Myth-Destroyers
Electronic Medical Records

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All EMRs are the same

Myth-Destroyers

All EMRs are the same

- **How will the system be used?**
  - **Small practice**
  - **Large Multispecialty group**
- **How well do the workflows and content represent your specialty and care context?**
- **Is there sufficient interoperability with external systems and services?**
- **What is the reputation of the vendor?**
- **What about support and updates after implementation?**

All EMRs are the same

- What is contained in the EMR
  - What kind of information and types of documents are going to be stored?
  - How is the information going to be captured?
    - discrete data
    - narrative electronic text
    - scanned images
  - Are different media supported (images, video)?

All EMRs are the same

- **Will the system provide decision support?**
  - **patient safeguard alerts**
  - **best practice guidelines**
  - **reference materials or links**
  - **population management tools**
  - **analytics capabilities**
  - **medication alerts**

All EMRs are the same

- **KLAS**
  - **WWW.KLASRESEARCH.COM**
  - **"Accurate, honest, and impartial ratings of healthcare technology to help providers make informed decisions."**
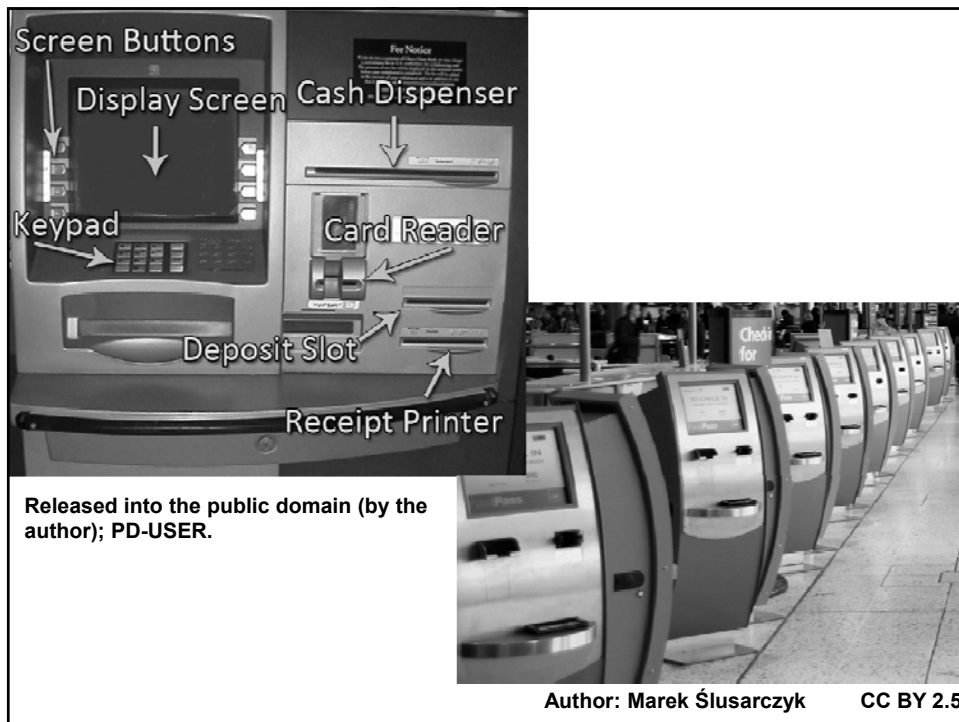
All EMRs are the same

All EMRs are the same

NOT A CHANCE

An EMR needs to work the way I do

Myth-Destroyers

Screen Buttons

Display Screen   Cash Dispenser

Keypad

Card Reader

Deposit Slot

Receipt Printer

An EMR needs to work the way I do.

- **Paper documents and workflows do not translate directly into electronic equivalents.**
- **To take maximum advantage of an EMR, you need to adapt your documentation and your workflows to leverage the strength of the system**
- **Significant changes to workflow may be required to achieve best performance**

An EMR needs to work the way I do.

- **EMRs will not fix organizational problems and cannot, by themselves, guarantee safety, quality, or efficiency**
- **Installing an EMR often identifies previously undetected poor workflows**
- **Business as usual may not be practical or safe**

An EMR needs to work the way I do.

- **Data that can be discrete, should be discrete**
  - **Allergies**
  - **Medications**
  - **Past Medical History**
  - **Past Surgical History**
  - **Family and Social History**
  - **Orders**

An EMR needs to work the way I do

An EMR needs to work the way I do

NOT SO

Myth-Destroyers
Electronic Medical Records

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EMRs are just Electronic versions of a traditional paper chart

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EMRs are just Electronic versions of a traditional paper chart.

- As opposed to traditional paper charts, the EMR provides the physician with
  - all the information that is known about the patient rather than what they might know or remember at any given moment
  - immediate access to decision support tools and a mass of online knowledge about medical conditions, treatment, and outcomes
  - the capability to engage patients as partners in their own health care and wellness efforts

EMRs are just Electronic versions of a traditional paper chart.

- As opposed to traditional paper charts, the EMR provides the physician with
  - the ability to collect key outcome data in order to continually improve the quality of care delivered
  - the information necessary to evaluate and monitor individual patients longitudinally over time and to manage entire populations of patients with similar conditions
- Think "Electronic Patient Management" rather than "Electronic Patient Records"

EMRs are just Electronic versions of a traditional paper chart.

- **Multiple people can access and enter data in an electronic record at the same time from a variety of devices and locations**
- **Physicians with paper charts often under-code as they don't document enough to justify the appropriate CPT code for their level of service.**

EMRs are just Electronic versions of a traditional paper chart

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NO WAY

Computers interfere
with the doctor-
patient relationship

Myth-Destroyers

Computers interfere with the doctor-patient relationship.

- **Bad workflow design, insufficient training, and poor ergonomics can lead to barriers**
  - **Insufficient or incorrect data**
  - **Inadequate workflows (e.g., chart review)**
  - **Improper workstation placement**
  - **Incorrect use of the system (e.g., chart transitions)**

Computers interfere with the doctor-patient relationship.

- **The benefits of good data and informed use**
  - **Information sharing between providers**
  - **Real-time decision support**
  - **Opportunity for patient engagement and input**
  - **Growing expectation of patients and families**
- **In general, better, faster, and more reliable access to information can provide more time for providers to interact with their patients**

Computers interfere with the doctor-patient relationship.

- **A 2010 survey of 18,000 patients by Sage Healthcare found that:**
  - **81% had a positive perception of documenting their care electronically**
  - **45% had a "very positive" perception of their physician documenting their care on a computer**
  - **Only 39% recall seeing their physician taking notes directly into a computer while in the exam room**

Computers interfere with the doctor-patient relationship.

- **3 other recent published studies showed that when their physician used an electronic medical record in the exam room, patients:**
  - **rated their quality of care higher**
  - **reported no detrimental effect on their ability to communicate effectively with their provider**
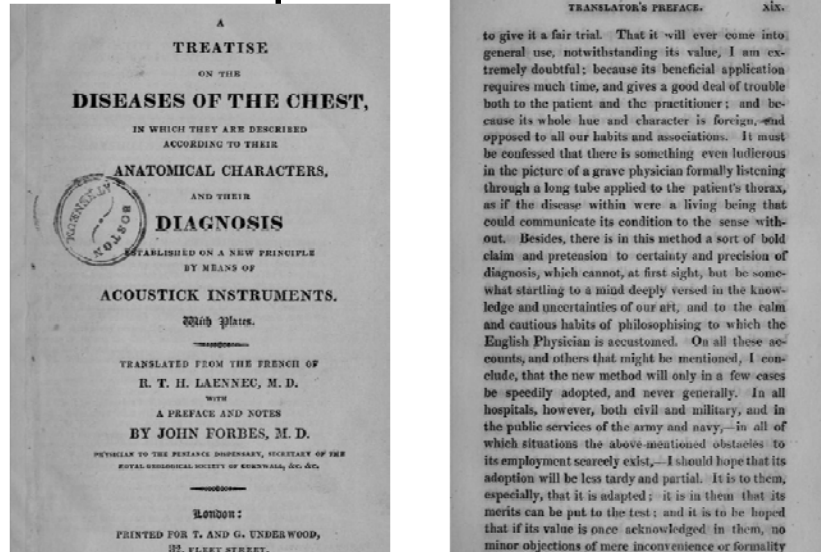 - **had increased overall satisfaction with their provider and the medical care being delivered**

Computers interfere with the doctor-patient relationship.

- **One unpublished survey of over 7,000 patients confirmed that patients did not see the computer as intrusive to the patient physician relationship.**
- **The only concern on the part of the patient was security of the record. Sharing of one record by all providers was seen as an advantage.**

Computers interfere with the doctor-patient relationship.

I have no doubt whatever, from my own experience of its value, that it will be acknowledged to be one of the greatest discoveries in medicine by all those who are of a temper, and in circumstances, that will enable them to give it a fair trial. That it will ever come into general use, notwithstanding its value, I am extremely doubtful; because its beneficial application requires much time, and gives a good deal of trouble both to the patient and the practitioner; and because its whole hue and character is foreign, and opposed to all our habits and associations. ....On all these accounts, and others that might be mentioned, I conclude, that the new method will only in a few cases be speedily adopted, and never generally.

Computers interfere with the doctor-patient relationship

John Forbes MD. Translator's Preface to Treatise on the Diseases of the Chest by RTH Laennec MD. Published by T. and G. Underwood, London, England, 1821. Photo courtesy of Marvin Harper MD, Boston Children's Hospital.

Computers interfere with
the doctor-patient
relationship

DESTROYED

An electronic patient
portal is nothing
but trouble

Myth-Destroyers

An electronic patient portal is nothing but trouble

- **Patient messages require more effort to address than phone calls**
- **Patients will abuse easy access to their provider by sending lots of messages**
- **Patients will consume a lot of non-billable services**
- **Patients may notice things in their record that have been previously overlooked**

An electronic patient portal is nothing but trouble

- **Physicians can respond to patient messages in between seeing patients to complete tasks more efficiently and avoid "phone tag" with patients.**
- **While some patients may send frequent messages, having the access alone seems to satisfy many patients'need for access to their provider.**
- **The provider has the option to request that the patient make an appointment if the condition cannot be addressed via email.**

An electronic patient portal is nothing but trouble

- **Some insurers are paying for time used to answer clinical concerns via a patient portal.**
- **One of the goals of meaningful use is having the patient as a partner in his/her healthcare.**
  - **Having access to read and ask questions about results empowers the patient**
  - **Patients will find overlooked information more quickly than a provider**

An electronic patient portal is nothing but trouble

- **The portal allows greater confidentiality for patients, avoiding the need for phone message.**
- **Patients are more comfortable communicating about sensitive issues via secure messaging.**
- **Proxy access allows caregivers of aging adults or young children as well as a spouse immediate access to medical records.**

An electronic patient portal is nothing but trouble

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NOT A CHANCE

Data stored in an EMR is a privacy and security risk

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Data stored in an EMR is a privacy and security risk.

- **Fact: Anyone can pick up and read a paper chart undetected and unrecorded.**
- **Fact: Paper records could not restrict access to particular information or restrict certain users.**
- **Fact: No one can access an electronic record without generating an audit trail of exactly what was touched and when it was touched.**
- **Fact: Data in EMR systems is typically encrypted and running on secure networks.**

Data stored in an EMR is a privacy and security risk.

- **In a 2012 survey, patients were highly (and equally) comfortable with the confidentiality of their records whether the provider used paper or electronic records.**

- **Because of the more organized and legible fashion of an EMR, caregivers are more likely to respond to important information.**

- **Cost to find and pull a paper record for a single office visit is $5-$10. Total cost and maintenance of a lifetime EMR is estimated to be between $25-$50.**

Data stored in an EMR is a privacy and security risk.

- **An electronic medical record may offer better security than a traditional paper record if we look to the banking industry.**
- **No system will protect the patient from fraud and abuse.**

Data stored in an EMR is a privacy and security risk.

- **Institutional policies will be key for internal risk and software developer interest key for external risk.**
  - **Accidental disclosure**
  - **Insider curiosity**
  - **Data breach by insider**
  - **Data breach by outsider**
  - **Unauthorized intrusion of network system**

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UNLIKELY

EMRs will eliminate
errors and ensure
patient safety

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EMRs will eliminate errors and ensure patient safety

- **Errors can be reduced but not eliminated**
- **Systems are designed to allow for provider judgment... and provider judgment can sometimes be flawed**
- **Systems cannot be truly error-proofed, but they can be made fault-tolerant**

EMRs will eliminate errors and ensure patient safety

- **Eliminate the confusion caused by physician handwriting.**
- **Improved medication safety with bar coding.**

EMRs will eliminate errors and ensure patient safety

- **Errors in programming**
- **Lack of questioning what is programmed in the EMR**
- **Confusion in the drop down menus**
- **Thinking someone will "know what I mean"when choosing an incorrect order.**

EMRs will eliminate errors and ensure patient safety.

- **Alert fatigue**
  - **80-90% of alerts are being ignored.**
  - **Many alerts are considered to be irrelevant.**
    - **Duplicate class of medication alert.**
  - **Important alerts are being ignored.**
  - **Alerts should be written in the best interest of patient care.**

EMRs will eliminate errors and ensure patient safety.

- **EMRs may improve physician-patient communication in some contexts, but may impair communication by leading the clinician to inaccurate conclusions.**

- **Asynchronous communication may decrease the value of the interchange.**

- **Structured data collection limits amount of open-ended questions asked, which can cause subtle symptoms to be missed.**

EMRs will eliminate errors and ensure patient safety.

- **EMRs have the potential to decrease certain kinds of errors, but may introduce new ones**
- **Reality:**
  - **EMRs are coded by human programmers**
  - **Software "bugs" are common**
  - **It is unrealistic to expect perfection**

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DOUBTFUL

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Using an EMR can make me more efficient

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Using an EMR can make me more efficient

- **Success of an EMR is dependent on technology that is designed to fit the needs of the physician.**
- **Integration of data collection must consider the cost of data acquisition.**

Using an EMR can make me more efficient

- **One problem focused specialty care can be made more efficient with discrete documentation.**
- **Multiple problem primary care visits may become less efficient.**

Using an EMR can make me more efficient

- **Efficiency Improved**
  - **Sending and receiving electronic messages**
  - **Availability of patient charts**
  - **Cross coverage**
  - **Evidence Based Medicine Practice**
- **Better overall care**
- **Better organized in my daily work**

Using an EMR can make me more efficient

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MAYBE SO

The only reason for adopting an EMR is to get meaningful use incentive payments

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The only reason for adopting an EMR is to get meaningful use incentive payments.

- **Meaningful Use**
- **Quality Reporting**
- **Pay for Performance**
- **Evidence-based Medicine**
- **Medical Home**

The only reason for adopting an EMR is to get meaningful use incentive payments.

- **Increased emphasis on population health and care coordination**
- **New focus on utilization and cost allocation management**
- **Increasing use of home medical devices**
- **Changes in reimbursement structures**

The only reason for adopting an EMR is to get meaningful use incentive payments.

- **Intelligent use of EMRs that can interconnect and communicate with other systems is critical to surviving healthcare reform**
- **Choosing the wrong EMR can be a disaster**
  - **High switching costs**
  - **Productivity slow down**
  - **Lost data**
  - **Exhaustion and frustration**

The only reason for adopting an EMR is to get meaningful use incentive payments

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LIKELY NOT

The push to implement and use EMRs is not going to last

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The push to implement and use EMRs is not going to last.

- **Electronic medical records are here to stay**
- **EMRs are drivers of practice guidelines, decision support, quality reporting, P4P, MU, value based purchasing, EBM, etc.**
- **Medicare Hierarchical Condition Categories coding is easier to track in an EMR**

The push to implement and use EMRs is not going to last.

- **Increasingly technology savvy patients and families will grow to expect a digital experience in health care**
- **They will demand online access to information**
- **Over $22 billion in MU payments as of March 2014**

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QUESTIONS?