Electronic Medical and Dental Record Integration Options  
June 2012

**What is an Electronic Medical/Dental Record (EMR/EDR)?**
- An electronic record of health-related information on an individual within one health care organization, such as a Health Center
- A computerized record of a patient’s clinical, demographic, and administrative data
- Real-time data access and evaluation in medical / dental care
- Provides the mechanism for longitudinal data storage and access
- A motivation for health care providers to implement this technology derives from the need for medical outcome studies, more efficient care, speedier communication among providers and management of health plans

**What is an Electronic Health Record (EHR)?**
- Provides a longitudinal electronic record of patient health information generated by one or more encounters in any care delivery setting
- Includes information such as patient demographics, progress notes, problems, medications, vital signs, past medical history, immunizations, laboratory data and radiology reports
- Automates and streamlines the clinician's workflow
- Has the ability to generate a complete record of a clinical patient encounter - as well as supporting other care-related activities directly or indirectly via interface - including evidence-based decision support, quality management, and outcomes reporting
- Conforms to nationally recognized interoperability standards and that can be created, managed, and consulted by authorized clinicians and staff, across more than one health care organization

**What is EMR/EDR integration?**
- The extent to which the Electronic Health Medical and Dental records converge to form a single patient record and system
- Primary Objectives
  - Maintain one billing/collections and A/R system
  - Ability to run UDS and practice management reports from one system
  - Limit the amount of training required
  - Easily provide clinicians with tools not present in clinical systems
  - Ability to view patient’s dental/medical information from anywhere in the organization including medication list
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<tr>
<th>Type</th>
<th>Pros</th>
<th>Cons</th>
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<td><strong>No Integration</strong></td>
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| All Paper | None | • Inefficient  
• Costly storage and retrieval  
• Information not readily available  
• Discrepancies between charts  
• Cannot report off information (unstructured data) |
| Electronic Medical Record Only | Part of patient’s medical record exists in electronic format for easy accessibility  
• Advanced clinical decision support mechanisms can be implemented in EMR | • Paper workflows are inefficient and costly to maintain  
• No single patient record  
• Need for process improvement and efficiency of paper record “unstructured content” integration into an EMR |
| Electronic Dental Record Only | EDR vendors are adding EMR functionality and planning to obtain ONC certification for Stage 2  
• EDR integrated with electronic imaging provides a single view of patient record | • Requires license to both programs  
• Must toggle between and log in/out of 2 distinct systems  
• No single sign on  
• Dual data entry  
• Any non-integrated EMR-EDR costly to maintain |
| Separate Electronic Medical and Dental Records | Dental can see medical  
• Sets the stage for tighter integration between the two systems | | |
| Electronic Medical Record Only with Dental Templates | Do not have to interface between systems; single database  
• All patient information is stored in a single chart  
• Ability to leverage embedded clinical decision support and interaction checking  
• Less cost | • Products vary in their ability to support film and image needs of dentists  
• Development of dental specific templates may be required  
• One size fits all approach  
• Duplicate information |
| Interfaced Electronic Medical & Dental Records | Control over systems development lifecycle  
• Ability to customize to the specific needs of the clinic and providers | | |
| Home Grown Electronic Medical & Dental Records | EDR dental specific  
• HL7 messaging is an accepted interoperability standard  
• Opportunity to obtain Meaningful Use incentive payments if EMR-EDR solution is ONC certified | | |
| Fully Integrated Electronic Medical & Dental Record (one database) | EDR dental specific  
• Streamlined and tightly integrated patient record and functions  
• Single sign on  
• Increased patient safety  
• Medication reconciliation  
• Single clinical view of patient record  
• Immediate access to patient records within the Health Center | | |
| Electronic Medical & Dental Record + Electronic Health Record (one database) | Multiple users can view a chart simultaneously  
• Lab and x-ray results returned automatically  
• Drug to drug/ allergy interaction checking  
• Quality of Care  
• Increased efficiency and improved workflow  
• Improved patient communications and services  
• Reduced medical records transportation costs | • Generally the combined cost can be more  
• Internal IT and clinical staff need to maintain and service both applications if Health Center is not a member of a Health Center Controlled Network |

*EMR/EDR Levels of Integration – How “integrated” is my Health Center?*