Oral Health Referral Management

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Director of Interprofessional Practice
DentaQuest Institute

Our mission is to improve the oral health of all.
Our Study

- We conducted a cross-sectional survey of a convenience cohort that included medical and dental professionals.
- Conducted at a continuing education program on Interprofessional Practice (IPP) through a 60-minute didactic lecture.
- The training examined the definition of IPP, presented examples of IPP currently employed, and an examination of challenges and opportunities faced with IPP implementation.
Our Study

• 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 Survey

- The survey was piloted to an eight member content expert panel.
- Changes were made based on their recommendations which included the addition of positions to describe current employment and clarification language.
- The survey asked respondents to evaluate the type of referral systems and provide ratings on the performance of those systems.
- The survey included demographic, operational and open-ended questions.
- Any surveys that were not completed in their entirety were discarded.

DentaQuest Institute
The Survey

State in which you are employed or practice: _________________________________

• Which best describes your current organization/employment site?
  a. FQHC  
  b. Health Department  
  c. Private practice  
  g. Hospital Based only  
  i. Armed Forces  
  k. Mobile/portable care only  
  m. Veterans Administration  
  d. Accountable/Coordinated Care Organization  
  e. Dental Service Organization (DSO)  
  f. RHC  
  h. Academia  
  j. School-based care only  
  n. Other:

Circle best location description where you practice: rural / urban / suburban / armed forces

1. Which best describes your current employment?
  a. Dental Director  
  b. Dentist  
  c. Dental hygienist  
  d. Dental assistant  
  e. Physician  
  f. Nurse  
  g. Medical assistant  
  h. Front Office / Patient Processing / Billing-Collections  
  i. Executive Management (CEO, CCO, CMO, etc.)  
  j. Senior Leadership (program/site director, vice president)  
  k. Other: _________________________________  
  l. Nurse practitioner  
  m. Physician assistant  
  n. Dental Therapist  
  o. Hybrid Hygienist-EFDA
4. Describe your current interprofessional referral system:
   a. No referral system currently in place (skip #6)  
   b. Bi-directional (medical to dental / dental to medical)  
   c. Medical to dental referrals only  
   d. Dental to Medical referrals only

5. How are referrals made? (Circle all that apply) [skip if answered “a” in question 4]
   a. Electronic Transfer (EHR/EDR; third party)  
   b. Protected, HIPA Compliant fax  
   c. Protected, HIPA Compliant email  
   d. Direct Mail  
   e. Direct Delivery (warm handoff, internal mail)  
   f. Referral list to pt. w/ contact #s  
   g. Verbal only  
   h. other:_________________________

For dental program to dental specialty referrals only:

6. Name up to three of the most difficult referrals to obtain for your patient population:
   a. Oral Surgery  
   b. Endodontic (Root Canals)  
   c. Pediatric dentist  
   d. Orthodontist (braces)  
   e. Periodontist (gums)  
   f. Anesthesiologist  
   g. Oral pathologist  
   h. None  
   i. Gen Dentist  
   j. Dermatologist  
   k. Other:____________________________
<table>
<thead>
<tr>
<th>PLEASE CIRCLE THE NUMBER THAT BEST CORRESPONDS TO THE STATEMENTS BELOW:</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Unknown/ Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our organization/site has successfully implemented a dependable dental to medical referral system/network.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Unknown/ N/A</td>
</tr>
<tr>
<td>Our organization/site has successfully implemented a dependable medical to dental referral system/network.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Unknown/ N/A</td>
</tr>
<tr>
<td>Our electronic health record software program makes medical to dental referrals easy.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Unknown/ N/A</td>
</tr>
<tr>
<td>Our electronic health record software program makes dental specialty referrals easy. (oral surgery, root canals, pediatric, etc.)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Unknown/ N/A</td>
</tr>
<tr>
<td>Medical to dental referral appointments are made in a timely manner (within 7 days).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Unknown/ N/A</td>
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</table>
The Survey continued

<table>
<thead>
<tr>
<th>PLEASE CIRCLE THE NUMBER THAT BEST CORRESPONDS TO THE STATEMENTS BELOW:</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Unknown/Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental specialty referrals (oral surg, pediatric dent, etc.) are made in a timely manner (within 7 days)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Unknown/ N/A</td>
</tr>
<tr>
<td>Our site sees significant issues with no-shows / broken appointments (15% or more) among referral patients.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Unknown/ N/A</td>
</tr>
<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>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Unknown/ N/A</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>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Unknown/ N/A</td>
</tr>
</tbody>
</table>
The Sample

- A total of 673 people participated in the study.
- 114 were eliminated
  - Elimination criteria:
    - Ambiguous responses were provided, such as ‘other’ or ‘unknown’ without additional clarification.
    - Respondents who indicated they practice in the military were also excluded.
- Resulting sample size was 560
- The last 9 questions were dichotomized to Agree (Agree, Strongly Agree) and Disagree (Disagree, Strongly Disagree, Neutral)
  - Unknown and N/A answers were discarded
# Description of Sample: Geographic

<table>
<thead>
<tr>
<th>Geographic Region of Practice/Employment</th>
<th>Percentage</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midwest</td>
<td>16.4%</td>
<td>92</td>
</tr>
<tr>
<td>Northeast</td>
<td>31.3%</td>
<td>175</td>
</tr>
<tr>
<td>South</td>
<td>31.8%</td>
<td>178</td>
</tr>
<tr>
<td>West</td>
<td>20.6%</td>
<td>115</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medicaid Expansion Status for State of Practice/Employment, as of 2016</th>
<th>Percentage</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expanded Medicaid</td>
<td>71.1%</td>
<td>398</td>
</tr>
<tr>
<td>Did expand</td>
<td>28.9%</td>
<td>162</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rurality of Organization</th>
<th>Percentage</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>42.9%</td>
<td>240</td>
</tr>
<tr>
<td>Suburban</td>
<td>32.1%</td>
<td>180</td>
</tr>
<tr>
<td>Urban</td>
<td>25.0%</td>
<td>140</td>
</tr>
</tbody>
</table>
### Description of Sample: Organization Indicators

<table>
<thead>
<tr>
<th>Type of Organization</th>
<th>Percentage</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountable Care/Coordinating Care Organization (ACO/CCO)</td>
<td>9.5%</td>
<td>53</td>
</tr>
<tr>
<td>Dental Service Organization (DSO)</td>
<td>6.6%</td>
<td>37</td>
</tr>
<tr>
<td>Federally Qualified Health Center (FQHC)</td>
<td>40.4%</td>
<td>226</td>
</tr>
<tr>
<td>Rural Health Clinic (RHC)</td>
<td>6.4%</td>
<td>36</td>
</tr>
<tr>
<td>Non-RHC Private Practice (PP)</td>
<td>37.1%</td>
<td>208</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Directionality of Interprofessional Referral System</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No referral system currently in place</td>
<td>33.4%</td>
<td>187</td>
</tr>
<tr>
<td>Bi-directional (medical to dental AND dental to medical)</td>
<td>40.7%</td>
<td>228</td>
</tr>
<tr>
<td>Medical to dental referrals only</td>
<td>25.9%</td>
<td>145</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Referral Method (respondents could check all that apply)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic transfer</td>
<td>14.0%</td>
<td>119</td>
</tr>
<tr>
<td>Direct delivery (warm handoff, internal mail)</td>
<td>19.5%</td>
<td>167</td>
</tr>
<tr>
<td>Answered ‘No referral system currently in place’</td>
<td>20.7%</td>
<td>177</td>
</tr>
</tbody>
</table>
## Sample Description: Person-level Indicators

<table>
<thead>
<tr>
<th>Professional Orientation/Primary System of Employment</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental</td>
<td>61.0%</td>
<td>325</td>
</tr>
<tr>
<td>Medical</td>
<td>39.0%</td>
<td>208</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Primary Role in Organization</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Care</td>
<td>30.2%</td>
<td>169</td>
</tr>
<tr>
<td>Leadership</td>
<td>12.7%</td>
<td>71</td>
</tr>
<tr>
<td>Support Staff</td>
<td>57.1%</td>
<td>320</td>
</tr>
</tbody>
</table>
Referral Questions Agreement/Disagreement

<table>
<thead>
<tr>
<th>Question</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our organization/site has successfully implemented a dependable dental to medical referral system/network.</td>
<td>146 (26.1%)</td>
<td>414 (73.9%)</td>
</tr>
<tr>
<td>Our organization/site has successfully implemented a dependable medical to dental referral system/network.</td>
<td>272 (48.7%)</td>
<td>287 (51.3%)</td>
</tr>
<tr>
<td>Our electronic health record software program makes medical to dental referrals easy.</td>
<td>131 (23.4%)</td>
<td>428 (76.6%)</td>
</tr>
<tr>
<td>Our electronic health record software program makes dental specialty referrals easy. (oral surgery, root canals, pediatric, etc.)</td>
<td>269 (48.0%)</td>
<td>291 (52.0%)</td>
</tr>
<tr>
<td>Medical to dental referral appointments are made in a timely manner (within 7 days).</td>
<td>257 (46.2%)</td>
<td>299 (53.8%)</td>
</tr>
</tbody>
</table>
## Referral Questions Agreement/Disagreement

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental specialty referrals (oral surg, pediatric dent, etc.) are made in a timely manner (within 7 days)</td>
<td>327 (58.4%)</td>
<td>233 (41.6%)</td>
</tr>
<tr>
<td>Our site sees significant issues with no-shows / broken appointments (15% or more) among referral patients.</td>
<td>292 (52.1%)</td>
<td>268 (47.9%)</td>
</tr>
<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>385 (68.8%)</td>
<td>175 (31.2%)</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>218 (38.9%)</td>
<td>342 (61.1%)</td>
</tr>
</tbody>
</table>
# FQHC’s Agreement vs Everyone Else

<table>
<thead>
<tr>
<th></th>
<th>FQHC</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our organization/site has successfully implemented a dependable dental to medical referral system/network.</td>
<td>11.1%</td>
<td>36.2%</td>
</tr>
<tr>
<td>Our organization/site has successfully implemented a dependable medical to dental referral system/network.</td>
<td>53.1%</td>
<td>45.7%</td>
</tr>
<tr>
<td>Our electronic health record software program makes medical to dental referrals easy.</td>
<td>5.8%</td>
<td>35.4%</td>
</tr>
<tr>
<td>Our electronic health record software program makes dental specialty referrals easy. (oral surgery, root canals, pediatric, etc.)</td>
<td>36.3%</td>
<td>56.0%</td>
</tr>
<tr>
<td>Medical to dental referral appointments are made in a timely manner (within 7 days).</td>
<td>31.4%</td>
<td>55.7%</td>
</tr>
</tbody>
</table>
# FQHC’s Agreement vs Everyone Else

<table>
<thead>
<tr>
<th>Description</th>
<th>FQHC</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental specialty referrals (oral surg, pediatric dent, etc.) are made in a timely manner (within 7 days)</td>
<td>43.4%</td>
<td>68.6%</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>
<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>
</tbody>
</table>
## Rural vs Urban/Suburban’s Agreement

<table>
<thead>
<tr>
<th>Description</th>
<th>Rural</th>
<th>Urban/Suburban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our organization/site has successfully implemented a dependable dental to</td>
<td>25.0%</td>
<td>26.9%</td>
</tr>
<tr>
<td>medical referral system/network.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our organization/site has successfully implemented a dependable medical to</td>
<td>51.5%</td>
<td>46.6%</td>
</tr>
<tr>
<td>dental referral system/network.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our electronic health record software program makes medical to dental</td>
<td>16.3%</td>
<td>28.8%</td>
</tr>
<tr>
<td>referrals easy.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our electronic health record software program makes dental specialty</td>
<td>53.8%</td>
<td>43.8%</td>
</tr>
<tr>
<td>referrals easy. (oral surgery, root canals, pediatric, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical to dental referral appointments are made in a timely manner</td>
<td>44.2%</td>
<td>47.2%</td>
</tr>
<tr>
<td>(within 7 days).</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Rural vs Urban/Suburban’s Agreement

<table>
<thead>
<tr>
<th></th>
<th>Rural</th>
<th>Urban/Suburban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental specialty referrals (oral surg, pediatric dent, etc.) are made in a timely manner (within 7 days)</td>
<td>60.0%</td>
<td>57.2%</td>
</tr>
<tr>
<td>Our site sees significant issues with no-shows / broken appointments (15% or more) among referral patients.</td>
<td>52.9%</td>
<td>51.6%</td>
</tr>
<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>67.5%</td>
<td>68.4%</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>40.0%</td>
<td>38.1%</td>
</tr>
</tbody>
</table>
Some Takeaways

• Overall the majority of the sample agree with the statement “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.”
  – The majority of both FQHCs and all others also agree with this statement
  – Rural and Urban/Suburban trend the same. The majority of both populations agree with the statement
Some takeaways

• However, most disagree with the statement “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.”
  – An overwhelming majority of FQHCs disagree with this statement, whereas everyone else actually agrees with it
  – Those in Rural and Urban/Suburban areas both disagree with this statement
Interprofessional Oral Health Referrals

*Practice Characteristics and Provider Dissatisfaction*
The Importance of the Referral Process

• **Evidence reveals:**
  
  – Strong referral system = 
    
    Patient satisfaction

    Patient outcomes

    Practice viability
HRSA and Oral Health Referral

• HRSA 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.

• HRSA also advises medical provider teams to consider a dental care referral “…equal to a referral to any other type of specialist.”
  – And vice versa!!!
Problems with the Referral Process

- Obstacles to a comprehensive IP referral process include:
  - Provider time constraints,
  - Difficulty in maintaining continuity of care (repeated diagnostic procedures and testing)
  - Communication failure
  - Lack of EHR/PMS interoperability,
  - Low oral health literacy
  - Patient’s lack of insurance coverage or means of payment
  - Transportation and child-care limitations

Previously Published 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.

Analysis: FQHC Medical-to-Dental Referral Process

• Differences were observed between the patients self-reported medical history obtained by dental care teams and the medical history and physical provided by PCTs as well as differences in self-reported medication lists
  – Patients were least likely to disclose substance abuse, tobacco habits, opioid prescriptions, aspirin use, pain management, and arthritis

Analysis: FQHC Medical-to-Dental Referral Process

- **Patient Respondents:**
  - “I prefer and enjoyed this process of my dentist and doctor/physician/nurse practitioner talking to each other during my appointments with them both” (1.70 ±0.76)
  - “I feel I have a better understanding to the importance of my oral health” (1.34 ±0.58)
  - “Following my medical and dental visit, I feel that I can manage my oral health needs better than prior to this process” (1.79 ±0.88).

- **Medical Provider Respondents:**
  - “This process provided a positive outcome for my patient(s)” (2.10±0.73)
  - “I feel more empowered to manage my patient(s) oral health needs due to having a dental care referral network in place.” (1.90±0.66)
Interprofessional Oral Health Networks

MORE Care’s Approach
Medical Oral Expanded (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 as a vehicle 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
MORE Care Overview

**Cooperative Tasks**
- Implement a bi-directional referral system (Medical-dental referral coordination)
- Initiate, develop and improve interprofessional communication protocols and processes
- Identify areas of clinical and operational overlap to optimize care team time

**Operational Integration of Oral Health Care**
- Oral health evaluation
- HEENOT
- Risk Factor Identification
- Fluoride application
- Self-management goals
- Dental care referral

**Operational Integration of Primary Care**
- Referral acceptance verified
- Clinical summaries completed for referral communication
- Referral dental care completion verified
  - Incorporating a disease patient centered management approach to care
IP and Care/Operation/Business Models

- IP Practice can serve as an adaptor to allow multiple care-business models to converge and bridge care pathway gaps.
Dental Care Referral Networks
Dental Referral Networks - Challenges

- Reports within dentistry and medicine reflect various issues impairing effective care coordination:
  - provider time constraints
  - breakdown in care coordination/management
  - communication failure
  - variation in education and training
- Capacity of dental care is traditionally much smaller than capacity in medical care.
- Risk based care: Medical vs. Dental
Dental Referral Networks - Opportunities

• Previous studies have demonstrated a link between a strong referral system and increased patient satisfaction, better health outcomes, and reduced cost of care.

• Alternative payment models

• The use of practitioner extension methodology (community dental health coordinators, dental care team embedded with medical teams and virtual dental home) has shown early promise.
  – Goal: Prevent Surgery!
Evaluating the IPP Coordination of Care

- **Results of joint analyses by MUSC and DQI evaluating medical-to-dental referral dependability**
  - Dependability rated highest by
    - 1.) ACOs 2.) FQHCs 3.) Private Practice
  - EHR satisfaction and functionality linked to higher referral dependability ratings
  - Disconnect between office staff/patient coordinators and clinical care teams & leadership.
  - Correlation with integration practices and understanding of cross discipline care
  - The deep impact of no-shows (15% or more)
    - Employ activities that maximize kept appointments which, in this analysis, include **warm handoffs and purposeful information exchange & HIT.**
Warm Handoffs
“Warm Hand-Offs”

• **Warm Hand-Off** approach to information and referral simply means “**good customer service**”
  
  • i.e., going that extra mile, when necessary, to ensure that clients get connected to a service provider who can provide what they want and need.

– Often associated with “**No Wrong Door**”

  • Staff of community organizations are able to connect individuals and/or families with the appropriate service(s) in a manner that is streamlined, effective and seamless from the individual’s and/or family’s perspective, even if that service(s) is not offered by their organization or within their sector.
Categories of Warm Hand-offs

- **Two Categories of Warm Hand-offs**
  - *Telecommunication*
    - Call from FO to FO / provider to provider w/ patient
    - Store and go (virtual dental home),
    - Teleconferencing
  - *Duel Encounter*
    - Patient hand-off
      - Administrative appointment
      - “One department to next”
      - Face to face
    - Integrated IPP – duel or joined encounter
    - Embedded team members
    - Most often same day – can be within 5 days
Achieving Warm Handoffs = Communication

- Establish rapport with referral partner – provider to provider & front office to front office
- Good interdepartmental communication is a must
- Scripting for information gathering on prospective partner
  - Practice Demographics
  - Name and contact of patient coordinator / FO
  - What age to refer-
    - At what age they provide restorative care
  - Information exchange
    - What information is important to both of you?
  - How to close the loop on referrals
  - Business model / payment process / insurance
Health Information Technology
Health Information Technology (HIT)

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**

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**Data Entry Consumes the Most Time of All Quality Measures**

- Average total hours spent per week on quality measures, 2014-15

  - **Quality measures**: Entering data, Collecting and transmitting data, Reviewing quality reports, Tracking measure specifications, Developing data collection processes, Figures are not available

  - **Pro**
    - All IT experts and electronic health record program managers: 0.3 hours total
    - All nurse practitioners and physician assistants: 0.9
    - All administrators: 0.9
    - All registered nurses: 1.4
    - All billing / coding and medical records staff: 2.2
    - All physicians: 2.6
    - Primary care physicians: 3.9
    - All licensed practical nurses and medical assistants: 6.6
    - All staff: 12.5
    - Primary care staff: 15.2

"Desired State" Open Network IPOHN Data-Flow Model

1. **EHR Data Entry w/ Decision Support**
   - EHR data entry with post and capture drop down selection (similar to current medical HIT operations for diabetes and cardiovascular disease management).

2. **Key IPOHN Patient Experience Data**
   - IP Network reports: Merged patient-level, dental and medical data needed by provider sites. (Specific to MORE Care: Fl- varnish; risk assessment, self-management/risk-factor identification, referral management.)
   - Reporting that allows for multiple-variable searches and comparison of data from numerous EHR/PMS systems. Participating networks would have the capability to compare their data with benchmarks or clinical averages, as well as, evaluate IP network encounters and specific patient populations. The reports would be customizable to fit the desires of various accreditation bodies and patient safety organizations that guide care operations.

3. **Key Referral Process Data**
   - Quality indicators would be flagged and captured from a bi-directional referral system for the data warehouse. Analysis of relevant patient data would occur either directly through a closed HIT system or portal-type applications.

4. **EDR Data Entry w/ Decision Support**
   - EDR provides referral system assistance by the ability to map CDT and ICD10 coding into a clinical summaries for referral consultation as well as patient education/self-management augmentation.

5. **IP Network Reports**
   - IP Network reports: Merged patient-level, dental and medical data needed by provider sites. (Specific to MORE Care: Fl- varnish; risk assessment, self-management/risk-factor identification, referral management.)

- **EHR Data Entry w/ Decision Support**
- **EDR Data Entry w/ Decision Support**
- **IP Network Reports**
- **EHR Data Entry w/ Decision Support**
- **EDR Data Entry w/ Decision Support**
- **IP Network Reports**
- **EHR Data Entry w/ Decision Support**
Ad hoc report writers grab flagged quality indicators as assigned by the network partners.

'Portal access: User opens secure browser connection using a Secure Sockets Layer (SSL – an encrypted link between user and server); user selects the application favorite from controller WebTop page; controller establishes a connection (log in through SSL); user is connected to server for information query; information is formatted for delivery; user receives content from the server in the native application format.
Closing the Loop

A look at the “Desired State” to IPP Referral Management
INTRAORAL EXAMINATION RESULTS:

**EMERGENT REFERRAL:** Pain/swelling; possible infection. The dental referral appointment should be as soon as possible if ICD-10 K12.2 is used.

**URGENT REFERRAL:** If active cellulitis/abscess is not observed, complete the referral within 5 days to lower broken appointment rates and optimize therapeutics. Observation of soft tissue anomalies or oral cancer.

*Referral managed with the same workflow/process as urgent referrals for similar specialty medical care.

**DIRECT REFERRAL:** Caries activity visible as white spots or small brown areas. Patient lacks a dental home. Patient lacks or has limited access to oral hygiene products for home care. Patient with chronic or concomitant disease/disorder &/or medicine list &/or social history report that may result in increased caries list. Referral within 5-15 days will optimize buy-in and timely care. *Referral managed the same as any medical specialty referral.

**MAINTENANCE REFERRAL:** Low risk patients; healthy teeth, following good home health care. When necessary, referral includes recommendation to visit dental provider [verbal referral and dental care team list to patient]. Verify dental care appt. at next medical visit.

*No referral is necessary for patients with a current dental home.

**SUGGESTED ICD-10 CODES:**
- Z00.121 Encounter/routine child exam. w/ abnormal findings
- Z13.84 Encounter for screening for dental disorders
- K02.9 Dental caries
- K12.2 Cellulitis and abscess of mouth
- K08.8 Other specified disorders of teeth and supporting structures
- Z00.129 Encounter for routine child health examination without abnormal findings
- Z13.84 Encounter for screening for dental disorders
Primary Care to Dental Referral Process

No dental home, provide dentists list or list to patient

Direct Referral
- Appointment 5-15 days

Emergent
- Appointment as soon as possible

Urgent
- Appointment within 5 days

Referral Form
Sent by secure Email to Dentist

PCP Referral Coordinator
Makes Appt or Dental Practice calls Pt to schedule?

Patient Received Dental Care
Dentist sends Clinical summary to PCP

OR Patient No Shows/Not Scheduled
Dental Practice informs PCP
Dental-to-Dental Specialty Referral
CareFlow maps how people make healthcare decisions.

START
Senses something may be wrong or possible medical need
Gathers information
Seeks professional help

CURED
Condition changes or stabilizes, new conditions emerge
Visits doctor for checkup
Assessed by doctor and learns diagnosis
Seeks to understand disease and treatment
Decides to seek alternative treatment and advice
Initiates treatment and fills prescription

Abandons treatment
Experiences initial treatment benefits and side effects
Refills prescription and is adherent to care protocol

Prediagnosis information gathering
Treatment evaluation
First prescription fill
Treatment experience

Source: Pharma3D.com; McKinsey analysis
Dental-Dental Specialty Referrals

- Completing a transportation-friendly and complete dental referral network can be difficult for multidisciplinary care teams providing care to significant underinsured or uninsured populations.

- EHR functionality and intraoperability impacts successful dental-to-dental specialty referrals similar to medical to dental
  
  – Prelim analysis: “our EHR makes dental specialty referrals easy” are 4.5 times more likely to agree with the statement that dental providers at our site are prescreening or screening for systemic disease
“The Doctors Company - Negligent Referral”

• In some situations, a dentist could be held legally responsible for treatment performed by specialist or consulting dentists.
  – Therefore, referring dentists should independently assess the qualifications of participating specialist or consulting dentists as it relates to specific patient needs
• This creates liability exposure for dentists who refer care outside their background, experience, or training.
  – Ask yourself: “Is this patient’s condition within my clinical competence?”
• Most claims involving failure to refer or delay in referral for evaluation or treatment involve care provided by specialists.
  – The most common referrals are for oral surgery, periodontal disease, implants, and orthodontia.
    • Pediatric dentistry more common in safety net programs
Top 3 most difficult dental-specialty referral types:

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Entire Cohort</th>
<th>FQHCs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pediatric Dentist</td>
<td>18%</td>
<td>25%</td>
</tr>
<tr>
<td>Orthodontist</td>
<td>15%</td>
<td>23%</td>
</tr>
<tr>
<td>Periodontist</td>
<td>12%</td>
<td>11%</td>
</tr>
<tr>
<td>OMFS</td>
<td>9%</td>
<td>9%</td>
</tr>
</tbody>
</table>

*FQHCs: Federal Qualified Health Centers*
For Consideration…

• When a dental-dental specialty referral occurred following a medical to dental referral no show rates increased and the number of diagnostic procedures were above clinic/site average

• Lack of dental to dental interoperability can result in increased cost
  – Try to have a singular system with written protocols

• Track and report regularly

• No show rates decreased with the primary care provider made the referral in the presence of the patient/parent
Measuring and Reporting
Referral Completion Rate

• Rarely administered in the health care system
• Tracking of referrals not common and under-reported in professional literature
• Requires a completed communication channel and process
• Successful programs provide some level of integrated oral health care and those affiliated with hospital systems report higher success
**D2: Number of Patients with dental referral initiated**

*Description:* Total number of patients in the target population who had a dental referral initiated and documented at a well visit or sports physical in the EHR (RHC) during the measurement month.

**N4: Count of patients with treatment completion form completed**

*Description:* Number of patients with a treatment completion form from dental provider received by RHC and documented in EHR during the measurement month.

**M4(S10): Percent with completed dental referral documented**

*Description:* Percent of patients in the target population with a treatment completion form received from dental provider to RHC and documented in EHR (RHC) (SC, PA, CO).
Interprofessional Practice (IPP) White Paper

This white paper was prepared to support the combined efforts of the DentaQuest Institute, the South Carolina Office of Rural Health, the Medical University of South Carolina, the Colorado Rural Health Center, and the Pennsylvania Office of Rural Health, who share the interest of improving the health of rural communities in the United States. The information contained in this document has been compiled during the last two years as collective findings of the Medical Oral Expanded Care (MORE Care) Initiative involving twenty-one Rural Health Clinics and fifteen rural dental care partners located in Colorado, Pennsylvania, and South Carolina. The purpose of MORE Care is to create interprofessional oral health networks (producing integrated care pathways between medicine and dentistry) and serve as a vehicle/component for adopting system change in the rural environment.

This document was developed to provide insight into the main factors affecting the initiation of interprofessional oral health practice observed during the early phases of MORE Care and offer insight into the needs of Rural Health Clinics and rural dental care teams as they undertook the creation of interprofessional oral health networks (IPOHNs).

https://www.dentaquestinstitute.org/rural-ipp