



Oral Health Partnership Core Group Meeting November 10, 2017

Seven Hills Foundation and
Tufts University School of Dental Medicine

Agenda

- Tier III overview (funding ends 7-31-18)
 - Deliverables
 - National PCORI Awardees Meeting
- Revisit Tier II research proposal draft: Chronic disease management intervention to reduce cavities (tooth decay)
- Consider reframing Tier II proposal from 'research' to an initiative to support good oral health for adults with IDD as a human right
 - PCORI Engagement Award option
- Brainstorming exercise
- Plan for Tier III activities



Tier III Deliverables

- **Quarterly Reports** – Nov., Feb., May
- **Final Report** – Aug.
- **Proposal Opportunity Plan: Potential funders list**
 - Draft – Nov.
 - Updated – May, Aug.
- **Dissemination & Communication Plan**
 - Draft – Feb.
 - Final – Aug.
 - Report to community about proposal – Aug.
- **Letter of Intent (LOI) for PCORI funding**
- **Major sections of a proposal to PCORI or alternative funder** – Aug.



Review of Tier II CER proposal draft: *“Chronic disease management intervention to reduce cavities”*

- What we proposed and why
- Information about a new non-research-oriented PCORI funding option – Engagement Awards (LOI due 2/1/2018)



Tier II CER* Proposal Draft

- We proposed: testing a *Chronic disease management intervention to see if it reduced caries (tooth decay) in adults with IDD*
- PCORI proposal requirements:
 - Must compare the outcomes of 2 or more interventions that are **evidence-based**
- Our problem:
 - NO interventions have been proven effective in improving oral health for adults with IDD
 - We needed to ‘borrow’ interventions **proven effective** with other dental pt. groups
- *CER – Comparative Effectiveness Research



Proposal: Why 'Tooth Decay' Outcome

- Tooth decay causes pain, poor nutrition, serious infections, and may affect behaviors at home & work. Also leads to dental office interventions associated with stress/anxiety/fear.
- Limited data suggest adults with IDD in Central MA (Glavin Clinic) have > untreated caries (40.1%) than total TDF clinic patients (32.2%)
- Many factors can modify tooth decay process and ***it may be possible to influence them***
 - Saliva
 - Frequency of sugar intake (diet, beverages, meds, supplements)
 - Fluoride use
 - Drinking fluoridated water
 - Brushing with fluoridated toothpaste
 - Having dental professionals apply fluoride in office



Proposal: Why CDM Intervention

- Chronic Disease Management (CDM) strategies:
 - Package of strategies that – combined together – help prevent or manage a disease
 - Most useful with health conditions where:
 - At-home behavioral changes are needed to prevent/ treat disease
 - e.g., childhood obesity, childhood asthma, diabetes
 - CDM strategies have been effective in managing Early Childhood Caries (ECC): Reduced new cavities, dental pain, OR referrals
 - Relied on:
 - Individual Risk Assessment
 - Family support/coaching linked directly to individual/child's needs re: diet, brushing, flossing, arranging dental visits
 - Dental office interventions to repair/restore teeth



Tier II Research Proposal #1

- Which of the following variations of a chronic disease management intervention for dental caries in adults with IDD is **most effective** at reducing the onset and recurrence of dental caries:
- Following completion of an Individual Risk Assessment:
 - Intervention Group A: Implementation of a patient-specific management plan including tailored preventive dental services and supports *for both the adult with IDD AND a caregiver*
 - Intervention Group B: implementation of a patient-specific management plan including tailored preventive dental services and supports *for the adult with IDD only*
 - Control Group: Participants follow their usual and customary oral health practices, including preventive dental visits and oral home care services.



Tier II Research Proposal #2

- Which ***topical fluoride application protocol*** is most effective at reducing dental caries in adults with IDD?
- Comparisons under consideration:
 - Comparing **different forms of application** (professionally applied compared to self/caregiver applied)
 - Comparing **different frequencies of professional applications**
 - four times/year as currently allowed by MassHealth/Medicaid for adults with IDD vs. other frequencies (e.g.):
 - Frequency allowed by private dental benefit providers in Massachusetts
 - Frequency recommended by dentists following CAMBRA (caries management by risk assessment) protocol.



Reframing next stage of Tier III from CER research proposal to an initiative focused on creating a framework to support good oral health for adults as a human right

PCORI Engagement Award Initiative
(‘research- support not research’)



PCORI Engagement Award - Franciscan Children's Hospital

- This project aims to develop a network to connect parents of children with medical complexity (CMC) to each other and to their key healthcare providers to identify the most common challenges for CMC in the healthcare continuum.
 - Four parent-generated online surveys conducted to identify the obstacles parents encounter when obtaining medical care for their child with complex medical needs
 - A meeting of project collaborators to identify root causes and potential solutions to parent-identified problems
 - A survey administered to obtain additional parent input regarding these potential solutions
 - Final collaborators meeting to formalize project recommendations for future research efforts.



Framing oral health for adults with IDD as a human right

- Dr. Morgan



Framing oral health for adults with IDD as a human right

- Goal:
 - Define basic package of services & supports to ensure good oral health for adults with IDD in Massachusetts
 - From availability of tooth paste to access to dental specialists
 - Spell out policy changes that would be required to get there
- Elements would be same (if not more) as those in Tier II CER research proposal
- Activities would focus on developing workable policy and practice solutions instead of developing a rigorous scientific research study but



Attributes of an Ideal Oral Health Care System*

- Integration with the rest of the health care system
- Emphasis on health promotion and disease prevention
- Monitoring of population oral health status and needs
- Evidence-based
- Effective
- Cost-effective
- Sustainable
- Equitable
- Universal
- Ethical
- Includes continuous quality assessment and assurance
- Culturally competent
- Empowers communities and individuals to create conditions conducive to health
- (*Tomar & Cohen, 2010)



Can we use an Engagement Award to define the basic package of services & supports needed to promote oral health/reduce new and recurrent cavities in adults with IDD who live in community settings?

Recall . . .



Cause of Tooth Decay



- For tooth decay to occur, bacteria (plaque) use sugars in your diet to produce acids which dissolve the tooth surface.



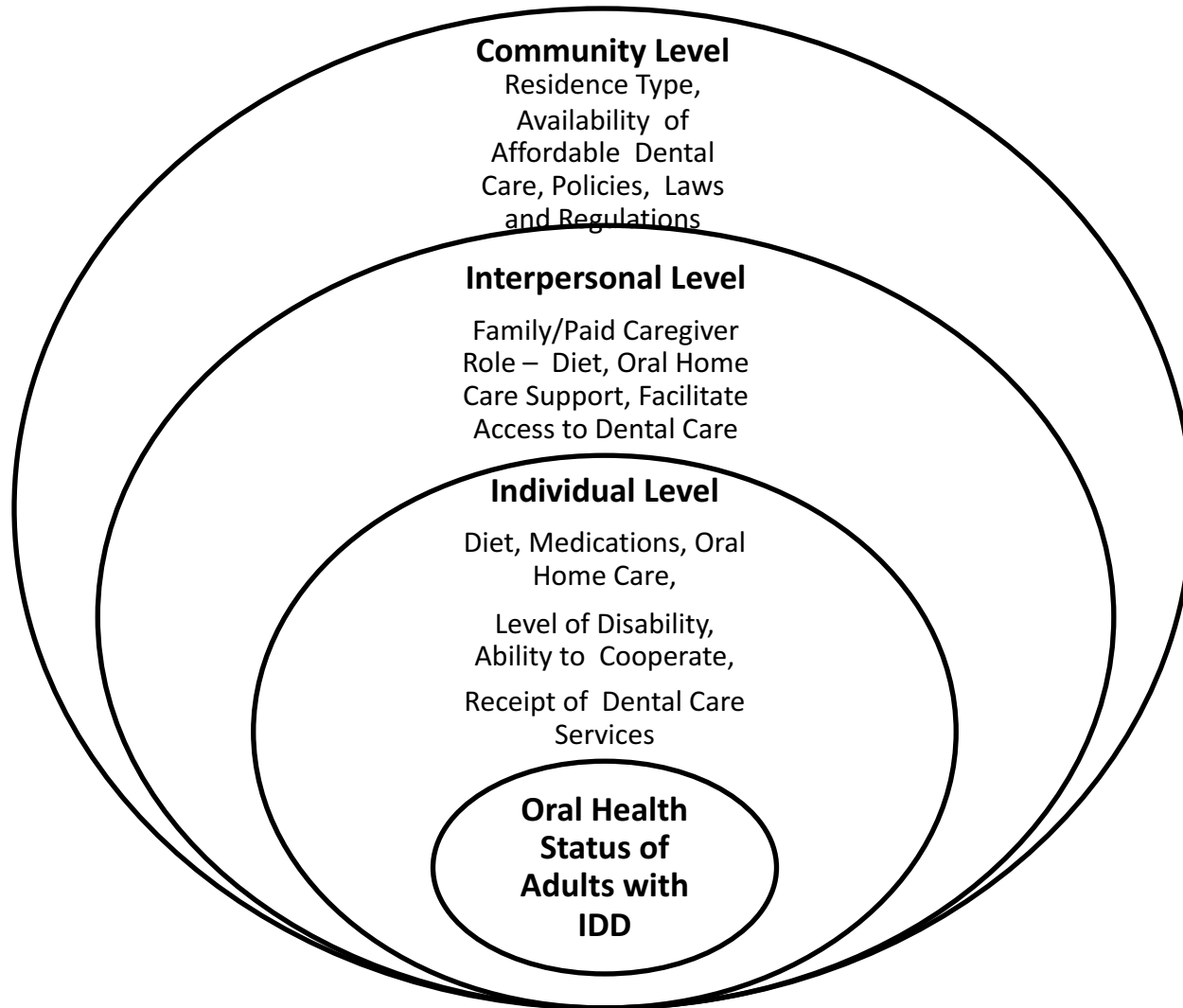
Many Factors Can Modify Tooth Decay Process

- Saliva
- Frequency of sugar intake
 - Sugar-sweetened food and beverages
 - Medication
 - Nutritional Supplements
- Fluoride Use
 - Drinking fluoridated water
 - Brushing with fluoridated toothpaste
 - Having dental professionals apply fluoride in dental office (or sometimes in other community-based settings)
- Other factors?



Spheres of Influence

Oral Health of Adults with Disabilities



Your List of Top Oral Health Influences (2016)

- **Individual & caregiver influences**
 - Genetic factors/meds that increase risk
 - High sugar diet
 - Unhealthy behaviors
 - Brushing teeth at least 2x/day
 - Flossing teeth at least 1x/day
 - Uncooperative behaviors
- **Dental care influences**
 - Scared/anxious about visiting dentist
 - Financial barriers re: visiting dentist
 - Barriers to visiting dental specialists
- **Others?**



ASPiRE Participants: How many times/day do you brush your teeth? (2015)

# Times/day	0	1	2	3	4	>4
% Participants (#) (n=84)	10.7% (9)	22.6% (19)	46.4% (39)	16.7% (14)	1.2% (1)	2.4% (2)



ASPiRE Participants: How many times/day do you floss your teeth? (2015)

# Times/day	0	1	2	3	4	>4
% Participants (#) (n=84)	64.3% (54)	19.0% (16)	9.5% (8)	4.8% (4)	2.4% (2)	0



ASPiRE Participants (cont.)

	% (n) Yes Responses	% (n) No Responses
Do your teeth ever hurt? (n=84)	34.5% (29)	65.5% (55)
When you brush your teeth does someone help/ instruct you? (n=84)	19.0% (16)	80.9% (68)
When you floss your teeth does someone help/ instruct you? (n=84)	16.7% (14)	83.3% (70)
Do you have all the tools you need to care for your teeth (n=84)		
Tooth brush	100% (84)	0
Tooth paste	97.6% (82)	2.4% (2)
Floss	51.2% (43)	48.8% (41)
Mouth wash	64.3% (54)	35.7% (30)



What additional information do you need? (2016)

- Does DDS require individuals to incorporate oral health into their ISP? If not, could that be suggested?
- Does SHF require and train staff to ensure participants in group and shared living homes brush properly and regularly? If not, should staff training be suggested?
- Other information?



Brainstorming Exercise

What could be done – thinking creatively – to influence these factors and reduce the risk of tooth decay?

- Caregiver perspective
- Administrator perspective
- Participant perspective



Resources

- Just to have on hand



Prevalence of Dental Disease among Glavin Clinic Patients (2009/10)

Dental Disease	Glavin Clinic Patients* (dentate only=469)	Total TDF Clinic Patients (Dentate only=4218)
Caries experience	436 (93.0% of Glavin pts.)	3705 (87.8% of total TDF pts.)
Untreated caries	188 (40.1% of Glavin pts.)	1359 (32.2% of total TDF pts.)
Periodontitis	418 (89.1% of Glavin pts.)	3369 (80.3% of total TDF pts.)



Patient Characteristics – at Glavin and at all TDF Clinics Combined

Patient Characteristics	Glavin Clinic Patients		Total TDF Clinic Patients
Gender			
Male	310 (58.9%)		2714 (57.4%)
Female	216 (41.1%)		2018 (42.6%)
Age			
20-39	119 (22.6%)		1174 (24.8%)
40-59	296 (56.3%)		2471 (52.2%)
60 and older	111 (21.1%)		1087 (23.0%)
Residence Type			
Home w/family	49 (9.3%)		625 (13.2%)
MA DDS community	406 (77.2%)		3208 (67.8%)
Home independently	5 (1.0%)		97 (2.0%)
MA DSS facility	41 (7.8%)		583 (12.3%)
Nursing home	7 (1.3%)		57 (1.2%)
Other	13 (2.5%)		117 (2.5%)



Characteristics (continued)

Patient Characteristics	Glavin Clinic Patients (n=526)	Total TDF Clinic Patients (n=4732)
Cooperation Levels		
0 – Doesn't enter clinic and/or dental chair	1 (0.2%)	10 (0.2%)
1- Sits in dental chair only	1 (0.2%)	41 (0.9%)
2-Allows brushing, visual exam or both	46 (9.1%)	396 (8.7%)
3 – Allows dental exam & dental instrument placement with behavioral assistance	92 (18.1%)	690 (15.1%)
4 – Allows dental procedures; requires behavioral assistance >50% of time	147 (29.0%)	1013 (22.2%)
5 – Allows dental procedures; requires behavioral assistance <50 of time	110 (21.7%)	828 (18.1%)
6 – Allows dental procedures without assistance	110 (21.7%)	1592 (34.8%)



Fluoridated water - MA

