Speaking Medical and Dental
John V Caron, DMD, MPH
NPOHC
October 2, 2012
8 Medical Locations
227,784 Visits
159,399 Medical
38,837 Dental
17,788 Behavioral Health
17,760 Complementary Alternative Medicine

455 Employees
33.3 fte MD
9.4 fte MidLev
11.6 fte DDS
8.5 fte BH
5.2 fte ND

2011
83,549 Patients
227,784 Visits
159,399 Medical
38,837 Dental
17,788 Behavioral Health
17,760 Complementary Alternative Medicine
The Beginning:

- Paper everything: dental records, scheduling, medical records
  - Little to no interactivity between systems
  - Reenter patient information at many levels
  - Frustrating to staff and patients
  - Locating records and information a burden
- Electronic scheduling – paper dental - paper medical
  - Still no interactivity unless paper driven
- Electronic scheduling – Electronic medical – Paper dental
  - Paper driven internal referrals
  - Paper medical histories
- Electronic everything: medical, dental, scheduling
Is integrating with medical difficult?
Integrated Electronic Health Care Record Conceptual Approach

- Several applications sharing data in real time.
- Shared data entered once.
Integrated Electronic Health Care Record Timeline

- PTSO (Practice Technology Service Organization) 2004
  Support for 5 CHCs

- EPM – NextGen (scheduling/demographics/billing) 2005

- EMR – NextGen (medical) 2006

- EDR – QSI (dental) 2010

- Radiographs – Apertryx (dental) 2010

- QS1 - (Pharmacy) 2012
Integrated Electronic Health Record
Future State:
Radiographs
Patient education

EDR, EMR, EPM
Improving Patient Care

• Develop lists of patients needing recall appointments
• Develop lists of pregnant medical patients needing dental appointments
• Schedule Well Child dental visits at the Well Child medical visit
• Tasks from medical to dental and vice versa
• Coordinate and update medications/BP/allergies
• Health care record available to all HealthPoint authorized users in real time
• Medical and dental health education available to patient
Improving Patient Care

**Dental Visits**

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012 proj</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visits</td>
<td>35234</td>
<td>34379</td>
<td>38922</td>
<td>41470</td>
</tr>
</tbody>
</table>

**Recall Exams**

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012 proj</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visits</td>
<td>5,462</td>
<td>5,743</td>
<td>6,515</td>
<td>9,254</td>
</tr>
</tbody>
</table>

**Well Child Dental Visits (<2)**

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012 ytd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate</td>
<td>31.3%</td>
<td>28.9%</td>
<td>21.5%</td>
<td>26.9%</td>
</tr>
</tbody>
</table>

**Pregnant Medical Patient visits to dental**

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012 ytd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate</td>
<td>3.9%</td>
<td>3.9%</td>
<td>11.2%</td>
<td>15.8%</td>
</tr>
</tbody>
</table>

**Treatment Plans Complete**

<table>
<thead>
<tr>
<th>Year</th>
<th>Children</th>
<th>Adults</th>
<th>Children</th>
<th>Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>75%</td>
<td>49%</td>
<td>90%</td>
<td>49%</td>
</tr>
<tr>
<td>2010</td>
<td>79%</td>
<td>56%</td>
<td>90%</td>
<td>60%</td>
</tr>
<tr>
<td>2011</td>
<td>90%</td>
<td>60%</td>
<td>90%</td>
<td>62%</td>
</tr>
<tr>
<td>2012 ytd</td>
<td>90%</td>
<td>62%</td>
<td>90%</td>
<td>62%</td>
</tr>
</tbody>
</table>
Patients with multiple services 18 Month totals

<table>
<thead>
<tr>
<th></th>
<th>Dec-09</th>
<th>Dec-10</th>
<th>Dec-11</th>
<th>Jun-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD/DN</td>
<td>7074</td>
<td>7059</td>
<td>7925</td>
<td>8596</td>
</tr>
<tr>
<td>MD/BH</td>
<td>4891</td>
<td>5498</td>
<td>5878</td>
<td>6074</td>
</tr>
<tr>
<td>MD/CM</td>
<td>2795</td>
<td>2928</td>
<td>3235</td>
<td>3398</td>
</tr>
<tr>
<td>MD/BH/CM</td>
<td>1037</td>
<td>1098</td>
<td>1265</td>
<td>1394</td>
</tr>
<tr>
<td>MD/DN/BH</td>
<td>939</td>
<td>984</td>
<td>1001</td>
<td>1069</td>
</tr>
<tr>
<td>MD/DN/CM</td>
<td>610</td>
<td>701</td>
<td>842</td>
<td>891</td>
</tr>
</tbody>
</table>
Opportunities:

- Pharmacy integration beyond demographics and eRx
- Patient Oral Health Risk Assessment (CAMBRA)
- Patient vitals in dental (Height, weight, BP) - BMI
- Patient Visit Summary (meaningful use)
## Vital Signs

**ALERTS:**
- Diabetic

<table>
<thead>
<tr>
<th>Measured Date</th>
<th>07/31/2012</th>
<th>Time</th>
<th>8:59 AM</th>
<th>Measured By</th>
<th>John V. Caron</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td></td>
<td>ft</td>
<td>in</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td></td>
<td>lb</td>
<td>kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temperature</td>
<td>F</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blood Pressure</td>
<td></td>
<td>mmHg</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Last Measured:** 06/14/2011
- measured today
- carried forward

**Context:**
- Dressed with shoes
- Dressed without shoes

**Position:**
- sitting
- standing
- lying

**Side:**
- right
- left

**Method:**
- manual
- automatic
- pediatric
- adult
- small
- large
- thigh

**Pulse Pattern:**
- regular
- irregular

**Pulse Ox:**
- Pre-Ox
- Post-Ox

**Pain Scale:**

**Neck Circumference:**
- in
- cm

**Waist Circumference:**
- in
- cm

**Hip Circumference:**
- in
- cm

**Saturation:**
- %

**Delivery Method:**

**BMI:**
- kg/m²

**BSA:**
- m²

**HAQ Disability Score:**

**Comments:**

**Room Air:**
- %
- L/min

**Peak Flow:**
- L/min
- Pre-bx
- Post-bx

**Clear For Add** | **Delete** | **Save** | **Close**
Thank you for choosing us for your healthcare needs. The following is a summary of the outcome of today’s visit and other instructions and information we hope you find helpful.

**Assessment/Plan**

**Examination, dental (V72.2)**

Today’s instructions / counseling includes follow instructions provided during this visit, schedule check up for 1 year and return for treatment as discussed.

**Medications**

<table>
<thead>
<tr>
<th>Brand Name</th>
<th>Dose</th>
<th>Sig Description</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tylenol</td>
<td>325 Mg</td>
<td>take 1 tablet (325MG) by oral route every 4 hours as needed</td>
<td></td>
</tr>
<tr>
<td>Naproxen</td>
<td>375 Mg</td>
<td>take 1 tablet (375MG) by oral route 2 times every day with food</td>
<td></td>
</tr>
<tr>
<td>Clindamycin Hcl</td>
<td>300 Mg</td>
<td>take 1 capsule (300MG) by oral route every 6 hours</td>
<td></td>
</tr>
</tbody>
</table>

**Allergies**

<table>
<thead>
<tr>
<th>Allergen/Ingredient</th>
<th>Brand</th>
<th>Reaction:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Clavulanate</td>
<td>Augmentin</td>
<td>Nausea/vomiting</td>
</tr>
<tr>
<td>Amoxicillin Trihydrate</td>
<td>Augmentin</td>
<td>Nausea/vomiting</td>
</tr>
</tbody>
</table>

**Instructions / Education**

<table>
<thead>
<tr>
<th>Status</th>
<th>Order</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>completed</td>
<td>Follow instructions provided during this visit</td>
<td></td>
</tr>
<tr>
<td>completed</td>
<td>Schedule check up for 1 year</td>
<td></td>
</tr>
<tr>
<td>completed</td>
<td>Return for treatment as discussed</td>
<td></td>
</tr>
</tbody>
</table>

Sincerely,

John V. Caron DMD
Lessons Learned:

• Staged implementation and integration, not all at once
• In house training facilities for initial setup and upgrades
• Use on-site experts, super users for minor fixes
• Incorporate IS training as part of new employee orientation
• Use dental assistants to their maximum potential – data entry for all applications
Recommendations:

- Focus on a few interfaces at first – BP, Medications, Allergies
- Initial emphasis on OB, Children, diabetic patients
- Use the built in systems for sharing (tasking, communications, email)
- Consider your sources for reports (NextGen, QSI, QS1)
- Consider your sources for support (vendor vs PTSO)
- Keep moving toward integration at all levels