

Indian Country Oral Health ECHO:

July 10, 2024

Topic: Medical-Dental Integration

WELCOME!



NORTHWEST PORTLAND AREA
INDIAN HEALTH BOARD
Indian Leadership for Indian Health

Photo of artwork in CTCLUSI tribal

Board



Established in 1972, the Northwest Portland Area Indian Health Board (NPAIHB or the Board) is a non-profit tribal advisory organization serving the forty-three federally recognized tribes of Oregon, Washington, and Idaho. Each member tribe appoints a Delegate via tribal resolution and meets quarterly to direct and oversee all activities of NPAIHB.

“Our mission is to eliminate health disparities and improve the quality of life of American Indians and Alaska Natives by supporting Northwest Tribes in their delivery of culturally appropriate, high-quality healthcare.”



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Indian Country Oral Health ECHO: Medical-Dental Integration

DISCLAIMER:

We have no financial disclosures or conflicts of interest with the information in this presentation.



Photo of artwork in Nez Perce
National Historical Park Visitor Center



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Indian Country Oral Health ECHO:

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Today's learning Objectives:

1. Improved understanding of oral health as it relates to overall health and wellness
2. Identify various clinical/interdisciplinary approaches to improve oral health in Native communities
3. Understand the concept of Integrated Dental Hygiene (I-RDH) and how it could improve the oral health in your community

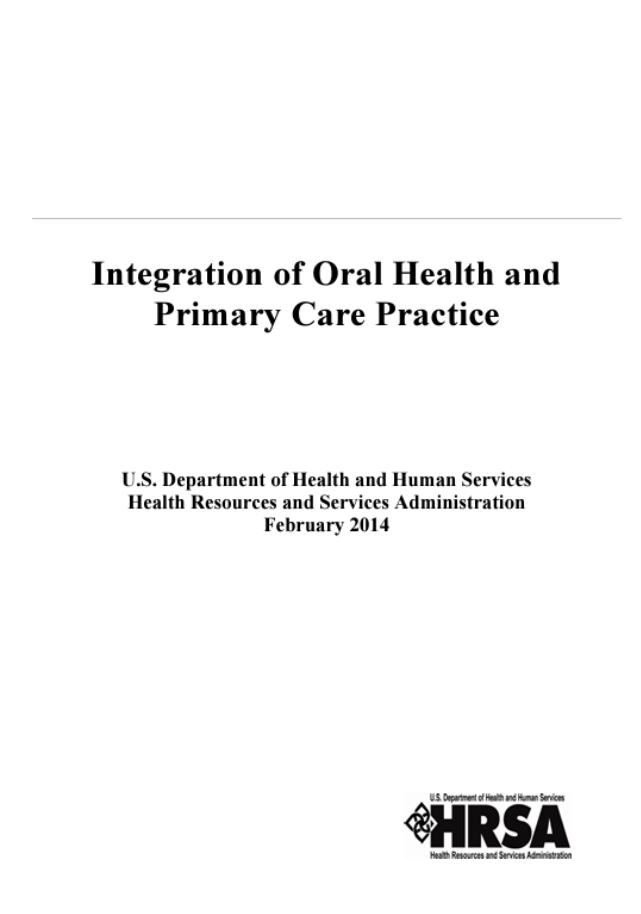
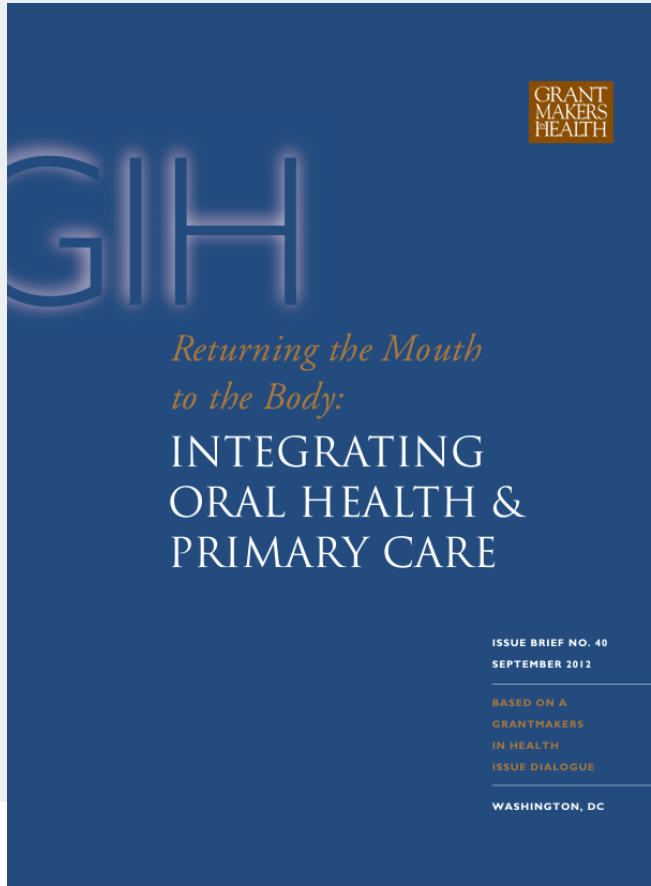
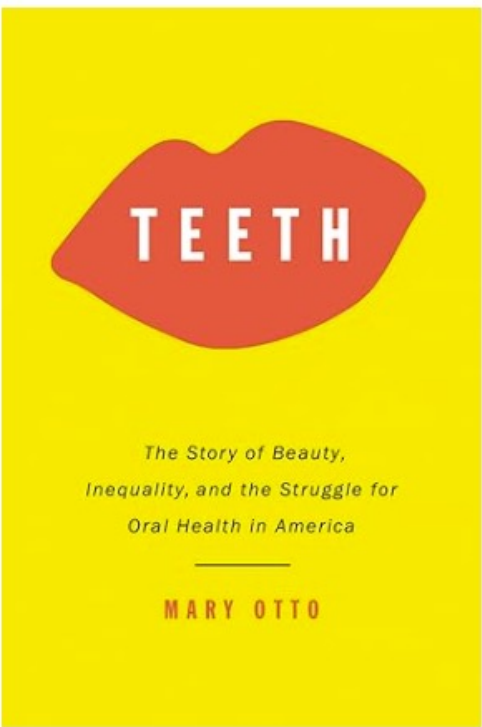


Outline:

1. Didactic Presentation
2. Case Presentation:
Integrated Dental Hygiene at Oklahoma City Indian Clinic
3. Group Discussion and Q&A



Medical-Dental Integration: a brief history



CONCLUSION

Integrating oral health and primary care can potentially solve a number of issues that contribute to the oral health crisis. By incorporating oral health into the primary care system's standard of patient care, the oral health needs of those communities and populations most in need can be addressed. But there is a great deal of work to be done. More research into the effectiveness of and processes for achieving oral health integration is needed, if widespread acceptance and adoption is to occur. There is also much to be done to educate providers, policymakers, and the public about potential benefits.

Philanthropy can make a significant contribution by taking on any number of roles: convener, researcher, educator, benefactor, and advocate. There is no gold standard approach to integration: each model has its own benefits and limitations that will require thoughtful assessment by all stakeholders. Grantmakers can play a leadership role in this effort and be powerful agents in reversing a century-and-a-half-long schism between the mouth and the body.

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Integrated Dental Hygiene

Presented By:

Monica McKee, MPH, RDH

VP Allied Services, Oklahoma City Indian Clinic

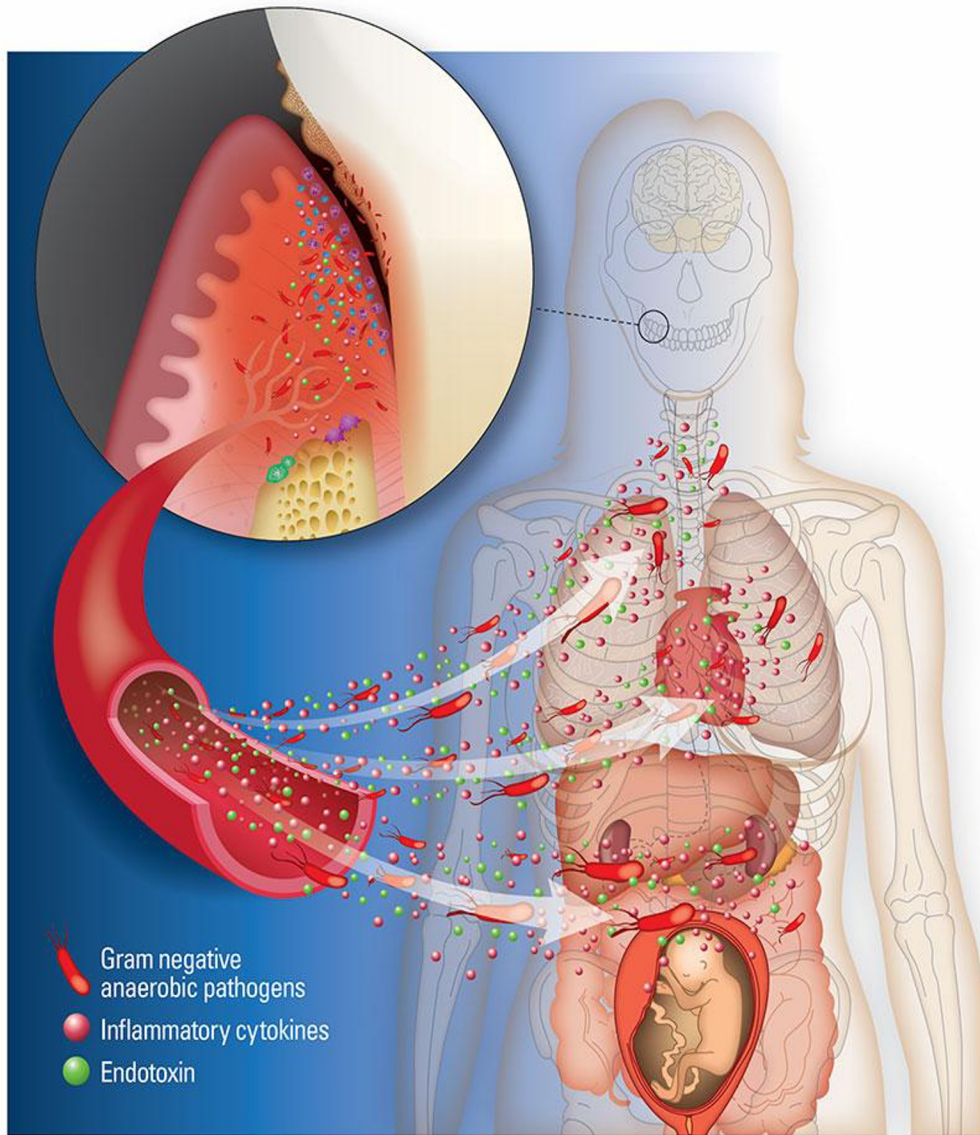
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Oral Health is Integral to Overall Health

- Poor oral health may be associated with other chronic diseases such as diabetes and heart disease.
- People with diabetes are more likely to have oral health problems, like cavities; tooth loss; gum disease; and dry mouth.
- Oral disease is associated with risk behaviors including tobacco use and consuming sugary foods and beverages; can limit healthy behaviors like eating nutritious foods.
- During pregnancy, women are more prone to cavities and gum disease.



Stroke

- Those with severe periodontitis have increased risk of getting stroke and periodontal treatment can help to reduce the risk. ²⁶

Alzheimer's Disease

- *P. gingivalis* with its toxic protease (gingipain) was identified in patients' brains with pathologic mechanism. ²⁵

Heart Disease

- Those with severe periodontitis may have increased risk of fatal heart attack. ^{15,16}
- Bacteria in the gingiva may travel through the bloodstream, reaching atheroma and causing clotting problems in the cardiovascular system. ³⁰
- Controlling periodontal disease can retard the progression of carotid atherosclerosis. ^{35,36}

Uncontrolled Diabetes

- People with type 2 diabetes are three times more likely to develop periodontal disease than those without diabetes. ¹³ Periodontal treatment can potentially help with controlling HbA1c. ³⁷
- Pathogens can be identified in pancreatic islet. ³³

Respiratory Infections

- Poor oral hygiene and periodontal infection are associated with increased anaerobic periodontal pathogens in the lungs of patients with lower respiratory track infection and pneumonia. ²⁷⁻²⁸
- Improved oral hygiene and periodontal treatment can reduce risk of pneumonia and mortality rate. ³⁸⁻³⁹

Osteopenia and Rheumatoid Arthritis

- Reduction in bone mass (osteopenia) is associated with periodontal disease and related tooth loss. ²⁰
- Periodontal pathogens can be present at the joint and periodontal disease is associated with arthritis. ^{18,31}

Cancer

- Periodontitis is associated with esophageal, breast, pancreatic, and colon cancer. ^{21,22}

Preterm or Low-Birthweight Babies

- Women with advanced periodontal disease may be more likely to give birth to an underweight or preterm baby. ¹⁷
- Oral microbes can cross the placental barrier, exposing the fetus to infection. ³²

People with Chronic Conditions are More Likely to Have Poor Oral Health

Among adults with 3 or more chronic conditions (CCs):

- **43% have untreated cavities**, compared to 22% among adults with <3 CCs.
- **18% have severe periodontitis**, compared to 14% among adults with <3 CCs.
- **14% have severe tooth loss**, compared to 6% among adults with <3 CCs.

Impacts of Poor Oral Health

34 million

Over 34 million **school hours** were lost in the United States in 2008 because of unplanned urgent dental care.



\$45 billion

Over \$45 billion is lost in **productivity** in the United States each year because of untreated oral disease.



18%

Nearly 18% of all working-age adults, and 29% of those with lower incomes, report that the appearance of their mouth and teeth **affects their ability to interview for a job.**



3x

Older adults who have low-income, have less than a high school education, or are current cigarette smokers are more than 3 times as likely to have **lost all their teeth** as the comparison groups.



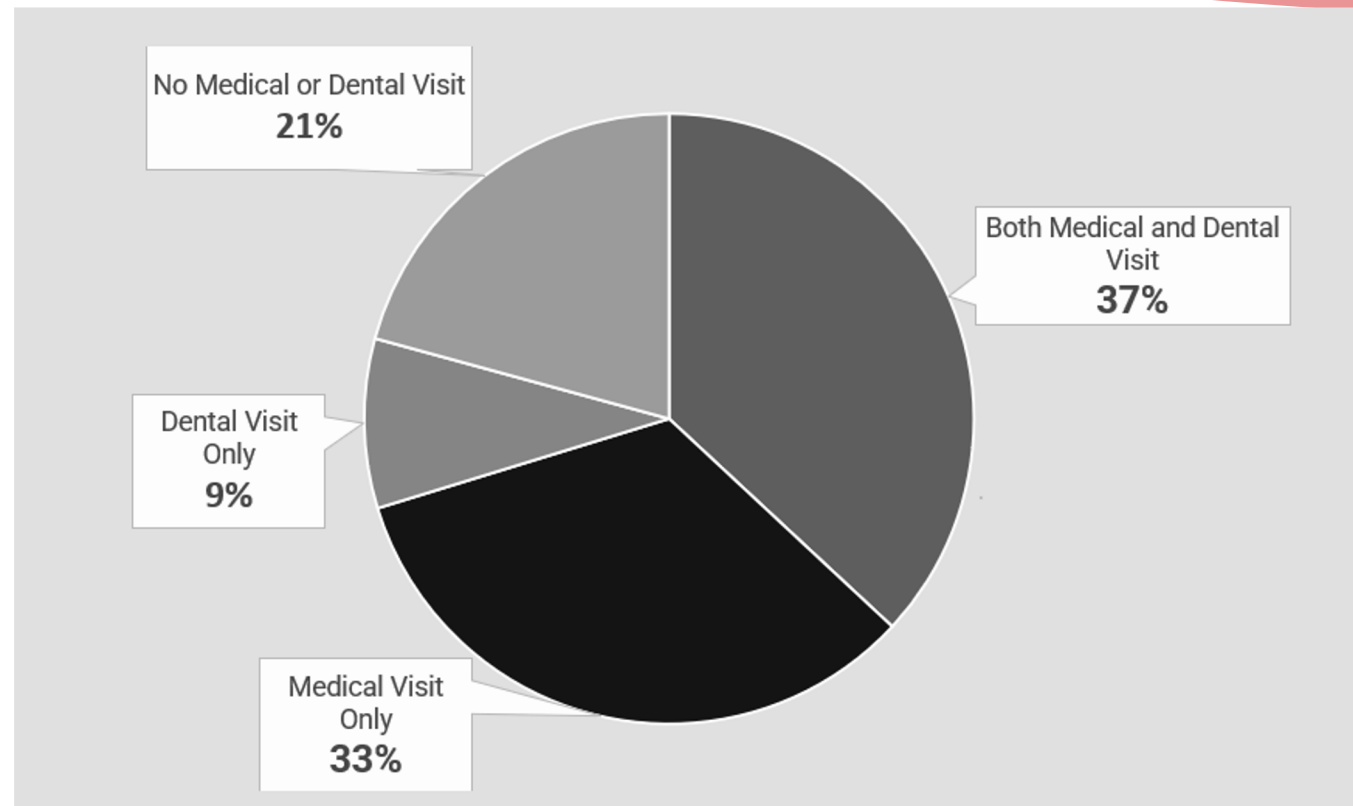
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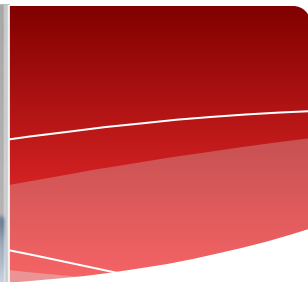
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Percentages of Overall Healthcare Visits, 2019



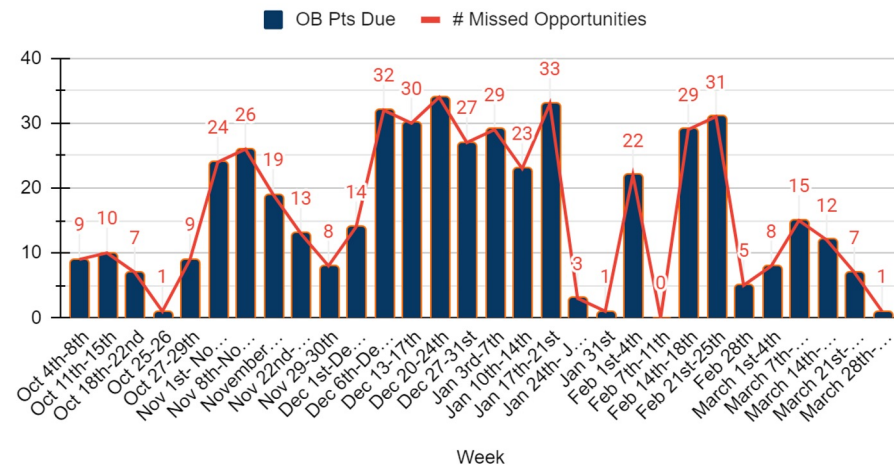
The Medical-Dental Home Model



Initial Data Collection

- During the study period, 482 OB patients were due for dental access. None received dental access during their Medical/prenatal visit.

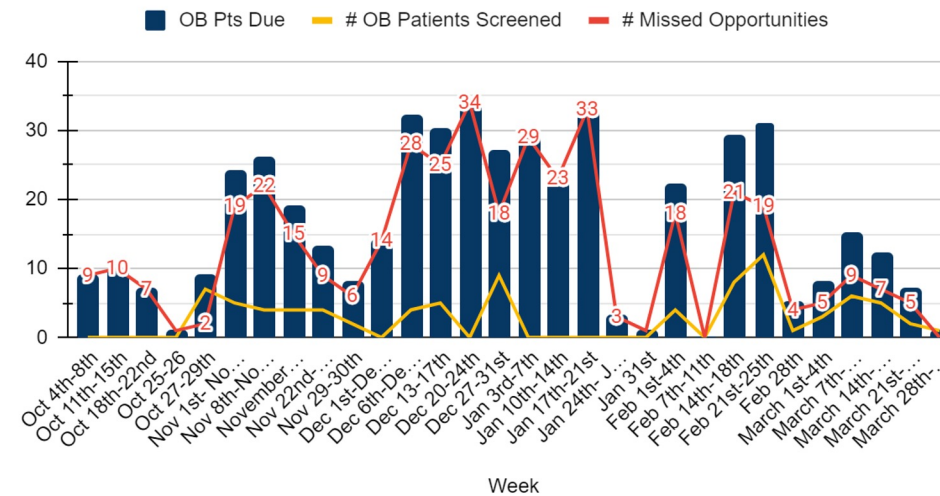
OB Patients Due for Dental Access and Resulting # of Missed Opportunities
October 2021-March 2022



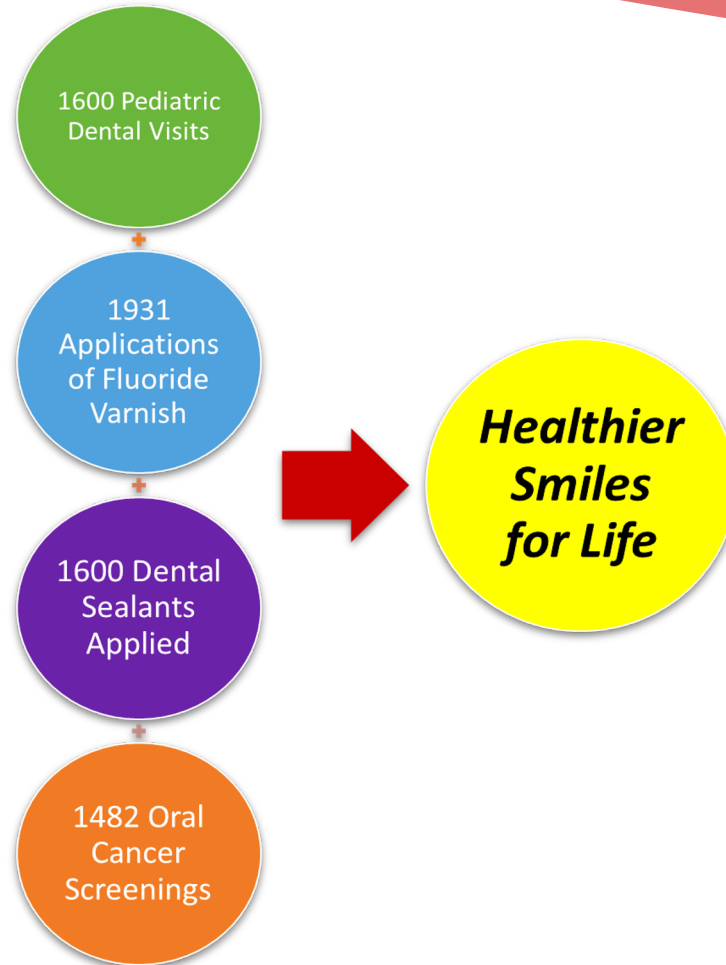
Initial Intervention and Remeasurement

- By utilizing Clinical RDH's, as they were available over the study period collectively, a 29% decrease in missed opportunities was observed, exceeding the goal of 10%, with no addition of staff.

OB Pts Due vs Screened and Resulting # of Missed Opportunities
October 2021-March 2022



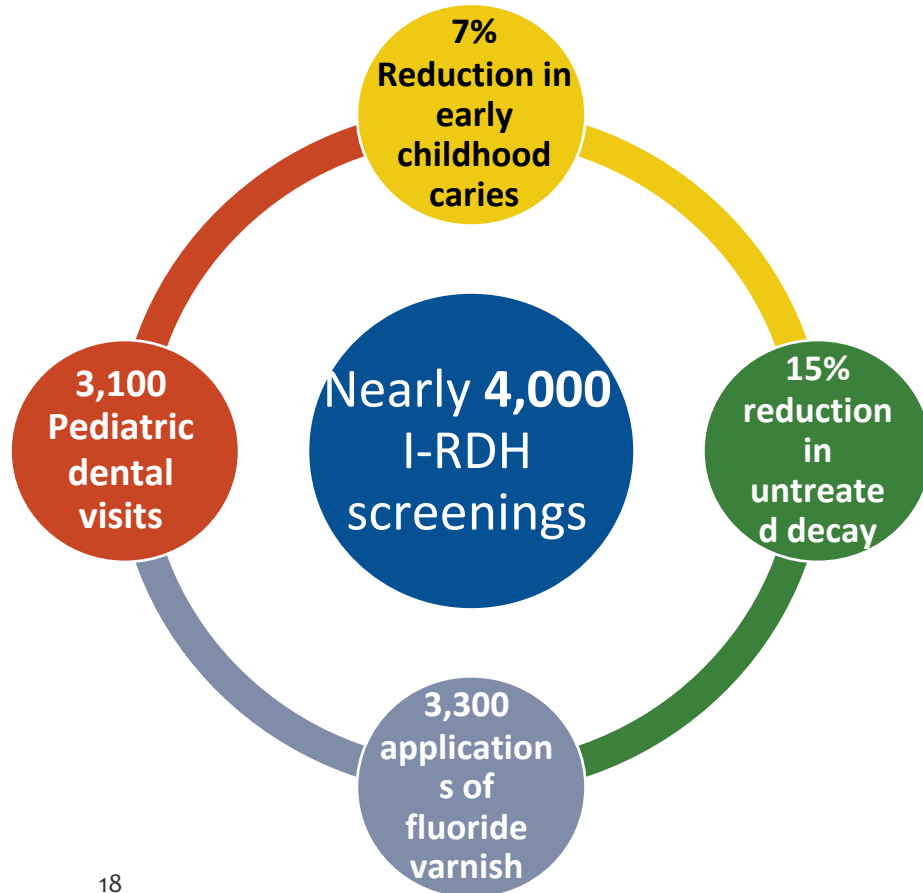
I-RDH Pediatric Pilot: *The first 6 months*



Our Vision:

1. Decrease the incidence of tooth decay and disease in children through direct services and education for Native American families
2. Improve dental access within the Native community
3. Spread the integrated dental hygiene model nationally

Current State



Our Vision:

1. Decrease the incidence of tooth decay and disease in children through direct services and education for Native American families
2. Improve dental access within the Native community
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Medical-Dental Integration

What is Medical-Dental Integration?

- Holistic, whole-person care that extends beyond teeth.
- A patient-centered continuum of care where the healthcare team (e.g., physicians, dentists, and others) multi-directionally communicate, collaborate, and share patient health information.
- Involves coordinated and collaborative care that is patient-centered, prevention-based, and systematic.

The Medical-Dental Home Model

Emphasis on “Dentistry in every Department”

- Oral screenings and topical fluoride performed at every well child check
- Oral screening and assessment for pregnant mothers at time of positive pregnancy test
- Education and coordination of care for diabetics
- Deploy dental staff to health fairs, after school activities, camps and events to provide education, screenings and topical fluoride application.
- Utilization of Integrated Dental Hygienists

Integrated Dental Hygiene



- An innovative approach to improving oral health outcomes by introducing trained dental professionals into the Medical setting.
- At OKCIC, Integrated Registered Dental Hygienists (I-RDH) are integrated into multiple medical clinics with their primary focus being the relationship between oral and overall health.

A Dental Visit at the Doctor?

During a Pediatric Visit:

1. The I-RDH evaluates several things including plaque index, gingival health, dental caries, presence of sealants, signs of bulimia, and any signs of abuse or neglect.
2. Topical Fluoride Application
3. If a family is scheduling their child's first dental appointment, the I-RDH will schedule that child to see them in-clinic personally.

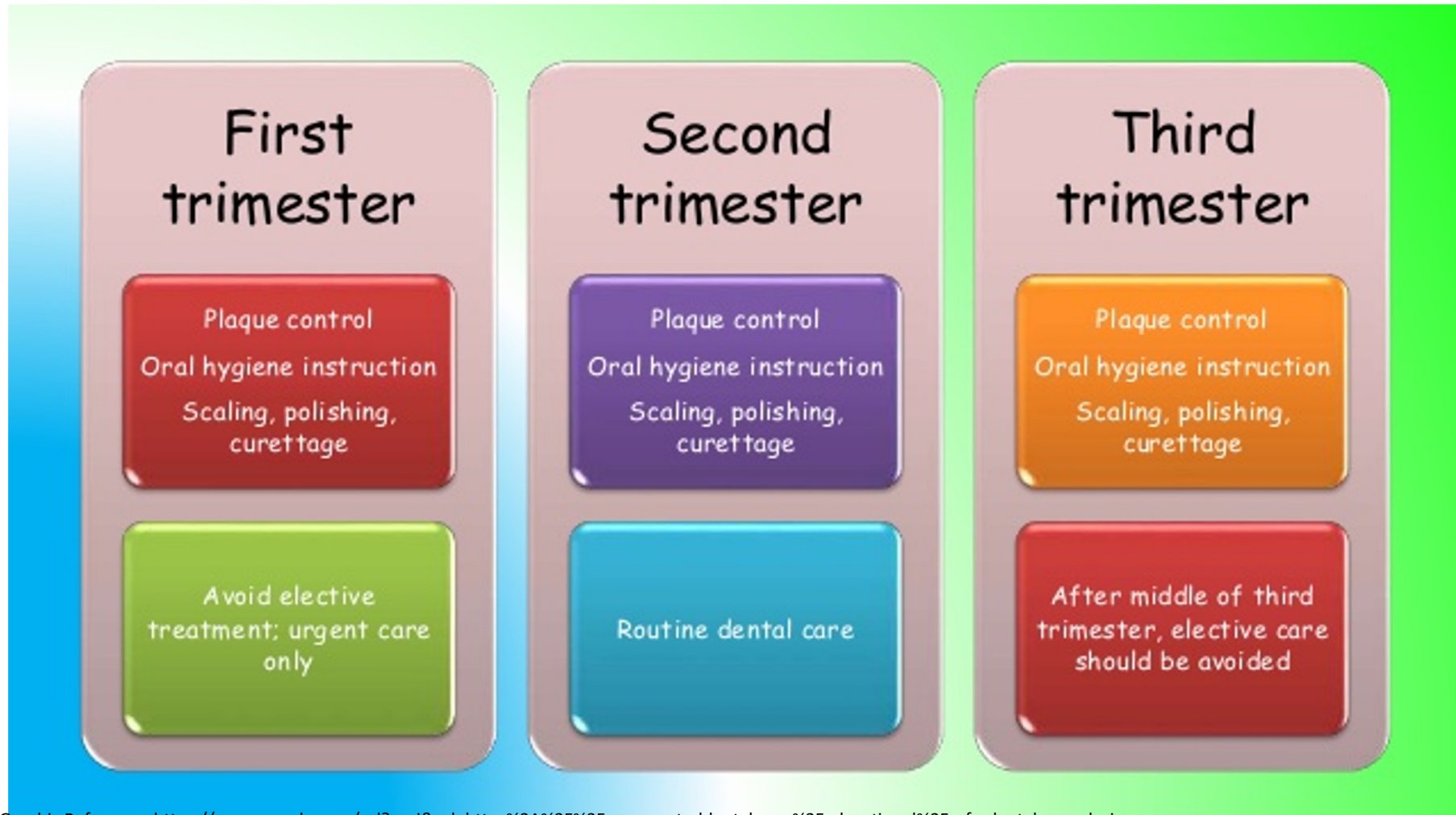


A Dental Visit at the Doctor?



Prenatal Visits

- The I-RDH evaluates several things such as plaque index, gingival health, dental caries, presence of disease, etc.
- Pregnant mothers receive an oral health assessment at initial appointment when pregnancy is confirmed
- Each mom is scheduled a comprehensive dental exam, and all identified dental needs are scheduled.
- At each subsequent visit, oral hygiene instructions are tailored to the applicable trimester and/or symptoms the mother is having
 - Morning sickness
 - Cravings
 - Bleeding gums



A Dental Visit at the Doctor?



After delivery, care is continued for both mom and baby at follow-up medical appointments.

A Dental Visit at the Doctor?

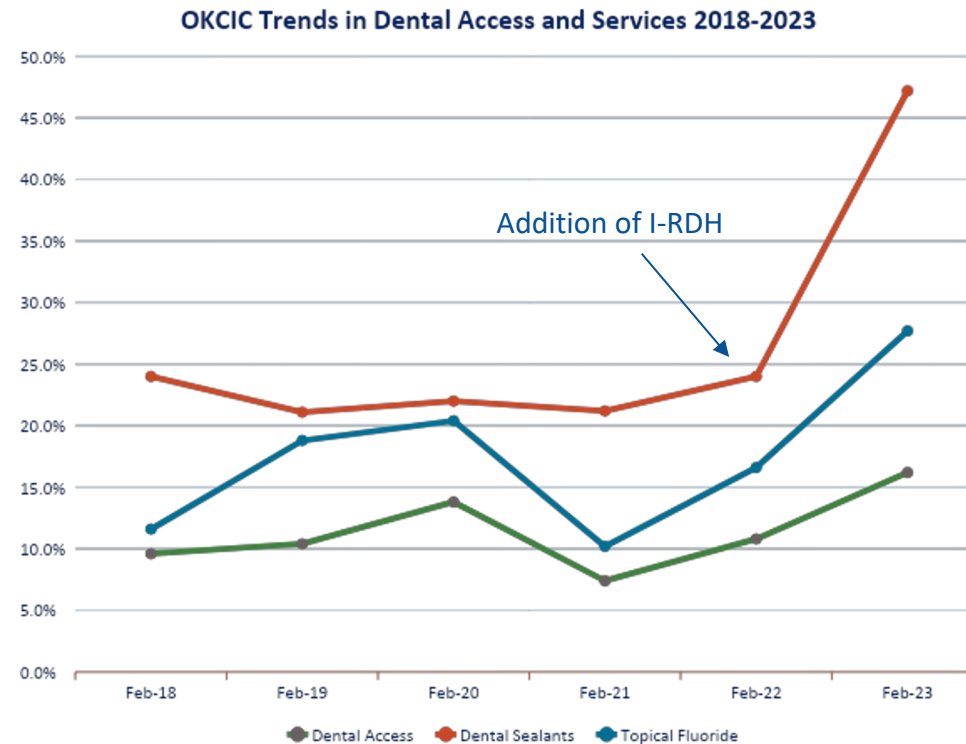
OKCIC's Newest I-RDH Addition:

- OKCIC Now has a full-time I-RDH in the Metabolic Center, providing oral screenings and access to care to our OKCIC's highest risk diabetic patients
- The I-RDH also bridges the gap for whole-health diabetic care by also screening for diabetic retinopathy
 - Utilizing a portable retinal camera
 - Images read by OKCIC Optometrists



Improvements in Dental Quality Metrics 2018-2023

- Since the addition of the first I-RDH, OKCIC has seen a significant increase in each of the three quality measures reported to Indian Health Services.
 - Dental Access
 - Dental Sealants
 - Topical Fluoride



Reported Benefits of the I-RDH Model from OKCIC's I-RDH's

- * Provides a break from chairside skills and repetitive movements
- * Provides for built-in coverage if a Clinical RDH is suddenly out (no patients cancelled!)
- * Becoming an integral part of the Medical team

Medical-Dental Integration is on the Map...

CDC Initiative— *Integrating Medical and Dental Care to Improve Health*



The framework will be centered around 4 pillars:



Awareness: Increase understanding about integrated care and the oral-systemic connection across the life span.



Workforce Development and Operations: Empower care professionals and others to work across disciplines to establish organizational structures supporting whole-person integrated care.



Information Exchange: Create structures to share meaningful and actionable health information to support patient care.



Payment: Establish sustainable financing, reimbursement, and incentives to support optimal health outcomes.

Medical-Dental Integration is on the Map...

CMS Oral Health Vision



Improve beneficiaries' health by **integrating oral health** and transforming the health care system to advance health equity, expand coverage and improve health outcomes.

Oral Health Strategy Fundamental Principles



Equity
Focused



Evidence
Empowered



Data
Driven



Integration
Centered



Stakeholder
Engagement



Innovation
Focused

2023 CMS Quality Conference



Integrated Dental Hygiene— A Simple Innovation Yielding Big Results

Presented By
Monica McKee, MPH, RDH
VP Ancillary Clinical Services,
Oklahoma City Indian Clinic



CareQuest

Institute for Oral Health

Medical-Dental Integration

The link between oral health and systemic health — between the mouth and the body — are increasingly clear. And to treat the whole person, our health system needs to recognize these connections and bridge the silos between medical care and dental care.



CareQuest

Institute for Oral Health

Medical-Dental Integration in Action



[Medical Oral Expanded Care \(MORE Care™\)](#)

An initiative that engages primary care practices across the country to integrate oral health competencies and capabilities into primary care offices while building patient-centered referral networks with local dental providers.

[Community Oral Health Transformation \(COrHT\)](#)

An initiative that serves as a learning community for the implementation of medical-dental integration and value-based oral health care. COrHT brings together stakeholders that believe healthy people and healthy communities are interconnected, oral diseases are systemic, and a transformation of health care is necessary for quality of life.

[Dental Data Exchange Project](#)

The Health Level Seven® (HL7) CDA® and FHIR® implementation guides help bridge the communication gap between primary care and oral health care. Publications are designed to facilitate care coordination and create best practices for electronic exchange of patient data between dental and medical professionals.

The American Dental Association

Medical-dental integration emphasizes mouth-body connection

Dental providers look at improving overall health outcomes through increased collaboration with physicians



<https://adanews.ada.org/ada-news/2022/october/medical-dental-integration-emphasizes-mouth-body-connection/>

Where Do We Begin???

- * Research available resources and evidence based best practices
 - * Feel free to use our outcomes as supporting evidence to gain approval
- * Request a 6 month pilot program and measure your outcomes (OKCIC measured potential missed opportunities)
- * If able, look into grant funding to help launch a pilot program.

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Questions?

Ask now, or contact me later!



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Discussion:

- **How else have you seen medical-dental integration work well?**
 - **Providing dental services in other departments**
 - **Pediatrics, Behavioral health, WIC, etc**
 - **Providing non-dental services in the dental setting**
 - **Pediatrics, Behavioral health, SDOH, etc**
- **Has your clinic tried something that didn't work well?**
- **What challenges has your clinic faced with integration?**



A scenic landscape featuring a vibrant rainbow arching across a valley filled with dense evergreen and deciduous trees. In the background, misty mountains rise under a sky with scattered white and grey clouds. The overall atmosphere is serene and natural.

Oral Health ECHO questions or topic suggestions?

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Thank You!



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