

# Avoiding Pitfalls in Selecting An Electronic Medical Record System

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# Disclosures

- I have no relevant disclosures related to this presentation.

# Outline

- Background on EMR
- EMR Options
  - Web based
  - Server based
  - Desktop based
- Cost models
  - Free
  - One time fee with maintenance
  - Monthly

# Outline

- EMR Pitfalls
  - Cost
  - Buy-in from staff
  - Privacy
  - Speed/Volume
  - Legal

# What is an EMR?

- Electronic Medical Records (EMRs) are computerized records of patients' clinical, demographic, and administrative information
- EMRs have the following functions:
  - Capture patient data
  - Integrate with multiple data sources
  - Provide decision support
  - Patient charting
  - Order communications systems
  - Document and image management



The screenshot shows an EMR software interface. At the top, there are menu options: File, Edit, View, Patient, Billing, Help, and Online Services. Below the menu, there are icons for Schedule, Messages, and Reports. The 'Scheduled Patients' section shows 35 patients and 10 messages. The 'Patient List' table has columns for ID, Lastname, Firstname, and Active Patients Only. Below the patient list is a scheduling calendar for June 2010. The calendar shows a grid of days with appointment times and names. A detailed view of the schedule for Wednesday, June 16, 2010, is shown on the right side of the screenshot. The detailed view includes a table with columns for Time, Provider Name, and Patient Name. The table lists appointments from 09:15 AM to 05:00 PM, including providers like JONATHAN HOLMES CRYO, JOHN HOLMES CRYO, SAM BARY WCC, and others.

Time	JONATHAN HOLMES CRYO (15)	BEN VISITS (15)
09:15 AM	WILLIAM CLINTON F/U (15)	SAM BARY WCC (20)
09:30 AM	FREDERICK POHL F/U (15)	SAM BARY WCC (20)
09:45 AM	DAVID BOWMAN F/U (15)	RACHEL DEKARD F/U (15)
10:00 AM	COURTNEY COX SICK (15)	SAMUEL JACKSON F/U (15)
10:15 AM	JEFF NOON SICK (15)	YUAN LUC PICARD SICK (15)
10:30 AM	LINDA BLAIR SICK (15)	WILLIAM CARLOS WILLIAMS SICK (15)
10:45 AM		
11:00 AM	FRANK POOLE III F/U (15)	TIMOTHY LEARY RECHECK (15)
11:15 AM	GIRISH KUMAR F/U (15)	JACK O'MALLEY F/U (15)
11:30 AM	WILLIAM GIBSON F/U (15)	SHIRLEY IZZAPANE NEW CONSULT (30)
11:45 AM	JOEYAN KENOBI F/U (15)	SHIRLEY IZZAPANE NEW CONSULT (30)
12:00 PM	<60 Minute Break>	<60 Minute Break>
12:15 PM	<60 Minute Break>	<60 Minute Break>
12:30 PM	<60 Minute Break>	<60 Minute Break>
12:45 PM	<60 Minute Break>	<60 Minute Break>
01:00 PM	SARAH PARKER F/U (15)	<Hospital Meeting>
01:15 PM	TOM CLANCY F/U (15)	<Hospital Meeting>
01:30 PM	JENNIFER ANISTON F/U (15)	<Hospital Meeting>
01:45 PM	GEORGE BUSH F/U (15)	GINGER LYNN CRYO (10)
02:00 PM	ARTHUR CLARKE SICK (15)	RIDLEY SCOTT SICK (15)
02:15 PM		
02:30 PM	DAVID WINN SICK (15)	
02:45 PM		
03:00 PM	WILLIAM COLES F/U (15)	WILLIAM SAFFIRE F/U (15)
03:15 PM	DEANNA TROI NEW CONSULT (30)	JONATHAN BUSH WCC (20)
03:30 PM	DEANNA TROI NEW CONSULT (30)	JONATHAN BUSH WCC (20)
03:45 PM		
04:00 PM	KALEEL JAMISON F/U (15)	FRANK HERBERT F/U (15)
04:15 PM		JAY BALLARD SICK (15)
04:30 PM		RANDALL OATS SICK (15)
04:45 PM		
05:00 PM		

# EMR Objectives

- Complete and Accurate Patient Health Information
- Patient Care Coordination
- Encouraging Active Participation from Patients
- Reduce Medical Errors
- Provide Safer Care at Lower Costs

# EMR Trends

- An increasing number of physicians are using EMRs
- National Ambulatory Medical Care Survey
  - 34.8% of physicians used EMR in 2007
  - 50.7% in 2010





# Physician's offices

- Physicians office systems
  - Less expensive
  - Decrease use of paper
  - Ultimately allow communication across the entire health care system

# Government EMR Mandate

- Goal for most physicians to use EMR by 2014
- \$17 billion of incentives to physicians and hospitals by The American Recovery and Reinvestment Act of 2009
- Loss of Medicare fees for physicians or hospitals who are not using EMRs by 2015

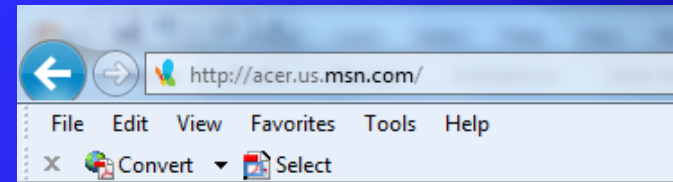


# EMR Options

- Web based
  - Cloud computing based
  - Data does not reside in office
  - Continuously or intermittently backed up to remote site
  - Advantages
    - Safe from natural disasters
    - Less costly
    - Access from anywhere with a web connection

# Web based

- Disadvantages
  - Where is the data?
  - Data transfer from system to system.
  - HIPAA secure but who is mining the patient data?
  - Potential delays based on internet connection
  - What if internet crashes?



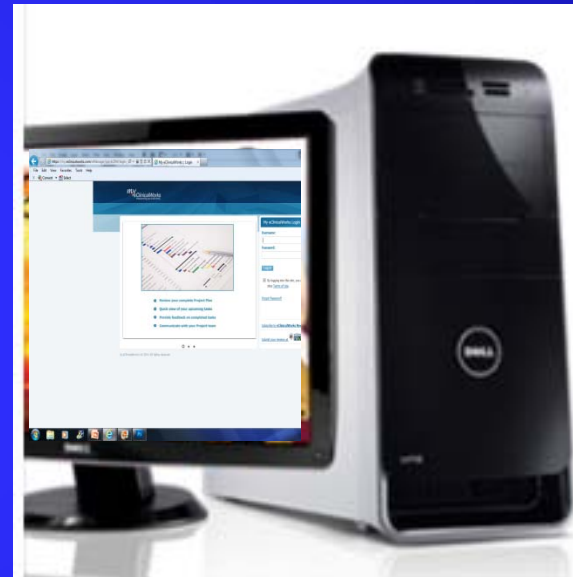
# EMR Options

- Server based
  - Server vs. client
  - May be ideal for a moderate sized office
  - Usually requires specific IT support
  - Client computers can be attached either through wired or wireless connections.



# EMR Options

- Desktop based
  - A desktop computer can act as a server
  - The EMR database resides on the desktop
  - Most likely for a very small office



# Client/Server Systems

- Allow for faster access to data
- Avoid internet traffic issues
- No internet needed
- Require remote data backup
- Online remote access
  - Logmein.com
  - Citrix



# Data entry

- Typing
- Templates and drop down menus
- Dictation
- Voice Recognition





# EMR/Practice Management

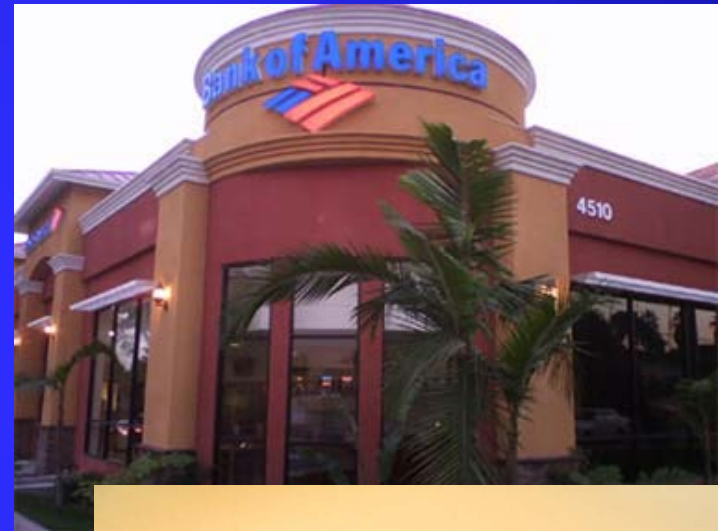
- Billing
  - Difference between EMR and practice management
  - Practice management
    - Scheduling
    - Billing
    - Office flow
    - Claim processing

# EMR Pitfalls

- Cost
- Buy-in from staff
- Privacy
- Speed/Volume
- Legal

# Cost Models

- Free
- One time +/- service agreement
- Monthly



# Cost

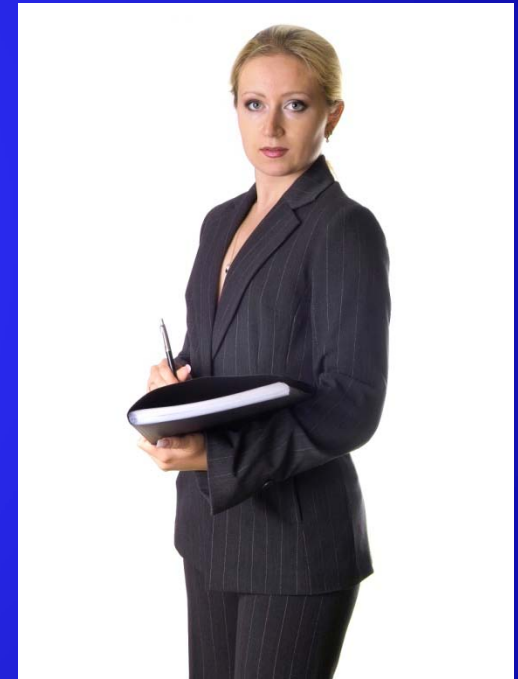
- EMR prices range from zero to \$millions depending on size
- US EMR market grew to \$15.7 billion in 2010
- Expected to reach \$25 billion by 2015
- For small offices, best to start off with the system that lets you “ease into the EMR concept”
- Avoid large up-front expenses

# Cost

- High price EMRs are typically financed
  - Major pitfall can occur if the office buys from a third party company rather than the manufacturer
  - Financing is through a bank rather than through the seller.
  - If things fall apart, office is on the hook for the full amount

# READ THE CONTRACT!

- EHR may not have the required certification for “meaningful use”
- An EHR that meets criteria does not necessarily mean the practice will meet the criteria
- Time and support
- Deadlines
- Careful with contract details
  - Licensing fees



# Free!



- Practice Fusion
  - Has been in existence since 2005
  - Free to use
    - Email address needed
  - Cloud based
  - How is this possible?
    - Advertisements, data mining
    - Compliant with meaningful use

# Buy-In

- A new EMR in the setting of a previous paper based office can be a source of anxiety
  - Test run
  - Site visit
  - Chat group
  - Involve staff
  - Lighten up the schedule!





# Buy-In

- Baby steps
  - Start off with the demographic info and notes
  - Then incorporate other facets of EMR
    - Labs
    - Xray results
    - Intraoffice ordering
    - Messaging

# Privacy

- HIPAA: Health Insurance Privacy and Portability Act
- Privacy Rule
  - Regulates the safety and control of Protected Health Information (PHI)
- EMRs provide an excellent method to safeguard info due to password protection

# Privacy

- Risk of data loss
  - Laptops
  - Flash Disks
  - Passwords



# Office Flow/Speed

- Typically, EMRs initially can lead to some degree of loss of speed
- Overall, the benefit of improved documentation and quality outweighs the decreased number of patients
  - Eventually

# Office Flow/Speed

- Ancillary staff
- Efficiency of ordering
- Improved access to data (no more thick charts)

# Legal Issues

- Concern about medical-legal risks
  - Loss of data
  - Malpractice liability



# Data Loss

- Loss of a laptop or portable device can lead to a massive breach
  - Important to know state regulations regarding informing patients
  - Loss of out of state patient data
  - Conflicts with investigating agency



# Malpractice Liability

- Liability for alleged “alteration of records”
- Many cases focused on reviewing electronic data
- Potential fodder for attorneys to review:
  - Timing of response to lab values
  - Use of external references
  - Inter office messaging
- Tort reform for EMRs is needed



# Summary

- Brief introduction of EMR
- Choices available for EMRs
- Pitfalls associated with incorporating an EMR into your practice

Thank you!

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