Florida Oral Health Alliance

Meeting
Thursday, Dec. 14, 2017

Twitter: @FL_OH_Alliance
#OH2020FL
Result:
All Florida children, youth and families have good oral health and well-being, especially those that are vulnerable.
Headline Indicator #1: Percentage of Medicaid-eligible Children Ages 0 - 20 Receiving any Dental Services

Source: Florida Form CMS-416 line 12a data retrieved in July 2017 from the Florida Institute for Health Innovation.
Headline Indicator #2: Percentage of Medicaid-eligible Children Ages 1 - 20 Receiving Preventive Dental Services

Source: Florida Form CMS-416 line 12b minus <1 data retrieved in July 2017 from the Florida Institute for Health Innovation.
Meeting Results

By the end of the meeting participants will have:

- Discussed emerging issues in oral health with a focus on the use of silver diamine fluoride
- Received an update on the Florida Oral Health Alliance Medical/Dental Integration (MDI) pilot
- Received an update on Florida Oral Health Alignment Network activities
- Learned about innovative ways to utilize Geographic Information Systems (GIS) to map oral health care gaps and target interventions
- Reviewed proposed structure for Florida Oral Health Alliance subcommittees and discussed next steps
Ethics Rounds: Death After Pediatric Dental Anesthesia: An Avoidable Tragedy?
Silver Diamine Fluoride. This Changes Everything.
Advantage Arrest

- **USA Claims**
  - FDA cleared as a dentinal hypersensitivity treatment *(similar to fluoride varnishes)*
    - For use in adults over the age of 21.
    - Increases Dentinal Hardness
    - Painless, Blocks dentinal tubules

- **Canadian Claims**
  - Prevents Tooth Decay
  - Arrests the progress of an already formed cavity in primary teeth.
  - Arrests the continuation of a cavity that has already formed in primary teeth.
  - Helps arrest the progress of an already formed cavity in permanent teeth.
  - Helps arrests the continuation of a cavity that has already formed in permanent teeth.
  - Helps to temporarily reduce (painful) tooth sensitivity due to air exposure in adults.
In short, one drop of SDF has the same amount of F as one liter of properly fluoridated water.
Toxicity

One Drop of SDF

=  

One Liter of Water @ 1 ppm F
Uses

• **Caries Arresting Use**
  o Stand alone treatment
    ✷ Arrest and leave alone
    ✷ Arrest and fill cavity (SMART Technique?)
  o Around existing restoration margins (e.g. crowns)
  o Buys time
    ✷ Exfoliation
    ✷ Hospital availability

• **Fluoride Tx**
• **Sealant??**
• **Indirect Pulp Cap material??**
• **As a liner under restorations??**
• **Other?**
How it works

- Forms silver-protein conjugates in decayed surfaces
- Increases resistance to acid dissolution and enzymatic digestion.\(^{11}\)
- Hydroxyapatite and fluoroapatite form on the exposed organic matrix, along with the presence of silver chloride and metallic silver.\(^{5}\)
- Increases in mineral density and hardness while the lesion depth decreases.\(^{5}\)
- Inhibits the proteins that break down the exposed dentin organic matrix: matrix metalloproteinases;\(^{11}\) cathepsins;\(^{12}\) and bacterial collagenases.\(^{5}\)
- Silver ions act directly against bacteria in lesions by breaking membranes, denaturing proteins, and inhibiting DNA replication.\(^{13,14}\)
- Ionic silver deactivates nearly any macromolecule.
- Silver diamine fluoride outperforms other anti-caries medicaments in killing cariogenic bacteria in dentinal tubules.\(^{15}\)
- Silver and fluoride ions penetrate ~25 microns into enamel,\(^{16}\) and 50-200 microns into dentin.\(^{17}\) Fluoride promotes remineralization, and silver is available for antimicrobial action upon release by re-acidification.\(^{18}\)
Silver Precipitation in Dentinal Tubules

Image courtesy of Jeremy Horst
The effect of SDF on biofilm formation

The SDF-treated teeth showed a significant reduction in *S. mutans* viability and the biofilm formation compared to untreated control teeth.
Advantage Arrest

• Does not stain sound enamel or dentin
• Does not stain when preventing sensitivity
• Does discolor when applied on demineralization
  o The color changes are like naturally arrested caries or darker. It is a signal to both clinician and patient that something is happening.
• Discolors soft tissue, and any other objects it touches
  o a few hours to appear
  o soft tissue fades in a few days
Advantage Arrest

- If stain is an issue
  - can be covered with Glass Ionomer or other restorative
  - Potassium Iodide has also been used to reduce the staining
    - Temporarily Reduces stain, does not affect efficacy
- **Do not light cure, air dries, excess can be wiped away after application**
- **Can be reapplied at intervals of > one week;**
  - one application is normally sufficient 75%
  - two applications separated by a week 95%
- Blue liquid, Light Sensitive
- 8 ml bottle
- 30 pack of unit-doses with applicators
- 3 year shelf life
Before and After SDF

Images courtesy of Dr. Jeanette MacLean
Impact

• Some numbers from a pediatric dentist (Dr. Jeanette MacLean – AZ) that demonstrate what SDF and SMART have done in terms of reducing sedation cases.
  o Practice is approximately 18% Medicaid with nearly 4,000 active patients of record
  o Year: 2014 - 340 oral sedation cases (i.e. pre-SDF)
  o 2015 - 258 (got SDF in May)
  o 2016 – 189
  o 2017 - 111

• Referred zero patients for GA in 2017.
**Guidance**

- **Caries Arresting Use**
  - Per tooth application and reimbursement (ADA 2018)
  - 2x a year (FL Medicaid)
  - Primary and permanent teeth
  - Applications separated by at least 2-3 weeks?
  - Restorations
    - Same day?
  - Should D1354 be recouped if any D2xxx, D3xxx or ext code is billed on same tooth within 6 months after application?

- **Topical Fluoride???
- **Sealant???
CDT Codes

- D1354 Interim application of caries arresting medicament – Per tooth (in 2018)
- Filling – class ionomer cement (D2330-D2394)
- D1208 – fluoride application
- D1351 – Sealant
- D3120 – indirect pulp cap
- D9910 – Application of a desensitizing medicament
Other Issues

- Case Selection
- Curing?
- Timing of placing fillings
- Informed consent
- Patient acceptance
- Provider acceptance
Case selection

UCSF identifies key candidates

• High risk for caries
  o Salivary dysfunction secondary to cancer treatment, Sjorgen’s syndrome, polypharmacy, aging or methamphetamine abuse
  o Severe early childhood caries

• Patients who cannot tolerate standard treatment for medical or psychological reasons
  o Precooperative children, the frail elderly, individuals with severe cognitive or physical disabilities, dental phobias, and immunocompromise

• Patients with more lesions than can be treated in one visit
  o Multiple quadrants, dental school setting

• Lesions that are difficult to treat
  o Crown margins, root caries

• Patients without access to dental care
Clinical Scenarios

• Pre-cooperative behavior
• Avoid or delay deep sedation or general anesthesia
• Incipient lesions, including interproximal “watch” areas
• Hypoplastic, hypersensitive molars
• Indirect pulp therapy, place under crowns
• Hypersensitivity

• Buying time
  o Backlog for GA, waiting on finances, waiting on age/weight/health status of patient, waiting for behavior and cooperation to improve

• Roots caries
• Recurrent decay
  o Crown and filling margins
• Special Needs, elderly, medically compromised
• Lack of access to care
Patient Acceptance

Pro
• Non-invasive
• Avoid anesthesia sedation
• Buys time
• Low cost

Con
• Stains teeth black
• Not well known – patients don’t know to ask about it
Provider Acceptance

• Still an unknown
• New information coming out all the time
  o Best practices
  o Coding
  o Uses
  o Guidance
• Growing acceptance
• Need to be careful with referrals to specialists – must recognize or know about SDF and understand stains are not decay
Medical Dental Integration
Improving Access to Oral Health for Children
Florida Oral Health Alliance
Overview

Medical Dental Integration (MDI) Pilot Overview

The Florida Institute for Health Innovation (FIHI) is exploring a piloting an innovative strategy for improving access to dental services for children in Miami-Dade and Palm Beach Counties. The program aims to improve oral health knowledge and increase access to dental services by training dental hygienists as Community Dental Health Coordinators and integrating them into pediatric primary care practices.

MDI Objectives

• **Create a collaborative focus** - by including the Florida Dental Association, Florida Dental Hygienists’ Association, American Academy of Pediatrics – Florida Chapter and the Florida Oral Health Alliance

• **Leveraging routine pediatric visits to improve dental education and referrals**

• **Increase access to dental care and preventative services for children** - for ~1,000 Medicaid-eligible children in Miami-Dade and Palm Beach Countries
DH/CDHC Scope of Work

Tasks to be performed by dental hygienist/community dental health coordinator

• Oral health screening
• Fluoride varnish
• Anticipatory guidance
• Provide referral to a dentist and assist in the “warm handoff” to establish a dental home for patients

CDHC Role:

– Patient navigation and coordination of support services
– Health promotion and community engagement
– Serve as conduit between underserved communities and dentist
Determining Success

The FIHI MDI Pilot’s evaluation for success will consist of:

• **Securing MOUs with dental and pediatric practices** in Miami-Dade and Palm Beach Counties for participation in the MDI Pilot

• Development of the **program’s business plan, protocols and successful implementation** of the MDI pilot

• Measuring FIHI MDI Pilot data: Number of pediatric patients seen by the CDHC; number of “**soft handoffs**” to a dental home

**Overarching Goal**

The FIHI MDI Pilot aims to develop a self sustaining medical-dental integration model that is able to extend beyond the initial grant period. The FIHI MDI Pilot will lay the groundwork for best practices for medical-dental integration for the State of Florida, increasing referrals to establish dental homes and improving access to preventative care.
FDA Meeting: Key Themes and Concerns

• Ensure financial compensation model works to ensure sustainability for covering the salary of the DH
• Ensure the model does not disrupt other mechanisms in place to get children and families to a dental home
• Consider using a Dental Assistant (DA) versus a DH
• Work with the DH and DA training schools to think about the pipeline of future CDHC/DH’s
• Opportunity to use this as a way to begin working closer with the Florida Medical Association (FMA) and their medical colleagues given that the model of global payment would require both fields to work closer together
Florida Oral Health Alignment Network Update

Deborah Foote, Managing Director, Oral Health Florida
Use of Geographic Information Systems (GIS) For Member Outreach Campaigns

Socrates Aguayo, MPA, PCMH-CCE
12/14/2017
GIS Overview

GIS Mapping Software Converts Table Data into Geographic (visual) Layers
Examples of How the Health Plan Uses GIS

- Analysis of overall member/community demographics
- Analysis of member clinical gaps in care and non-clinical barriers to care
- Analysis of provider network across service area
- Planning Health Promotion Outreach (Mail/Phone) Campaigns
- Planning Targeted Community-level Clinic Day Events
- Community Partner/Provider Selection (Churches, Schools, CBOs, FBOs)
Using GIS to Support Outreach Campaign

**Planning**
- Data & GIS Analysis (<em>both</em>)
  - Clinical/Gaps in Care
  - Demographics
  - Providers/Partners
- Site Selection (<em>both</em>)
  - Identify targeted Community
  - Provider Selection
  - Partner/Host Selection
  - Staff Assignments
- Clinic Dates (<em>both</em>)
  - Staff/Resource Planning

**Outreach**
- Outreach (<em>MCO</em>)
  - Phone
  - Mail
- Sched Appts (<em>MCO</em>)
  - Education
  - Referrals
  - Member Incentives
- Confirm Eligibility (<em>both</em>)
  - Medicaid
  - No Recent Dental Visit

**Mobile Clinic Days**
- DOH/Partner Staff Onsite
  - RDH or Dentist
  - Coordinator
- MCO Staff Onsite
  - Health Rep
  - Education/Referrals
- Mobile Clinic Setup
  - 1-2 Exam Room
  - Supplies
Using GIS to Support Outreach Campaign

Data Layers can be combined, queried, to yield targeted results

Sample query...

- Spanish Speaking
- Needs Well Child Exam
- Within 1 Mile Radius of Target Location
Opportunities & Challenges of Using GIS for Member Outreach

Address-Level Targeting

Zip Code Level Targeting

Address Level Targeting

Challenges...
- Limited Geo-coding Solutions
- Time/Resources
- Staff Training
- Sharing Data with Non-Users
Data Sources Used
- Member Enrollment Data
- Medical/Dental Claims Data
- Provider (Medical/Dental) Locations
- U.S. Census other Demographic
- Schools (Location, Enrollment Info, Title I)
- Boundary Files (County, Zip Codes, school boundary)
- Transportation (Streets, highways, bus/train routes)
- Other Publicly Available Data

GIS Software Used
- MapInfo Pro (Pitney Bowes)
- GeoMap
Proposed Subcommittee Structure

This document provides an overview of the Florida Oral Health Alliance Subcommittee structure and functions. The purpose of each subcommittee is to develop resources that can support grassroots organizations and local coalitions throughout the state in implementing targeted oral health interventions that improve access and utilization of dental care and preventive oral health services for Florida’s vulnerable children. Each subcommittee focus area was selected based on prioritized strategies derived from the Florida Oral Health Alliance Strategic Plan.

Subcommittee Structure
Subcommittees will meet in between bi-monthly Florida Oral Health Alliance (FOHA) meetings via conference call between December 2017 and August 2018. Each subcommittee has specific goals, objectives and proposed deliverables as outlined below that can be updated based on the needs of community partners and the vision of subcommittee members.

Subcommittee member responsibilities:
• Identify a subcommittee lead to facilitate meetings with assistance by the Florida Institute for Health Innovation (FIHI) team
• Attend meetings and/or send a representative to maintain continuity
• Review, write and/or provide input to subcommittee documents and materials
• Report out during FOHA meetings and subcommittee meetings
• Conduct outreach to engage additional partners in subcommittee initiatives as needed
• Work closely with local oral health coalitions and grassroots organizations to ensure alignment with community needs
Proposed Subcommittee Structure

Review focus areas:

1. **Oral Health Hot-Spotting**
   - Function: Identify multi-sector oral health data available to be able to guide the development and implementation of targeted oral health interventions (oral health hot-spotting).

2. **Communications/Messaging**
   - Function: Develop a streamlined and coordinated communications and messaging strategy to inform, educate and galvanize oral health stakeholders to take action to improve oral health in Florida.

3. **Medical/Dental Integration**
   - Function: Investigate the feasibility and sustainability of embedding dental hygienists into pediatric primary care practices or Federally Qualified Health Centers (FQHCs) in order to increase access and utilization of dental care among Medicaid-eligible children in Florida.
Discussion

- Which subcommittee most aligns with and supports your current work?
- What key relationships do we need to facilitate to engage additional partners?
- What resources do we need to drive the work forward? Are there any workshops that might be useful to gain knowledge/best practices?
- Next steps

Next Virtual Meeting:
Friday, February 9, 2018
10 a.m. to 12 p.m.