Integrating Oral Health into the Patient Centered Health Home: More Success Stories

Lisa Kearney, DDS
G Joseph Kilsdonk, AuD, MS
Objectives

- Describe how two Health Centers have integrated oral health into their Patient-Centered Health Home initiatives, with a focus on various populations of focus, including children, prenatal patients and diabetic adults.
- Illustrate how integrating oral health into the Patient-Centered Health Home can improve patient outcomes.
- Identify “take home” examples and strategies on how you can incorporate oral health into your Health Center’s Patient-Centered Health Home.
Medical and Dental Integration at Erie Family Health Center

Lisa Kearney, DDS
Clinical Director of Oral Health
Erie Family Health Center
Erie Family Health Center

- Provide care in 13 sites in Chicago and northern suburbs to 52,000 patients annually
  - 7 Primary health care sites with 4 integrated dental centers
  - 5 school based sites
  - One teen center
  - 9,000 dental patients
  - PCMH recognition
Brief Overview of Project

- With the establishment of our new site management teams, the clinical director of oral health and the Foster site operational director decided to work collaboratively to implement pilot projects that would improve medical and dental integration at Erie Family Health Center.
Rationale for Project

- Until recently, the dental clinic had been its own separate entity.
- Not a lot of communication or collaboration between medical and dental.
- The mouth of our patients was being treated separately from the rest of their bodies.
- Wanted to break down the established barriers between medical and dental in an effort to improve patient care and overall patient health.
Project Objectives

- Increase medical and dental collaboration to improve clinical care and overall patient health.
- Implement operational changes to improve patient access, improve utilization of shared services, and improve quality of care provided.
- Increase the number of patients receiving both medical and dental care.
Project Planning Process

- **Timeline – Ongoing (January 2013 to present)**
  - Operational changes
    - Hours of operations – evening hours for better access
    - Changes in DA/Dentist ratios
  - Physical changes
    - Co-location of front desk staff for medical and dental teams
  - Trainings
    - Training for all front desk to schedule in Centricity for medical and dental
    - Training for front desk team to send claims to billing and verify codes
    - Training for billing team to process dental claims
  - IT changes
    - HL7 interface – link between EMR and EDR
    - All teams scheduling in Centricity
Project Planning Process

- **Timeline continued**
  - Integrated service changes
    - Integrated front desk
    - Front desk staff at non-dental sites making dental appointments
    - Health promotions team making appointments at VOP appointment
    - Coordinated group visits – Centering and Parenting groups
    - Coordinated well-child visits
    - Medical residents rotating through dental clinics
    - Dental team screening blood pressure and blood glucose
    - Site management team – new Erie model
    - Call center taking on dental calls (September 2014)
Project planning process

### Committee

- Clinical and Operational dental directors
- Executive Leadership Team - President and CEO, Chief Clinical Officer and Senior Vice president of Clinical Operations, Chief Financial Officer
- Leadership teams: Front desk supervisors for all sites, billing and finance supervisors, call center supervisors
- Providers: Dentists, hygienists, nurses, doctors, midwives, PAs
- Front line staff: medical assistants, dental assistants, Women’s health promoters, PBAs, PSSs, finance team, etc.
Other resources required

- Training, Training, Training
- Time
- Data
- Buy-In: Why are we doing this?
  - ELT
  - LT
  - Provider
  - Staff
  - Patient
Implementation Process

- **Back to the Basics**: Operational changes to improve access, improve quality of patient care and improve provider productivity
- **NOHLI Project** (National Oral Health Learning Institute)
- **Objectives**:
  1. Implement new hours of operation to increase access to dental services
  2. Implement new scheduling model for dental providers to improve efficiency
  3. Implement new standard chair dentist ratios and dental assistant/dentist ratios to improve efficiency and quality of care
Implementation process

- **Step by step process**
  - Board approval of new hours of operation for dental centers
  - Created new provider scheduling template to create more space per provider in the clinics and improve provider efficiency
  - Discussed new hours and scheduling template with dental providers and staff and requested suggestions for improvement in a series of dental staff meetings
  - Received approval from ELT to hire more DAs to provide better DA to Dentist ratios (used HRSA suggestions and SNS suggestions as guide for approval)
  - Implemented new hours and template
Implementation Process

- Implemented new hours of operation
  - Same as medical clinics
  - Improve patient access
  - Extended hours to target kids after school
- Implemented new provider scheduling template

- With new hours and new scheduling template – improved provider to chair ratios (at least 2 chairs/provider)

- With ELT approval - hired DAs for better DA/Dentist ratios
Outcomes of Operational Changes

- Improved provider and staff satisfaction with new scheduling template, DA/Dentists ratios, and chair/provider ratios
- Overall visit volume increase with extended hours
- Improved patient satisfaction with extended hours
- Extended hours are the first appointments books
- Extended hours also have highest no-show rates
- Implemented operational changes leads easier implementation of integrated front desk
Implementation Process

- Co-located front desk: physically moving dental front desk to the same place as the medical front desk
  - Evanston clinic opened in July 2013 with co-located front desk
  - When AP clinic moved to larger EFA location in July 2013, the new site was built with a co-located front desk
  - Dental PBAs in HP location were moved to medical front desk check in on the first floor
  - Required collaboration of medical and dental directors and front desk supervisors to make room for the dental team in the medical space
Implementation Process

- HL7 interface – scheduling and billing through Centricity rather than Dentrix

- Timeline: January 2014 to April 2014
  - Building and testing of the interface
  - Training, Training and more Training
  - Go-Live: April 1st 2014
Implementation Process

- **Training**
  - Trainings for all medical and dental front desk on how to make dental appointments in Centricity
  - Training on how to schedule dental appointments (how much time per appointment type, what types of procedures can be scheduled together, etc.)
  - Training for dental team - changes to the system and what to expect
  - Training for all front desk staff to send dental claims to billing department and to verify dental codes
  - Training for billing team to send dental claims
  - For now, all incoming dental calls still handled by dental team
  - Trainings were given by dental clinical supervisor, front desk supervisors, clinical director of oral health, billing supervisor
Outcomes of HL7 Implementation Process

- HL7 interface – bumps in the road
  - Front desk did not know how fill-in appointment types in the schedule so all appointments were labeled: Dental 30, Dental 45 or Dental 60 – immediate email communication on how to enter appointment types was sent
  - Since unable to tell appointment types – dental schedule for the first month was crazy: dental providers and staff unhappy
  - Server that interface was built on melted – interface went down for the entire third week of April
  - Dental patients confused as to where to register, used to registering with dental team
  - Dental patients complained about longer wait times in line to register and then check out
Outcomes of HL7 Implementation Process

- HL7 Interface successes
  - Front desk able to make medical and dental appointments for all patients that present at the clinic
  - Able to fill cancellations and no-shows in dental schedule with medical patients
  - Better utilization of shared services – do not need separate front desk staff for medical and dental clinics
  - Better communication between medical and dental teams
Outcomes of HL7 Implementation Process

- Created potential for more integration of services
  - Front desk at non-dental sites making dental appointments
  - Women’s health team making appointment at VOP appointment for pregnant women
  - Coordinated group visits – Centering and Parenting groups
  - Coordinated well-child visits
  - Medical residents rotating through dental clinics
  - Dental team screening blood pressure and blood glucose
  - Site management teams – new Erie management model
  - Call center taking on dental calls (September 2014)
Coordination with Women’s Health Team

- Women’s health promotions team were trained to make dental appointments in Centricity.
- At verification of pregnancy visit, patient is scheduled an appointment with an Ob/Gyn and also scheduled an appointment with a dental provider.
- Ability to capture all pregnant patients presenting to medical clinic at early stage in their pregnancy.
- Dental clinics have seen huge increase in amount of pregnant women presenting for treatment.
Coordinated Group Visits – Centering Group

- Worked with women’s health team to be part of week 2 centering group
- Provide group presentation on oral health and infant oral health
- Make dental appointments for centering group patients at the end of the session
Coordinated Group Visits – Parenting Group

- Worked with nurse practitioner to be part of 6 month and one year parenting group sessions
- Dentist provides group presentation on infant oral health
- Patients are given vaccines, have 6 month or 12 month well child check-up with medical provider and dental check-up with the dentist
- Follow up visits are scheduled in dental clinics
- Parents are encouraged to schedule dental appointments also
Coordinated Well-Child Visits

- Dentist on-site at medical clinics that do not have dental center
- Provides knee-to-knee exams and oral health education to all medical patients 2 and under presenting for medical well-child visits
- Able to schedule follow up visits in the dental centers
Medical Residents Rotate Through Dental Clinic

- Family Practice Residency at our HP clinic
- As part of the residents training, they spend a day with the dental providers in the dental clinic
- Gives the dental providers a chance to talk to new medical providers about the importance of oral health and systemic disease and vice versa
- Improves collaboration between medical and dental providers
- Significant increase in dental referrals from medical residents that rotate through the dental clinic
New Management Model – Site Management Team

- Each site has a health center operations director and medical director that work as a team to manage the clinic
- In sites with dental, I am part of the site management team
- Behavioral health director is also included in the site management team
- The Executive Leadership Team is present at these meetings
- All aspects of the site are discussed at the meeting, including the budget, productivity, current challenges.
- The site management team along with the leadership team work to resolve the challenges
Challenges

- Dental still sometimes the forgotten group
- Patient wait times – longer lines for medical check-in
- IT – new to the interface and takes longer to resolve problems
- Data collection
  - I knew how to collect data in Dentrix, but am unfamiliar with Centricity
  - Outcomes data is still collected in Dentrix
  - QI team is collecting data in Centricity now and still working out the bugs
- Trainings – making sure that everyone was comfortable and confident with their new dental roles
  - Front desk with scheduling
    - With many more people making dental appointments – a lot more scheduling errors occurred
  - Billing team with sending dental claims and receiving payments
Observations and Conclusions

- All projects require support from the Executive Leadership – need to understand the importance of oral health
- All projects need the support of medical and dental teams
- Medical and Dental integration is a work in progress
- NOHLI mentor experience
- Medical team is very busy and will not commit to projects that take away from their scarce and precious time
Observations and Conclusions

- Better utilization of shared services
- Better access for patients to dental clinics
- Better integration of medical and dental teams
- Improving overall health of our patients
Contact Us!

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Erie Family Health Center
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phone: 312 432 4545

G. Joseph Kilsdonk, Au.D., M.S.
Division Administrator / Administrative Director
Division of Education
Medical Service Area / FQHC Dental Service Area

380,000 unique patients

NCQA Level 3 PCMH accreditation at 34 centers

Dental System

24 learner operatories
50,000 unique dental patients; 9 dental sites
Brief Overview of Project

- Our goal is to implement an oral health strategy to increase access to care, integrate medicine & dentistry, develop workforce, and reduce the cost of care and burden of oral health disease in a 200 x 200 mile service area.
- 2010 went live with an integrated medical – dental electronic record.
- Presently we are focused on integrating diabetes & periodontal disease management and childhood risk caries prevention, assessment and referral.
- A combination funding sources and partnerships have made this possible.
Rationale for Project

- Why did we decide to work on the project?
- What would you do if your patient couldn’t get dermatological care?... Hire a dermatologist!
  - What would you do if your patient couldn’t get dental care?
- PGP Demonstration
# ACO Quality Metrics

<table>
<thead>
<tr>
<th>Diabetes Mellitus</th>
<th>Heart Failure</th>
<th>Coronary Artery Disease</th>
<th>Hypertension</th>
<th>Prevention/Cancer Screening</th>
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</thead>
<tbody>
<tr>
<td>HgbA1c &gt; 9%</td>
<td>LV Function Assessment</td>
<td>Antiplatelet Therapy</td>
<td>BP &lt; 140/90</td>
<td>Screening Mammography</td>
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<tr>
<td>Blood Pressure &lt; 140/90</td>
<td>LV EF testing - Hospitalized</td>
<td>Drug Therapy for LDL &gt; 130</td>
<td>Plan of Care</td>
<td>Colorectal Screening</td>
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<tr>
<td>LDL &lt; 100</td>
<td>Weight Measurement</td>
<td>Beta Blocker if prior MI</td>
<td></td>
<td>Influenza Vaccination &gt; Age 50</td>
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<tr>
<td>Urine Protein Testing</td>
<td>Heart Failure Education</td>
<td>LDL Level &lt; 100</td>
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<td>Pneumococcal Vaccination &gt; Age 65</td>
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<tr>
<td><strong>Dilated Eye Examination</strong></td>
<td>Beta Blocker Therapy</td>
<td>ACE or ARB w/DM</td>
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<tr>
<td><strong>Foot Examination</strong></td>
<td>ACE or ARB Therapy</td>
<td>Warfarin Therapy w/AF</td>
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<td></td>
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<td>Dilated Eye Examination</td>
<td>ACE or ARB w/DM</td>
<td></td>
<td>Periodontal evaluation should be considered</td>
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<tr>
<td>Foot Examination</td>
<td></td>
<td></td>
<td>According to the American Academy of Periodontology,</td>
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<td>treatment of periodontitis reduces systemic markers of inflammation and endothelial dysfunction</td>
<td>Periodontal disease was associated with a 2.7-fold increase in pancreatic cancer</td>
</tr>
</tbody>
</table>

**Periodontal Exam 12mo / 6mo* ADA guide**
United Concordia Study, Dr Marjorie Jeffcoat, 2012 - Looked at medical & dental claims data of people with Type II diabetes from a pool of 1.7M patients

The UCWellness Oral Health Study produced several key findings.²

Over the course of the study, each diabetic member who treated their gum disease:¹

- Saved an average of $1,814 in medical costs annually.
- Had an average reduction of 33% in annual hospital admissions.
- Had an annual average of 13% fewer physician visits.

Treating Gum Disease in People with Diabetes Lowers Both Medical and Pharmacy Costs

- Annual Medical Savings (starting in first year of treatment) = $1,814
- Annual Pharmaceutical Savings (after 7 treatments) = $1,477
- Combined Annual Savings = $3,291
Project Objectives

1. Develop & deploy electronic clinical decision support tools at medical & dental point-of-care to facilitate standardization of care processes, support risk assessment & provide **timely bi-directional referral**

2. Develop & deploy inter-professional [medical / dental] education & collaboration to improve individual & population health [Value Margin]

3. Develop & deploy patient education about the importance of the interrelationship between DM & periodontitis. [Compliance]

4. Pilot a referral workflow among medicine and dentistry [Standardize]

5. Develop and integrate prototypical risk assessment tools for prevention of dental caries and periodontal disease [Pediatric focus]

6. Develop and implement a PCHH fluoride varnish program

7. Adapt model to other oral systematic conditions.
Timeline

Three year process:

1 year in.
- Start with Diabetes & Oral Health
- Assessment & Educational Interventions.
- Old dogs new tricks

2nd year:
- Appointing and Referral Process
  - Medicine to Dentistry
  - Dentistry to Medicine
- Workflow / Alerts / Documentation
- New dogs new tricks

3rd year:
- Caries assessment
- Fluoride Varnish in Pediatrics / Med-Peds
- Next health condition

/ Committee of Champions

<table>
<thead>
<tr>
<th>Leader/Staff</th>
<th>Title</th>
<th>Role Description/Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amt Acharya, BDS, PhD</td>
<td>Project Director</td>
<td>Leads project &amp; clinical decision support architecture. Coordinates all Clinic IS efforts; Responsible for all project activities and reporting. Coordinates Co-Ds.</td>
</tr>
<tr>
<td>Eric Penniman, DO</td>
<td>Clinical Champion</td>
<td>Medical Champion and Project Advisor; Liaison for decision support and medical provider training for DM-dental module.</td>
</tr>
<tr>
<td>Ram Pathak, MD</td>
<td>Director of Diabetes Education</td>
<td>Medical Champion; Liaison for decision support and medical provider training for DM-dental module.</td>
</tr>
<tr>
<td>John Schmelzer, PhD</td>
<td>Co-Director</td>
<td>Leads project evaluation and outcomes. Coordinates all evaluation activities.</td>
</tr>
<tr>
<td>Joseph Kildonk, AuD</td>
<td>Co-Director</td>
<td>Leads all project medical and dental provider education efforts; supervises development, deployment and staffing of education programming</td>
</tr>
<tr>
<td>Jane Wolf, RN</td>
<td>Co-Director</td>
<td>Leads all SHP project efforts, including coordinating SHP interventions and related staff.</td>
</tr>
<tr>
<td>Gregory Nycz</td>
<td>Co-Director</td>
<td>Leads FHC medical/dental interventions; directs all staff efforts to assure dental access for targets.</td>
</tr>
<tr>
<td>Teresa Kleutsch, RN</td>
<td>Dental Division Administrator</td>
<td>Coordinate all staff efforts to assure dental access for targets.</td>
</tr>
<tr>
<td>Matt Eaton, DDS</td>
<td>Dental Operations Director</td>
<td>Dental Champion; Liaison for decision support and dental provider training for DM-dental module.</td>
</tr>
</tbody>
</table>
Process Focus

- Pulled together stakeholders
- Three key target areas
  1. Interprofessional Education
     - Physicians
     - Dentists
  2. Patients
  3. Informatics
Interprofessional Education

<table>
<thead>
<tr>
<th>Interprofessional Education and Competencies</th>
<th>Goal: Educate medical &amp; dental provider communities about oral-systemic complexities associated with diabetes (Interprofessional Education and Competencies)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Increase the referral of diabetic patients to oral health providers as part of an interprofessional medical-dental (workflow design)</td>
</tr>
<tr>
<td></td>
<td>• Improve care management teams’ competencies in understanding and communicating importance of oral health in patients’ management of DM.</td>
</tr>
<tr>
<td></td>
<td>• Increase oral health providers’ ability to identify and co-manage diabetic patients as part of an interprofessional team</td>
</tr>
<tr>
<td></td>
<td>2013 Oral Systemic Health Conference: Successful conference held on October 4th, theme was ‘Medical-Dental Interprofessional Initiatives &amp; Competencies.’</td>
</tr>
<tr>
<td></td>
<td>2014 Oral Systemic Health Conference: Beginning preparations for this year’s conference, theme will be ‘Diabetes and the Importance of Oral Health.’</td>
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<tr>
<td></td>
<td>Grand Rounds: On October 18th, Dr. Ram Pathak and Dr. Neel Shimpi gave a talk on Oral Health and Diabetes to MC medical providers.</td>
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<tr>
<td></td>
<td>In March, Dr. Ram Pathak will give a talk on Oral Health and Diabetes to all MC/FHC dental providers.</td>
</tr>
<tr>
<td></td>
<td>Pre/Post Survey: Anonymous survey to be implemented system wide for medical providers to access the current knowledge and attitude regarding oral health. Conducted on a voluntary basis.</td>
</tr>
<tr>
<td></td>
<td>CBTs/Smiles for Life Curriculum: Developed a separate CBT on oral health for medical and dental providers. Required education for primary care and endocrinology. Need to discuss implementation strategy with medical directors – pilot test; implement by district or specialty?</td>
</tr>
<tr>
<td></td>
<td>Video Module: Developed and finalized a video module as an educational tool for the dental hygienists and diabetes nurse practitioners covering diabetes and periodontal disease. Now available on MC website. Next step: System-wide email regarding broader dissemination strategy (playing in centers throughout system).</td>
</tr>
<tr>
<td></td>
<td>Educational Tools: Develop and distribute handouts, posters, etc. about oral health to be used by medical providers at the primary care level.</td>
</tr>
</tbody>
</table>
• Large “N” – 300+ primary care providers

• Large range of knowledge and application
  • Pre & Post Testing
  • Transparency
- Practice Gaps
  - Collectively
  - Individually

- Physician Order Sets [PCHMH]

- Adding **Oral Health Exam** [an oral examination every 6 months if dentate or every 12 months if edentate and more frequently, if advised]
Computer Based Education

Relationship between Diabetes and Periodontal disease

Pathogenesis of Diabetes

1. Stomach & intestines changes food

Oral Manifestations of Diabetes

- Gingivitis
- Burning mouth manifestations
- Periodontitis
- Lichen planus
- Xerostomia manifestations
- Oral candidiasis
CME Conference Education
Grand Rounds & Department Meetings

- Diabetes and Oral Health Correlation
- Ram Pathak, MD, FACP, Endocrinologist, & Neel Shimpi, B.D.S., M.M., PGDHMM, PGCCR, Research Specialist

1. Identify oral disorder(s) as a complication of diabetes
2. Discuss the need for ongoing evaluation of Oral Health in all Diabetes patients
3. Describe common dental condition(s) afflicting patients with diabetes
4. Recognize conditions that require evaluation and management by Dental/Oral Surgeon
5. Explain the need for adjustment in Anti Diabetic medication for patients undergoing oral surgery
6. List diabetic medications that need adjustments for patients undergoing oral surgery
Smiles For Life Curriculum

• Relationship Between Oral & Systemic Health
• Childhood Oral Health
• Adult Oral Health
• Managing Acute Dental Problems
• Oral Health & Pregnancy
• Caries Risk Assessment
• Geriatric Oral Health
Smiles for Life

National Interprofessional Initiative on Oral Health

- Free Content & Credit

- Developing an app based periodontal risk assessment tool

- Take a medical student! Conversations with the state medical schools to introduce curriculum and rotation components.

Initiative activities are made possible as a result of funding from the DentaQuest Foundation, the Washington Dental Service Foundation, and the Connecticut Health Foundation.
## Wisconsin Diabetes Oral Care Guidelines

### Section 9: Oral Care

<table>
<thead>
<tr>
<th>Concern</th>
<th>Care/Test</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral Care</td>
<td>• Simple inspection of gums and teeth for signs of periodontal disease</td>
<td>At diagnosis, then each focused visit</td>
</tr>
<tr>
<td></td>
<td>• Oral exam by general dentist or periodontal specialist</td>
<td>At diagnosis, then individualize based on oral assessment and risk</td>
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Main topics included in this section:
- Visual Oral Inspection and Oral Health Education by Primary Provider
- Oral Examination by Dentist
- A Team Approach: Medical-Dental Collaboration
- Identifying Undiagnosed Diabetes in the Dental Care Setting
- Identifying Undiagnosed Periodontal Disease in the Primary Care Setting
- Additional Resources
- References

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Identifying Undiagnosed Periodontal Disease in the Primary Care Setting

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40 Member Wisconsin Interprofessional Workgroup
- Smaller “N”
- Academic Detailing –
  - Continuing Education Sessions
  - Endocrinologist Presentation
  - Department Meeting
  - Computer Based Training Modules
  - Pre-Post Test Questions
Wisconsin Diabetes Oral Care Guidelines

Section 9: Oral Care

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Identifying Undiagnosed Diabetes in the Dental Care Setting

40 Member Wisconsin Interprofessional Workgroup
Care Management Education for Dual Diagnosis Patients

Pre-Operative Considerations

1. If the patient has acute swelling or pain, check a finger stick blood glucose.

If the blood glucose level exceeds 300 mg/dl.
- If possible, draw venous sample for confirmation.
- Consider delaying dental procedure and getting patient under the care of PCP/Urgent Care/ER.

If the blood glucose level is between 200-299 mg/dl
- Have telephonic contact with Primary Care Provider.
- Under many scenarios, patient can likely be initiated on treatment and dental procedure can likely be proceeded on the same day.
- Short acting insulin such as Lispro(Humalog), Aspart (Novolog) and regular insulin can give rapid glycemic control in 2-4 hours.
- Follow PCPs advice in considering storing a few vials of insulin at dental centers.
Dental Team Applying Emerging Research

- Dental Findings & Identification of Undiagnosed Hyperglycemia
- Key finding: Dental patients who were never told they were pre-diabetic or diabetic, but had at least one self reported diabetic risk factor [had a first degree blood relative with, had hypertension, hypercholesterolemia, overweight] and had 26% or more teeth with deep pockets [5mm+] or 4 or more missing teeth were correctly identified 72% of the time as pre-diabetic or diabetic when compared with HbA1c diagnostic testing and / or fasting plasma glucose levels. N = 1097
- In other words, if a patient has a risk factor, multiple deep pockets on periodontal examination and or multiple missing teeth; perform glucose testing and / or refer to medicine.
- Chair side risk assessment
AEGD Residency

- Medical – Dental Rotations
- Informatics Component
- Faculty Engagement
- Mentoring
- Visibility
- Interprofessional Provider  [CODA competency “act as a primary care provider”]
- VA Partnership
Management of Patients with Diabetes & Periodontitis

- Developed Clinical Decision Support Tools within the iEHR to support cross disciplinary care management of Diabetic and Periodontal Patients
Collect Dental provider Information in Patient Demographics

The following information about the diabetic patient’s dental provider has to be collected and updated: Dental Center Name, Dental Center Contact Phone Number, Primary Dental Provider (Dentist) Name.

Note: We need to discuss this a little further. For eg: If the patient does not have a dental home established; how do we capture that information. Also, providing a comment field may be helpful for the medical staff to leave a note about the patient (e.g: Pt did not want to get a dental home established right now);

<table>
<thead>
<tr>
<th>Name</th>
<th>Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prompt for primary dentist verification</td>
<td>IF the patient’s primary dentist/dental facility has been verified in 3 months THEN do not prompt user to verify this information ELSE prompt the user to verify the primary dentist/dental facility.</td>
</tr>
<tr>
<td>Diabetic Patients</td>
<td>IF patient has been classified as a diabetic patient by their Mfld Clinic medical provider THEN prompt in Reception for verification/entry of primary dentist/dental clinic at every Clinic visit ELSE do not prompt</td>
</tr>
<tr>
<td>Primary dentist/center display</td>
<td>IF the patient is a Mfld Clinic Dental Center patient THEN display the primary dentist and center recorded in Cattails Dental within Verify Personal Dental Provider dialog ELSE allow the medical user to input the patient’s dental provider information.</td>
</tr>
</tbody>
</table>
### Display Oral Exam Information in the Patient Portal

**Personal Care Provider**
- Name: [Name]
- Phone: [Phone]
- Request appointment

**Health Reminders**
- Comprehensive Foot Exam: Overdue, Request appointment
- Oral Exam: Overdue, Request appointment
- Fasting Lipid Profile: Overdue
- Pneumococcal: Overdue

<table>
<thead>
<tr>
<th>Service name</th>
<th>Due next</th>
<th>Last service date</th>
<th>Request appointment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive Foot Exam</td>
<td>Overdue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral Exam</td>
<td>Overdue</td>
<td>10/13/2011</td>
<td>Information from PreServ</td>
</tr>
<tr>
<td>Fasting Lipid Profile</td>
<td>Overdue</td>
<td>6/20/2012</td>
<td></td>
</tr>
<tr>
<td>Pneumococcal</td>
<td>Overdue</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

You know the saying, an ounce of prevention... Health reminder services are preventive health screenings and immunizations that help prevent serious diseases or detect them sooner rather than later. Discovering these problems early increases your chance that a treatment is successful.

[Request Appointment] will be directed towards the FHC Dental Centers/Dentists.
### Goals, Objectives and Activities

**Goal: Educate diabetic patients regarding the role of proper oral health in managing the complexities of their diabetic condition.**

- Increase HMO member/patient awareness about impact of oral health on their diabetes outcomes from insurer
- Identify SHP members with DM and high HbA1c for care management and mail interventions
- Allocate SHP target members into intervention cohorts for staged contact over 6-8 months & initiate interventions
- Monitor SHP care managers and customer support for member feedback regarding oral health and related issues
- Develop SHP member electronic tracking system for monitoring dental appoints and subsequent visits (Evaluation element)

### Activity Progress

- The data analytics group identified the accurate number of SHP members with DM and high HbA1c located in proximity of Marshfield Clinic’s nine FHC Dental Centers.
- Initial draft of the SHP intervention letter and patient education material were prepared and approved by IRB.
- Finalized the intervention design consisting of two cohorts: SHP diabetic patients will receive a letter containing the importance of regular oral health and a request to follow up with their dental provider, with and without a 'regret lottery' incentive option for follow up. *(see table on next page)*
- As of Feb. 7th, 25 member/patients have returned their Dental Check-up Lottery Cards to be entered into a regret lottery.
- Preparing for the next mailing group to SHP DM members.

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**After Visit Summary** – Facilitate hand-off for self care and coordination with non-dental providers.
Patient Mailings

Did you know... you are at risk for dental issues because you have diabetes. People with diabetes are 2 times more likely to develop serious gum disease.

Taking Care of Your Mouth Can Help Control Your Diabetes
Yes, it is true, your diabetes puts you at greater risk of having problems with your teeth and gums. Gum disease and tooth problems in people with diabetes can be more severe and take longer to heal because of less ability to fight bacteria in the mouth as well as other infection.

- People with diabetes are at higher risk for tooth and gum disease, including infection.
- Gum disease may affect blood glucose control, making diabetes harder to control and may increase the progression of diabetes.

Symptoms of Mouth Problems
- Red, swollen and bleeding gums
- Gums that have pulled away from teeth
- Pus between teeth and gums
- Bad Breath that won’t go away
- Permanent teeth that are loose or moving away from each other
- Changes in the way your teeth fit together when you bite
- Changes in the fit of dentures
- Sore, white or red patches on your gums, tongue, cheeks or roof of your mouth
- Patches that have turned into open sores
- Dry feeling in your mouth, dry rough tongue, cracked lips, mouth sores
- Burning feeling in mouth, bitter taste

What You Can Do to Prevent Dental Problems
- Keep your blood glucose as close to your target as possible
- Take diabetes medicines as instructed
- Eat healthy meals and follow your diabetes meal plan
- Brush your teeth at least twice a day and after meals with a soft toothbrush and fluoride toothpaste
- Floss your teeth at least once a day
- Drink water with fluoride every day

Action Steps
If you have not seen a dentist within the last six months you need to call now and schedule an appointment.

- See your dentist every 6 months
- Keep your dentist informed of any changes in diabetes conditions and medicines
- See your doctor on a regular basis
- Eat healthy meals and get plenty of exercise
- Work together with your physician and dentist to manage your diabetes

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Security Health Plan
In collaboration with
Marshfield Clinic
Don’t just live. Shine.
DentaQuest

PREVIEW
https://www.marshfieldclinic.org/healthy-living/dental/dental-why-important

- Chair side deployment
- Patient Portal
- Website
- Waiting Rooms
- Schools
Exam Rooms

- Diet
- Eye Exam
- Foot Exam

Managing Diabetes is as Simple as ABC:

- **A:** A1C below 7%
- **B:** Blood pressure below 140/80
- **C:** Cholesterol in check

Go Home Inspired by Joseph Kilsdonk to Lead on Medical Notifications for Oral Exam!
Challenges

- Education
- Priorities
- Engagement
- Start up funds
Observations and Conclusions

- Work with your providers & patients to:
  - Leverage the big picture
  - Leverage credibility [referral of diabetic in their practice]
  - Leverage documentation and workflow

- Don’t over look the little things at point of care –
  - Workflow; identify who and when the conversation occurs
  - Patient education materials – type and when given
  - Generate the referral
<table>
<thead>
<tr>
<th><strong>Diabetes Mellitus</strong></th>
<th><strong>Coronary Artery Disease</strong></th>
<th><strong>Hypertension</strong></th>
<th><strong>Prevention/Cancer Screening</strong></th>
<th><strong>Pregnancy</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>HgbA1c &gt; 9%</td>
<td>Antiplatelet Therapy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blood Pressure &lt; 140/90</td>
<td>Drug Therapy for LDL &gt; 130</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LDL &lt; 100</td>
<td>Beta Blocker if prior MI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urine Protein Testing</td>
<td>LDL Level &lt; 100</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the American Academy of Periodontology, periodontal disease was associated with a 2.7-fold increase in pancreatic cancer. Periodontal exam should be considered.

Treatment of periodontitis reduces systemic markers of inflammation and endothelial dysfunction. People with periodontal disease are almost twice as likely to have coronary artery disease.

Current Design

Diabetes Management Protocols
Patient should be seen every 3-6 months.

Blood Pressure
- Ever 12 Months: Goal: BP < 130/80
- Ever 6 Months: Goal: A1c < 7%

Hb A1c
- Ever 12 Months: Goal: LDL < 100 mg/dL

Fasting Lipid Profile
- Every 12 Months: LDL > 100 mg/dL

Microalbumin
- Every 12 Months: No Nephropathy

Foot Exam
- Every 12 Months: Order

Schedule Follow-Up appointment
- None

Order A1c every 3 months
- Yes

Check LDL every 3 months
- Yes

Optional Hypertension Clinic Provider only
- Yes

Prep Foot Exam in Doc Main for next visit
- None

Schedule an oral exam with a dentist
Expand to Other Medical Conditions
Example= Oral Health & Pregnancy

- Obtain an AHEC funded Community Health Intern [CHIP]
  - Observe Workflow in Obstetrics
  - Evaluated Patient Ed Materials
- Dental not visible in OB material or consult
Interventions

- Develop a pamphlet [highlight adverse outcomes]
Interventions

Oral health kit handed to patients at new OB visit

- Toothbrush
- Toothpaste
- Floss
- FHC referral
Interventions: Add Oral Health to Nurse Worksheet

<table>
<thead>
<tr>
<th>Prenatal Record (Continued)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient name</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

**PLANS/EDUCATION (Distribute Patient Education Material)**

**FIRST TRIMESTER**
- Your Pregnancy booklet*
- Providers, call schedule, contact information*
- HIV and other routine prenatal tests*
- Nutrition during pregnancy
- Toxoplasmosis precautions (cats/raw meat/gardening)*
- Other food safety (fish consumption/Listeria)*
- Sexual activity
- Exercise
- Environmental/work hazards
- Tobacco (ask, assess, assist, arrange)
- Alcohol/Recreational drugs
- Cystic fibrosis carrier screening*
- Genetics testing including ultrasound*
- Use of any medications (including supplements, vitamins, herbs, or over-the-counter drugs)*
- Domestic violence*

**SECONED TRIMESTER**
- Seat belt use/travel
- Cord blood banking Information
- Resident/Teaching service explained
- Influenza vaccine (☐ Yes  ☐ No)
- Signs and symptoms of preterm labor
- Selecting a pediatrician/family physician
- Childbirth classes/hospital facilities*
- Postpartum family planning/tubal sterilization
- VBAC counseling

**THIRD TRIMESTER**
- Anesthesia/analgesia plans
- Fetal movement monitoring
- Labor signs
- Assisted delivery pamphlet*
- Signs and symptoms of pregnancy-induced hypertension

- Breast or bottle feeding
- Breastfeeding booklet provided*
- Circumcision
- Postpartum depression*
- Group B Strep screening*
- Newborn car seat
- Family medical leave or disability forms

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[Image]
Contact Us!

Marshfield Clinic

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Marshfield, WI 54449
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Thank you:

DentaQuest Foundation
Delta Dental
Otto Bremer Foundation