use Planning
3. American Planning Association, Oregon Chapter

Supporting Preconception Health in Southern Oregon

Partners implemented the One Key Question® initiative encouraging all health care and social service providers to routinely ask women about their reproductive health needs to better prepare for pregnancies and reduce unintended pregnancies.

Key Partners:
1. Jackson County Public Health Department
2. Josephine County Public Health Department
3. Health Care Coalition of Southern Oregon
4. Jackson Care Connect
5. Primary Health Josephine County, LLC
6. AllCare Health Plan

www.healthoregon.org/modernization
Dental workforce distribution – oh, no!

All dentists: FTE dentists per 1,000 Oregonians
Source: Oregon Health Care Workforce Survey (2015/2016 renewal data)

Percent of a dentist’s caseload that are Medicaid patients.
2015/2016 renewal data (statewide)

<table>
<thead>
<tr>
<th>Percent of Medicaid</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Medicaid</td>
<td>58.5%</td>
</tr>
<tr>
<td>1-24% Medicaid</td>
<td>19.2%</td>
</tr>
<tr>
<td>25-49% Medicaid</td>
<td>7.5%</td>
</tr>
<tr>
<td>50-74% Medicaid</td>
<td>5.5%</td>
</tr>
<tr>
<td>75-100% Medicaid</td>
<td>9.4%</td>
</tr>
</tbody>
</table>

The percentages above reflect those with known Medicaid acceptance status. 11.5% of all providers report unknown Medicaid caseload.
Telehealth connected dental team
Clinical dental documentation
Teledentistry school based program
Satisfaction survey analysis

Overall satisfaction with the dental care provided

Very satisfied
Somewhat satisfied
Don’t know
Somewhat dissatisfied
Very dissatisfied

Child need for additional care

No needs
Need care
Maybe
Don’t know

Eli Schwarz - School of Dentistry
Discussion & Conclusions

- Oral Diseases impact health and wellbeing
- Oral Diseases need lifelong attention
- Oral Diseases and other chronic diseases share common risk factors
- Dental care and primary care providers jointly should share responsibility for addressing care of all chronic diseases
- Expanding integration of general, behavioral, and oral health care will create benefits for all
- Adoption of ANY integrative model will provide added experience and impetus to expand integration
Thanks for your attention

schwarz@ohsu.edu