Finding Meaning with Interprofessional Oral Health Practice

Our mission is to improve the oral health of all.
What is “integration”?

• “Integrated” is frequently used to refer to a package of preventive and curative health interventions for a particular population group.

• “Integrated health service” can refer to multi-purpose service delivery points – a range of services for a catchment population is provided at one location.
  – “Integrated services” to some means achieving continuity of care over time.

• Integration can also refer to the vertical integration of different levels of service – for example a regional hospital, health centers and private practice.

• Integration can also refer to integrated policy-making and management which is organized to bring together decisions and support functions.

• Integration can mean working across sectors.

• Integration can mean that the insurance function and health care provision are provided by the same organization.
INTEGRATED CARE
- An interdisciplinary approach to health care that incorporates specific procedures of other disciplines into daily practice.

COORDINATED CARE
- Using a continual care pathway approach that allows the patient easy navigation and understanding their needs within the health care system.

INTERPROFESSIONAL PRACTICE

INTEGRATED CARE
- Clinical Integration
- Population & System Analysis
- Risk Stratified Care

COORDINATED CARE
- HIT & Telehealth
- Referral & Care Management
- Patient Engagement
“Healthcare is an exercise in interdependency—not personal heroism... a need for greater teamwork and to ask, what am I part of?”

- DON BERWICK

President Emeritus and Senior Fellow, IHI
Relative Health Care System Performance and Spending in 11 High-Income Countries.
## Where We Are Headed...

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fragmented Payment</td>
<td>Unified Budget</td>
</tr>
<tr>
<td>Hospital as the Center</td>
<td>Home as the Hub</td>
</tr>
<tr>
<td>Excellent Soloists</td>
<td>High Performing Teams</td>
</tr>
<tr>
<td>Moving People</td>
<td>Moving Knowledge</td>
</tr>
<tr>
<td>What is the Matter with You?</td>
<td>What Matters to You?</td>
</tr>
</tbody>
</table>

- Dr. Don Berwick, IHI [NOSORH Annual Session 2016]
APM Framework

The Framework is a critical first step toward the goal of better care, smarter spending, and healthier people.

- Serves as the foundation for generating evidence about what works and lessons learned
- Provides a road map for payment reform capable of supporting the delivery of person-centered care
- Acts as a "gauge" for measuring progress toward adoption of alternative payment models
- Establishes a common nomenclature and a set of conventions that will facilitate discussions within and across stakeholder communities

Source: HCPLAN
Increased Care Coordination: 50 New Patients

Figure. Breakdown of the US adult population (aged 19-64 years) by whether they visit a dentist or physician during the year and whether they have dental benefits. Source: Agency for Healthcare Research and Quality. 

- 55.2 million: Do Not Visit a Physician
- 19.4 million: Visit a Physician for a Wellness Visit and Have Private Dental Benefits
- 14.2 million: Visit a Physician for a Specific Health Issue and Have Private Dental Benefits
- 33.9 million: Visit a Physician and Do Not Have Private Dental Benefits
ADA HPI: Among those newly diagnosed with type 2 diabetes, periodontal intervention reduces total healthcare costs and lowers total type 2 diabetes healthcare costs (\(-\$1799\) to \(-\$408\)), compared to those with no intervention.

Figure 1: Astra-Columbia retrospective claims analysis

<table>
<thead>
<tr>
<th>Condition</th>
<th>ERG Score for Participants with</th>
<th>ERG Score for Participants without</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes (CAD and CYD)</td>
<td>8.26</td>
<td>4.38</td>
</tr>
<tr>
<td>Coronary artery disease (CAD)</td>
<td>27.9%</td>
<td>16%</td>
</tr>
<tr>
<td>Diabetes (CYD)</td>
<td>4.79</td>
<td>9%</td>
</tr>
<tr>
<td>Partidentities</td>
<td>No</td>
<td>4.12%</td>
</tr>
<tr>
<td>Medical costs</td>
<td>29.2%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Lower total medical costs excluding pharmacy.
“Progress is impossible without change, and those who cannot change their minds cannot change anything.”

- GEORGE BERNARD SHAW
  Irish playwright, critic, polemicist and political activist
Change is not always easy

And weight is not always indicative of poor overall health! A very muscular man can weigh 250lbs+ and be very healthy. Another man can weigh 180 lbs and have a high cholesterol, diabetes, anything! Weight is a very very poor indicator of health.

Absolutely not! I understand the correlation between general health and dental health. But, come on... We are dental professionals... Let’s not attempt to cross over into medicine.

There is always a better way to say things. If you think your patient is heavier then talk about nutrition and

Enough it’s enough... What next? Discuss their emotional well being, mental illness.... Let’s focus on teeth and gums...
Figure 2. Why do you not take BP readings? (Check all that apply)

- Too little time in appointment: 61
- I do not see the need: 96
- Uncomfortable with skill to do this task: 26
- Equipment not available: 48
- Unable to refer for care: 5
- No reimbursement or incentive to perform this procedure: 57
- Other: 105
IPP Analysis: Universite de Montreal & Canadian Institutes for Health Research

“What are the barriers and the facilitators of integration of oral health into primary care in various healthcare settings across the world?”


Figure 1 Flow chart of the scoping review.
Barriers

- **Lack of political leadership and healthcare policies**
  - Poor understanding
  - Separate medical and dental insurance
  - Separate specific policy interest
- **Patient’s oral healthcare needs**
  - Patient’s decision to accept or refuse care based on their need perception rather than the assessment of healthcare providers.
- **Lack of effective interprofessional education**
- **Lack of continuity of care / silo practice structures**
- **Implementation challenges**
  - Deficient administrative infrastructure
  - HIT
Health Information Technology systems, and their vendors, are currently a laggard that is stagnating the proliferation of rural IPP:

Facilitators

• Financial and technical support from governments, stakeholders and non-profit organizations.
• Interprofessional education (non-dental providers)
• Collaborative practices
  – Perceived responsibility and role identification
  – Case management
  – Incremental approach
• Local strategic leaders (champions)
• Proximity / Convenience
  – Increasing consumerism
Table 1: The Proposed Levels of Integration with Role identification.

<table>
<thead>
<tr>
<th>Medical Team Tasks</th>
<th>Co-operative Tasks</th>
<th>Dental Team Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PLANNING PHASE:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Complete a readiness assessment</em></td>
<td><em>Initiate provider and staff training</em></td>
<td><em>Complete a readiness assessment</em></td>
</tr>
<tr>
<td><em>Alteration to practice/site policies and procedures to address changes in care</em></td>
<td><em>Create and finalize business and memorandum agreements that include documentation of capacity limitations, HIPAA, target population agreements, etc.</em></td>
<td><em>Alteration to practice/site policies and procedures to address changes in care</em></td>
</tr>
<tr>
<td><em>Developing and implementation necessary documentation, electronic management systems, and ancillary changes to operation</em></td>
<td><em>Formalization of leadership or point of contact teams.</em></td>
<td><em>Identify and implement necessary documentation, electronic management systems, and ancillary changes to operation.</em></td>
</tr>
<tr>
<td><strong>BASIC LEVEL:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Oral health screenings completed on target populations</em></td>
<td><em>Implement a bi-directional care referral process</em></td>
<td><em>Query patients for medical homes and last medical visit</em></td>
</tr>
<tr>
<td><em>Query patients for dental home and last dental visit</em></td>
<td><em>Use of cross-promotional propaganda</em></td>
<td><em>Record body mass index, blood pressure, heart rate, respiratory rate on all patients with readiness referral for intervention</em></td>
</tr>
<tr>
<td><strong>MODERATE LEVEL:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Basic understanding of oral health disease processes and how they can impact well-being</em></td>
<td><em>Establish and engage partnerships or affiliations with community entities assist with community outreach</em></td>
<td><em>Basic understanding of primary care disease management and applied intervention methodology</em></td>
</tr>
<tr>
<td><em>Achieving appropriate phase of meaningful use</em></td>
<td><em>Begin using a depression screening tool when applicable within the target populations</em></td>
<td><em>Creating an appropriate phase of meaningful use</em></td>
</tr>
<tr>
<td><em>Complete pediatric oral health integration (patients receiving an oral health risk assessment, anticipatory guidance, fluoride application, pm referral to dental care team)</em></td>
<td></td>
<td><em>Utilize ancillary personnel to the highest level of their license and scope of practice</em></td>
</tr>
<tr>
<td><strong>HIGH LEVEL:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Implementation and documentation of oral health quality assurance/quality improvement plans and outcomes</em></td>
<td><em>Achieve a high percentage of patients having seen both medical and dental teams each year</em></td>
<td><em>Implementation and documentation of primary care specific quality assurance/quality improvement plans and outcomes</em></td>
</tr>
<tr>
<td><em>Achieve real time analysis and access for the sharing of oral health benchmarks</em></td>
<td><em>Integration of a behavioralist to assist with high risk, low compliance patients in need of behavioral chronic disease management</em></td>
<td><em>Achieve real time analysis and access for the sharing of systemic disease treatment benchmarks</em></td>
</tr>
<tr>
<td><strong>CREATIVE LEVEL:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>A wide-open level that should encourage innovation, allows creativity, and facilitates professional and patient development</em></td>
<td><em>High level medical and dental screenings are completed that result in accuracy with finding undiagnosed disease</em></td>
<td><em>Use of the international statistical classification of diseases and related health problems coding system</em></td>
</tr>
<tr>
<td><em>Population based health planning designed to achieve a geographic distribution of oral health information</em></td>
<td><em>Regular meeting should take place involving all partners affiliates network partners in which updates on care administration and review of performance/quality measurements. Meeting minutes should be completed and disseminated appropriately.</em></td>
<td></td>
</tr>
<tr>
<td><em>The use of phase contrast microscopy to identification of poor health as well as the use of salivary diagnostics to assist with periodontal health, general diagnosis, and patient outcomes improvement</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Conducting research/analysis/PDSA to design appropriate risk factor measures, encourage changes in insurance coverage as well as marketplace design and improving the standard of care.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>A true quality assessment that leads to practice translation and meets identification parameters of the Institute for Healthcare Improvement’s Triple Aim Approach to Healthcare.</em></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medical Team Tasks</th>
<th>Co-operative Tasks</th>
<th>Dental Team Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PLANNING PHASE:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Complete a readiness assessment</td>
<td>• Initial providers and staff training</td>
<td>• Complete a readiness assessment</td>
</tr>
<tr>
<td>• Alteration to practice/site policies and procedures to address changes in care</td>
<td>• Create and finalize business and memorandum agreements that include documentation of capacity limitations, HIPPA, target population agreement, etc.)</td>
<td>• Alteration to practice/site policies and procedures to address changes in care</td>
</tr>
<tr>
<td>• Develop and implement necessary documentation, electronic management systems, and ancillary changes to operation.</td>
<td>• Formalization of leadership or point of contact teams.</td>
<td>• Identify and implement necessary documentation, electronic management systems, and ancillary changes to operation.</td>
</tr>
<tr>
<td><strong>BASIC LEVEL:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Oral health screenings completed on target populations</td>
<td>• Implement a bi-directional cross referral process</td>
<td>• Query patients for medical home and last medical visit</td>
</tr>
<tr>
<td>• Query patients for dental home and last dental visit</td>
<td>• Use of cross promotional propaganda</td>
<td>• Record body mass index, blood pressure, heart rate, respiratory rate on all patients with readiness referral for intervention</td>
</tr>
<tr>
<td><strong>MODERATE LEVEL:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Oral health primary and secondary prevention procedures administered to target populations</td>
<td>• Priority populations are receiving care and a strategic plan is completed to determine process for increasing the number of target populations</td>
<td>• Basic understanding of primary care disease management and applied intervention methodology [understanding treatment goals]</td>
</tr>
<tr>
<td>• Basic understanding of oral health disease processes and how they can impact well-being</td>
<td>• Establish and engage partnerships or affiliations with community entities assist with community outreach</td>
<td>• Nearing or achieving appropriate phase of meaningful use</td>
</tr>
<tr>
<td>• Nearing or achieving appropriate phase of meaningful use</td>
<td>• Complete pediatric oral health integration (patients receiving an oral health risk assessment, anticipatory guidance, fluoride application; pm referral to dental care team)</td>
<td>• Utilize auxiliary personnel to the highest level of their license and scope of practice.</td>
</tr>
<tr>
<td>• Complete pediatric oral health integration (patients receiving an oral health risk assessment, anticipatory guidance, fluoride application; pm referral to dental care team)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Medical Team Tasks**

- Implementation and documentation of oral health quality assurance / quality improvement plans and outcomes
- Achieve real-time analysis and access for the sharing of oral health benchmarks

**Co-operative Tasks**

- Achieve a high percentage of patients having seen both medical and dental teams each year
- Integration of a behaviorist to assist with high-risk, low-compliance patients in need of behavioral chronic disease management
- High-level medical and dental screenings are completed that result in accuracy with finding undiagnosed disease.
- Regular meeting should take place involving all partners/affiliates/network partners in which updates on care administration and review of performance/quality measurements. Meeting minutes should be completed and disseminated appropriately.

**Dental Team Tasks**

- Implementation and documentation of primary care specific quality assurance / quality improvement plans and outcomes
- Achieve real-time analysis and access for the sharing of systemic disease treatment benchmarks
- Use of the international statistical classification of diseases and related health problems coding system

**CREATIVE LEVEL:**

- A wide-open level that should encourage innovation, allows creativity, and facilitates professional and patient development
- Population-based health planning designed to achieve a geographic distribution of oral health infrastructure
- The use of phase contrast microscopy to identify presence of poor health as well as the use of salivary diagnostics to assist with periodontal health, general diagnoses, and patient outcome improvement
- Conducting research/analysis/PDSA to design appropriate risk factor measures, encourage changes in insurance coverages as well as marketplace design and improving the standard of care.
- True quality assessment that leads to practice translation and meets identification parameters of the Institute for Healthcare Improvement’s Triple Aim Approach to Healthcare
How do I get on the path to Creative IPP?
Medical Oral Expanded Care (MORE Care)

MORE Care aims to address health disparities through the integration of oral health into primary care practice and the development of dependable oral health care networks. Using an improvement-based framework, partners work with key stakeholders in their communities and abroad to create a usable model of interprofessional oral health care. MORE Care serves to:

Develop proficient and efficient integrated oral health networks
**INTEGRATION OF CARE**

Develop and test solutions to ease burdens associated with interprofessional practice
**COORDINATION OF CARE**

DentaQuest INSTITUTE
How We Make the Vision

**What we know DESIRED**
- Focus on prevention
- Assess and manage risk
- Monitor health
- Population health
- Support behavior change
- Activate a dental referral system

**What we do ACTUAL**
- Applying evidence
- Changing processes
- Training workforce
- Educating parents
- Using information technology
- Aligning payment

**THE GAP**
- Little focus on self-management
- Leave out the mouth
- Surgical intervention model predominates
- Outcome based care is a rarely seen model

**How We Make the Vision**
- Focus on prevention
- Assess and manage risk
- Monitor health
- Population health
- Support behavior change
- Activate a dental referral system

**DESIGNED**
- Applying evidence
- Changing processes
- Training workforce
- Educating parents
- Using information technology
- Aligning payment

**Actual**
- Little focus on self-management
- Leave out the mouth
- Surgical intervention model predominates
- Outcome based care is a rarely seen model
MORE Care Pediatric Pathway

**MEDICAL**

**Oral Health at Well Child Visit**
- Review medical/dental histories
- Perform Oral Health Evaluation (HEENT)
- Document findings and management plan, including referrals
- Fluoride administration (SDF to be explored)

**Oral health – Risk based instruction**
- Conduct counseling to decrease or maintain low oral health risk (risk factor identification)
- Set self management goals
- Follow up and develop referral plan

**DENTAL**

**Dental Care Appointment**
- Review medical/dental histories
- Complete Caries Risk Assessment and assign status (Low/Moderate/High)
- Conduct Preventive Dental Care Appointment
- Create treatment plan focused on disease management

**Cooperative Tasks**
- Coordinate care with bi-directional referral system
- Initiate, develop and improve interprofessional communication
- Create shared outcomes through collaborative interprofessional practice
- Develop joint treatment planning and record keeping

**Disease Management**
- Complete counseling aimed at prevention and/or stabilization of disease (self management goals)
- Establish re-care appointments according to patient needs
- Initiate and sustain patient-centered interprofessional communication

**Measurement Concepts**

<table>
<thead>
<tr>
<th>Fluoride Application*</th>
<th>Self-Management Goal Setting</th>
<th>Oral Health Evaluation (Risk Assessed)</th>
<th>Referral Initiated</th>
<th>Referral Completed</th>
</tr>
</thead>
</table>

*Fluoride Application is noted as an asterisk to denote its importance or specific nature within the pathway.
Integrating Oral Health - Medical

Oral Health

Knowledge: Oral-systemic connection key concepts

Skills: Oral exam Fluoride

Attitudes: Interprofessional care

https://www.dentaquestinstitute.org/learn/morecare/interprofessional-practice
Integrating Oral Health - Dental

Oral Health

Knowledge: Oral-systemic connection key concepts


Attitudes: Interprofessional care

https://www.dentaquestinstitute.org/learn/morecare/interprofessional-practice
Attitudes: Interprofessional Care

- Oral health is part of overall health and within physician’s scope of care
- Oral exams can be readily included in routine clinical care
- Oral health risk assessment is done just like other risk assessments in primary care
- Systemic evaluation is a vital component of a dental encounter
- There is no contra-indication to dental treatment during pregnancy
- Physicians and dentists should communicate with each other about patient care

Based on content by Dr. Mark Deutchman, University of Colorado – School of Medicine
“We’re not just relying on our guidelines and what’s been published... we are able to start looking at using data-driven methods that are much more concurrent and in real time.”

- JUDY MURPHY

Chief Nursing Officer, IBM
Why We Measure...

If you cannot measure it ... You cannot improve it.

- Data is feedback
- Where are we now? (Baseline)
- Are we going in the right direction?
- Monitor progress: Are we getting closer to what we set out to achieve?
- Outcomes

trust. noun
a trustee
as its noun
Lessons from Medicine [QC > QI]

1. Reception/Intake
   Account Initiation/Update

2. Clinical Care

3. Patient Coordination
   Account Management
Closed versus open systems

- **Closed HIT system**: a single or interface based HIT program used within one care site or care system and all users must be part of a single organization, network, or business entity. All users share a common IT platform.

- **Open HIT system**: a multifaceted HIT system usually associated with network partners using different EHR/PMS programs, care teams located separately across a geographic region, a lack of effective communication between network partners, and/or comprised of multidisciplinary care teams and multiple operational models.

- *Lack of interoperability*
- *Cost prohibitive*
- *Overwhelming dissatisfaction*
- *FTE use for reporting, entry, and referral*

---

**Providers Spend $40,000 Per Physician on Quality Reporting**

A recent survey estimates that physician practices spend about 15 hours per physician per week on data entry and management — or 785 hours each year. That effort translates into about $40,000 per clinician annually. Physicians are required to submit quality data to Medicare, Medicaid and insurance companies in the push for digital health records, performance measurement and data accountability. More than 80 percent of all respondents said the effort required to submit that data is “more” or “much more” than it had been three years ago.

**Perceptions physician practices had on external quality measures in 2014, by specialty**

- **All**
  - Measures were “moderate” or “very representative” of the quality of care: 29%
  - Groups’ effort in dealing with measures was “more” or “much more” than three years earlier: 28%
- **Cardiology**
  - Measures were “moderate” or “very representative” of the quality of care: 32%
  - Groups’ effort in dealing with measures was “more” or “much more” than three years earlier: 21%
- **Orthopedics**
  - Measures were “moderate” or “very representative” of the quality of care: 27%
  - Groups’ effort in dealing with measures was “more” or “much more” than three years earlier: 69%
- **Multispecialty**
  - Measures were “moderate” or “very representative” of the quality of care: 35%
  - Groups’ effort in dealing with measures was “more” or “much more” than three years earlier: 44%
- **Primary care**
  - Measures were “moderate” or “very representative” of the quality of care: 46%
  - Groups’ effort in dealing with measures was “more” or “much more” than three years earlier: 79%

**Scores were used “frequently” or “very frequently” to improve quality**

88% in all categories

---


By Janie Boschma, POLITICO Pro DataPoint
Drinking the Quality Juice

- **Quality Planning**
  - Spending time to bring the design and goals of the system into alignment
  - Understanding the needs

- **Quality Control**
  - Monitor, review and standardize

- **Quality Improvement**
  - Make changes to achieve goals

- **Quality Assurance**
  - *External view to determine if meeting targets/goals*
Better Professional Development

Applying Evidence
- Caries Risk Evaluations
- Effective Communication/Motivational Interviewing
- Fluoride Varnish application

Changing Processes
- Incorporate Oral Health Evaluations
- Oral Health Workflow
- Referral Communication

Training Workforce
- Smiles for Life
- First Tooth
- Quality Improvement
- Effective Communication

Educating Families
- Flipbooks, Grosser Books
- Take Home Kits
### Better System Performance

#### Concept: Oral Health Evaluation/Risk Assessment

<table>
<thead>
<tr>
<th>Change Idea</th>
<th>Test Detail</th>
</tr>
</thead>
</table>
| 1. Utilize a recognized oral health risk assessment tool and train all providers to ensure consistency | • Investigate existence of in-state training resources and/or training, including:
• Train providers with online Smiles
• Encourage staff to have one or both conversations (not a list of questions or MD) — this is a team effort
• Clinics leadership use staff to provide systemic health assessments |
| 2. Update electronic health record to include documentation of completed oral health risk assessment and findings | • Start by using paper risk assessment before integrating electronically in EHR
• Build a template that automates (which helps with reporting)
• Build risk assessment fields into EHR |
| 3. Ensure all completed oral health risk assessments are accurately documented in electronic health record | • Assessment data is documented in the electronic health record
• Paper assessment documents are accessible andData for risk assessments comes from risk assessment data to guide clinical decision-making |
| 4. Document patient’s dental provider or dental home in electronic health record | • Document dental provider on the chart
• Document dental provider in visit
• Document dental provider in free text |
| 5. Identify process for monitoring optimal medication list for patients | • No tests to document |

---

#### The Primary Care Guide to Creating Interprofessional Oral Health Networks

**Why Oral Health in Primary Care?**

Tooth decay, a preventable, infectious disease, impacts millions of Americans every year. It is a disease that has systemic connections and can impact multiple areas of overall health and well-being. Although the dental workforce works to treat dental disease, access to dentists in all areas of the country is not sufficient to meet the needs, particularly among the country’s most vulnerable populations. Interprofessional strategies are necessary for keeping patients’ mouths healthy and bringing patients that are in need of dental care.

**What Can Primary Care Do About Tooth Decay?**

This is not a problem that can be solved by dentists alone. A coordinated, integrated approach to addressing oral health in primary care can be implemented with the following key components:

- **Evaluate and Monitor Patients’ Oral Health Risk**
- **Reinforce and Co-Design Healthy Oral Health Strategies for Patient at-Home Care**
- **Complete Appropriate Preventive Activities (Apply Fluoride Agents)**
- **Coordinate Care with Dental Providers When Necessary**
Better Patient Outcomes

MORE CARE Collaborative

- D1: Patients with well-child visit
- D2: Count of pts with referral initiated
- M1: Percent with risk assessed
- M2: Percent with SMGs reviewed
- M3: Percent with fluoride varnish
- M4: Percent with completed dental referral
- M5: Percent with intraoral exam
- M6: Percent with dental care referral initiation
- M7: Percent with dental referral

Goal
Median
Direction of Improvement
Denominator of measure

SMG = Self management goals
Questions? Contact: Kelly Braun at kub277@psu.edu
Sealant Retention Rates

• The yearly expected sealant retention rate has been reported to range from approximately 50-83%.
  – A 55-80% yearly retention rate was found with school based placement on children from low income backgrounds

• Identified variables include:
  – Tooth location
  – Isolation techniques
  – Age of patient
  – Operator experience
  – Field of view
  – Number of operators

Even though retention was at approx. 85% per quarter: The FQHC site felt event to address was loss of sealant

Dental Teams should replace each sealant that is lost (3 year maintenance)

- Increase time and cost of materials
  - Lost revenue
  - Caries susceptibility

Next step was to identify variables & possible issues to improve these percentages – **PDSA it!**

- Manually looked at patient base – overweight/obese patients made up approximately 50% of patient’s with lost sealants in first year

- **PRACTICE TRANSLATION**— patients that fit Obese/OW status when possible have team to place sealants
Understanding the Other Side & Effective Communication
What’s the current state of affairs?

- Medical and dental professionals are trained separately and then they practice how they are trained - separately.
- The “hidden curriculum” about oral health in medical training:
  - Oral health means teeth
  - Teeth are the domain of dentistry
  - I know very little about teeth
  - Dentists know little about the rest of the body
  - Why are you (dentist) asking me about something related to teeth?
  - Why is this patient coming to ME about their mouth?
  - Why can’t I get a dentist to see this patient?
What’s the current state of affairs?

• Medical and dental professionals are trained separately and then they practice how they are trained - separately.

• The “hidden curriculum” about oral health in dental training:
  – Oral health means dental care
  – Teeth are the domain of dentists
  – I do not see a need to know about treating systemic diseases
  – Physicians consider us as an inferior “doctor”
  – Surgical intervention gets me to graduation & pays the bills after
  – Why is this patient coming to ME about their health?
  – Team, what team? I’m holding my own suction over here.
What a great idea: let’s go to lunch ........
Ready, Set, Implement

*Oral Health Screening in the Medical Office*

1. Determine who will deliver the services
   a. History/risk assessment: ________________________________
   b. Screening (provider): _________________________________
   c. Anticipatory guidance/patient education (oral hygiene, nutrition): ________________________________
   d. Fluoride varnish education: ___________________________
   e. Fluoride varnish application: __________________________

2. Decide when the services will be delivered (ex: Coordinate fluoride varnish with immunizations/well-child visits 6 mo, 9 mo, 12 mo, 15-18 mo, 24 mo, 36 mo. Separate visits for high-risk patients).
   _____________________________________________________
   _____________________________________________________
   _____________________________________________________
   _____________________________________________________

3. Identify an oral health champion in the office to:
   a. Order supplies (varnish and materials) and oral health education materials
   b. Identify and incorporate prompts for providers and patients __________________________
   c. Ensure new employees receive training___________________

4. Create plan for fluoride varnish and oral health education materials
   a. Who will order: ________________________________
   b. Where will they be stored: _________________________
   c. For patient visit, who will get supplies ready (ex: clip dose to chart): __________________

5. Who will coordinate dental referrals and ensure that dental referral information is in exam room or at front desk __________________

6. Establish process for documentation (ex: for paper charts- stickers or other prompts, intake form, exam form, determine location for tracking-immunization flip tab, dental tab, graphs, history section, etc.)
   _____________________________________________________
   _____________________________________________________
   _____________________________________________________
   _____________________________________________________

7. Create process for eligibility determination (ex: flag chart) and billing
Communication and Navigation
USDHHS and Oral Health Referral

• USDHHS set forth the following competencies for coordination of interprofessional oral health care:
  – exchange meaningful information that benefits care delivery
  – apply patient and population-centered interprofessional practice principles; as well as,
  – facilitate patient navigation and provide appropriate referrals.

• Also advises medical provider teams to consider a dental care referral “...equal to a referral to any other type of specialist.”
Let’s Review Current Referral Use Analyses...

• **ADA Health Policy Institute**
  – Found that a significant disconnect exists between medical and dental care referral systems.
  – Physicians who participated in the analysis stated an overall dissatisfaction with the current process.

• **Electronic Referral Process**
  – When primary care teams used an electronic referral tool, the receipt of timely patient information between the referral partners was three times higher compared to non-electronic.
    • Most dental PMS lack interoperability.

• **FQHC Dental Referral**
  – Patients were surprised by the high level of IPP provider communication and preferred the IPP process to previous care experiences.
  – Medical providers stated that they felt more empowered to address oral health needs with a dental care referral network in place.

Our Study (DQI and MUSC)…

• The continuing education program was offered at ten national, regional, and state meetings during April through September 2016

• Attendees were invited to complete an on-site paper survey, “Evaluation of Interprofessional and Oral Health Related Referral Systems,” created by the study principle investigator at the end of the training.
The Participant Sample*

• A total of 673 people participated in the study.
  – Resulting sample size was 559 - 560

• Demographics
  – Dental: 60%; Medical: 40%;
  – Rural: 43%; Suburban: 32%; Urban: 25%
  – Clinical care: 30%; Leadership: 13%; Support staff, FLHWs: 57%

• Motivated population

• The last 9 questions were dichotomized to Agree (Agree, Strongly Agree) and Disagree (Disagree, Strongly Disagree, Neutral)
  • Unknown and N/A answers were discarded
## ‘The Participant Sample’

<table>
<thead>
<tr>
<th></th>
<th>FQHC</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical providers at our site, or part of our network, are administering fluoride varnish and identifying oral health risk factors in the majority of patients seen.</td>
<td>62.8%</td>
<td>72.8%</td>
</tr>
<tr>
<td>Dental providers at our site, or part of our network, are pre-screening or screening for systemic disease (ex: diabetes, high blood pressure) in the majority of patients seen.</td>
<td>20.4%</td>
<td>51.5%</td>
</tr>
<tr>
<td>Our site sees significant issues with no-shows / broken appointments (15% or more) among referral patients.</td>
<td>61.5%</td>
<td>45.8%</td>
</tr>
</tbody>
</table>
The Dependability of **Coordination**

- **Business Model**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Odds Ratio</th>
<th>Confidence Interval</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organization type (<em>RHC as referent group</em>)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACO</td>
<td>5.72</td>
<td>1.66-19.74</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>FQHC</td>
<td>3.04</td>
<td>1.13-8.17</td>
<td></td>
</tr>
<tr>
<td>Private Practice</td>
<td>2.07</td>
<td>0.68-6.35</td>
<td></td>
</tr>
</tbody>
</table>

- **Satisfaction and ease of Electronic Health Record use**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Odds Ratio</th>
<th>Confidence Interval</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referral variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ease of EHR for making dental referral (<em>Agree/strongly agree as referent group</em>)</td>
<td>6.67</td>
<td>3.61-12.17</td>
<td>&lt; .0001</td>
</tr>
<tr>
<td>Disagree/strongly disagree</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **No-Show Rate (15% or more)**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Odds Ratio</th>
<th>Confidence Interval</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue with no shows (<em>Agree/strongly agree as referent group</em>)</td>
<td>1.99</td>
<td>1.29-3.10</td>
<td>.01</td>
</tr>
<tr>
<td>Disagree/strongly disagree</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Dependability of **Integration** (Medical)

- **Health Information Technology / Electronic Health Record**
  - Respondents who reported EHR ease were **2.4 times** more likely to administer fluoride varnish and conduct risk assessments
  - Embedded risk assessment
  - Ease of reporting and monitoring

<table>
<thead>
<tr>
<th></th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>19 (14.5%)</td>
<td>156 (36.4%)</td>
</tr>
<tr>
<td>Disagree</td>
<td>112 (85.5%)</td>
<td>272 (63.6%)</td>
</tr>
</tbody>
</table>

Referral system variable: Type of agreement with the following statement: “Our electronic health record makes medical-to-dental referrals easy”
The Dependability of **Integration** (Medical)

- Medical to dental referral capability
  - Respondents signifying a dependable medical to dental referral system were **4.5 times** more likely to administer FL/RA/SM

### Table: Referral System Attributes

<table>
<thead>
<tr>
<th>Referral System Attributes</th>
<th>Has a Successful Network for Medical-to-Dental Referrals (Disagree/Strongly Disagree as Referent Group)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree/Strongly agree</td>
<td>4.54</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Referral Directionality (One Directional, Medical to Dental Only as Referent Group)</td>
<td>2.79–7.39</td>
<td></td>
</tr>
<tr>
<td>No referral system</td>
<td>0.65</td>
<td></td>
</tr>
<tr>
<td>Bidirectional</td>
<td>0.91</td>
<td>0.7826</td>
</tr>
<tr>
<td>Referral Method (Electronic Health Record as Referent Group)</td>
<td>0.22</td>
<td>0.0009</td>
</tr>
<tr>
<td>Warm handoff</td>
<td>0.10–0.51</td>
<td></td>
</tr>
<tr>
<td>All other methods</td>
<td>0.26</td>
<td></td>
</tr>
<tr>
<td>No method</td>
<td>0.54</td>
<td></td>
</tr>
<tr>
<td>Ease of Electronic Health Record Use for Making Dental Referral (Disagree/Strongly Disagree as Referent Group)</td>
<td>0.13–2.29</td>
<td></td>
</tr>
<tr>
<td>Agree/Strongly agree</td>
<td>2.37</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.29–4.37</td>
<td></td>
</tr>
</tbody>
</table>

Questions?