The Decade of the EHR: Accomplishments and Remaining Challenges
Centricity Healthcare User Group
Orlando, Florida
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MedStar Health

Overview

- “The Decade of the EHR”
- Are we there yet – or even close?
  - Remaining (and brand new) challenges
- The importance of user groups
  - Current and future roles
Widespread adoption of EMRs, just around the corner...

The Internet Revolution

- Information and communication technology was “the new new thing”
  - Burn rates and eyeballs had new meaning (all good)
  - Many US cities ripped open their streets to lay the cable for the upcoming broadband revolution
  - The NASDAQ was rising daily (even hourly)
  - The Internet was poised to transform healthcare
The Internet Revolution

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- And yet, as we were poised for unprecedented change and success...

Doubts emerged

- About the soundness of the Internet economy
Doubts emerged

- About the soundness of the Internet economy
- About exactly how the Internet was going to transform medicine

"Which of the following would you like to do at your doctor's Web site?"

- Request Rx renewal: 39%
- Get medical information: 32%
- Review my chart online: 32%
- Schedule an appointment: 32%
- Request a referral: 29%
- Review or pay my bill: 22%

Base: online US consumers (multiple responses accepted)

Doubts emerged

- About the soundness of the Internet economy
- About exactly how the Internet was going to transform medicine
- About physician use of the Internet

Doctors Hate The Net - Report
By Newsbytes, April 5, 2000
CAMBRIDGE, MASSACHUSETTS, U.S.A.
2000 APR 5 (NB) -- By Kevin Featherly, Newsbytes.
Commercial healthcare leaders who think they hold the key to a medical industry revolution had better think again, according to a senior analyst from Forrester Research [NASDAQ:FORR]. If they think that, the analyst says, they've simply forgotten to include the physician in their equations.
Doubts emerged

- About the soundness of the Internet economy
- About exactly how the Internet was going to transform medicine
- About physician use of the Internet
- And even about what the Internet magicians were proposing to do with our EMR (Logician Legacy)

Fortunately, the bubble burst

- IT stock options became worthless
- Most EMR vendors went thru a “world of pain”
- The “new new thingers” moved on to other “new new” things

“I didn’t realize healthcare was so complex.”
**Fortunately, the bubble burst**

- IT stock options became worthless
- Most EMR vendors went thru a “world of pain”
- The “new new thingers” moved on to other “new new” things
- Healthcare continued to be delivered
- Those of us practicing medicine with EMRs were still seeing patients, still using our EMRs, and still sure that there was value in what we were doing (though not due to, but rather enabled by technology)

**But critical problems with healthcare never went away**

- Quality where it should be?
- Medical errors?
- IOM reports
- Managed care didn’t quite get it right
  - Premiums again were rising
  - Patients and physicians unhappy with cumbersome processes
- Increasing number of elderly
- Increasing number of patients with multiple chronic conditions
And out of the ashes...

- Instead of being relegated to VH1’s “I Love the 90s” – EMRs re-emerged as the tool to help solve real problems in healthcare (along with a lot of help from powerful people in Washington...)

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HIT comes to Washington

- President Bush learns how to pronounce “interoperable”
HIT comes to Washington

- HHS Secretary Thompson
- David Brailer and the Office of the National Coordinator Health Information Technology

The election of 2004
HIT comes to Washington

- HHS
  - Secretary Leavitt

- CMS
  - 8th Scope of Work
  - DOQ-IT
  - Pay-for-performance

- Congressional leadership
  - The value of IT is not a partisan issue

Are we there yet?

- Stop and declare victory
- Unclear which road we are on, or who is drawing the roadmap
“By 2014, half of all Americans will have an EHR”

- Great news – patients will buy their own EHRs
- Maybe what he really meant was…
  - ½ of all American doctors will have EHRs
  - ½ of all Americans will go to doctors who use EHRs
  - All Americans will go to doctors who use an EHR ½ of the time (or an EHR-lite all of the time)
  - All Americans will go to doctors who use EHRs, and ½ of them will interconnect with PHRs

Others were quick to interpret his words
- Universal EHR
- The PHR replaces the EHR

He didn’t mean any of the above…

- “By 2014, all doctors will use EHRs, and 50% of patients will use personal health records” (Shortened by speech writers)
- So Bush does get it!
- But wait a second…

Does this mean that W is the smartest person in Washington?

“By 2014, ½ of all Americans will have an EHR”
Let’s not declare victory

- Lack of clarity from political / policy leadership
- Growing interest from an increasing number of stakeholders
  - Also very unclear in what they mean by “EHR”
  - Vision of the endgame differs by stakeholder
- Has anyone else noticed that the term “EMR” is gone?

The EMR re-emerges as the EHR

- The Electronic Health Record
- New name
  - Same old EMR
  - New product
- Significance of the new name
  - New chance at success
  - Focus on “health” – and not disease
- Also implies care shifts...
  - From episodic to continuous
  - From siloed to shared
  - From provider-centric to patient-centric
  - From quality is “my business” to quality is everyone’s business
- Inclusion of other stakeholders
  - Patients
  - Caregivers
  - Healthplans
  - PBMs
  - Disease management companies
  - Vendors
We might be on the right road...

- We're not driving the same car
- We're not the only ones with our hands on the steering wheel(s)
- Someone’s been messing with that “space-time continuum thing” because every time I look up, the “right road” seems to be going somewhere else

Revisiting old challenges

- Can the risks / barriers for EHR adoption be lowered sufficiently to facilitate mass adoption?
- Is the EHR the right tool for the job?
<table>
<thead>
<tr>
<th>Barrier</th>
<th>Solution</th>
<th>Current Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confusion about product and company</td>
<td>EHR product certification</td>
<td>Certification Commission on HIT (CCHIT)</td>
</tr>
<tr>
<td>Not knowing which EHR is best for which type of practice</td>
<td>Trusted specialty-specific EHR guidance</td>
<td>AAFP, ACP, other medical specialty societies; KLAS, HIMSS, others</td>
</tr>
<tr>
<td>High prices</td>
<td>Affordability and transparency</td>
<td>Buying collaboratives - medical professional and specialty societies</td>
</tr>
<tr>
<td>Risk of implementation failure</td>
<td>Trusted technical advice</td>
<td>AAFP's CHiT, ACP's PMC, QIOs</td>
</tr>
<tr>
<td>Wide variability in contracting and business practices</td>
<td>Standard contracting language, RFP guidance</td>
<td>AAFP's Partners for Patients, ACP's PMC eHealth Initiative</td>
</tr>
<tr>
<td>Difficult and expensive access to external information</td>
<td>Standards-based solutions for labs, imaging centers, etc</td>
<td>California Health Care Foundation, Connecting for Health, eHI</td>
</tr>
</tbody>
</table>
Is the EHR the right tool?

If goal = ↑ quality, safety, efficiency, access and:

- Decreasing unwanted variability
- Decreasing the time from “bench-to-bedside”
- Increasing (or perhaps resuming) care coordination
- Proactive population and disease management
- Shifting focus from episodic to longitudinal care
- Making health information more mobile and shareable
- Increasing involvement of the patient
- Acknowledging the necessity of reporting / transparency…

- Is the EHR the right tool, or do we need something else (or even a “new new” label)?
- Will widespread adoption of the “E_ _” by itself lead to achieving these goals? Is something else needed?

New challenges

- Incentives, mandates, pay-for-performance
- The value of documentation
- Medical errors and EHRs
- The brave new world of interconnected healthcare
- Unintended consequences
Are incentives necessary?

- Some say “yes”
  - Adoption lagging
  - Misalignment of costs / benefits (highlighted C!TL ACPOE report)
  - Strongly supported by Connecting for Health, eHI, others

- Some imply / say “no”
  - C!TL HIEI report suggests that physicians will be the largest financial beneficiaries of interoperable EHRs
  - No new money is available anyway

- Some say “Stop whining and just do it – you’ll figure out how to make it work”

And we probably could...

- Indeed many (in this room) have “successfully” implemented EHRs

- Is the definition of success = achieved a financial ROI in 2-3 years? Or, have demonstrated improved quality / safety at a lower global cost?

- Without reimbursement reform / incentives, small practices will learn to be “successful” (primarily thru “right-coding”) – but that this vision of success will yield next to no value for patients and payers.
**Why not just mandate EHRs?**

There are times when safe medical practice might dictate certain mandatory changes – such as asepsis in the OR.

- Why not have CMS mandate EHR use as a condition of Medicare participation?
  - Condition for payment for the “Welcome to Medicare physical”
- Mandate/incentive hybrid – Medicare cuts ↓ for EHR use
- “Stealth” mandate – quality data submission prerequisite to payment

*No, but I can give you an unfunded mandate.*

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**Pay-for-performance**

- Agreement on measures
- Limiting measures to what is most important
- Process vs. outcome measures
  - Remembering patient choice / responsibility
- Deciding who to pay
  - PCPs
  - All physicians involved with care of patient
  - Disease management companies
The value of documentation

<table>
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<tr>
<th></th>
<th>Scribble</th>
<th>EHR templates</th>
<th>LQD</th>
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<tr>
<td># of words</td>
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<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Legibility</td>
<td>6</td>
<td>8</td>
<td>9</td>
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<tr>
<td>Reporting</td>
<td>5</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Quality</td>
<td>4</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Q/TxE</td>
<td>2</td>
<td>4</td>
<td>5</td>
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New errors

"It's a good thing you're here. I just punctured your eardrum."
While the informaticists / standards communities are making great strides into making true interoperability possible, the medical community has yet to begin to consider the clinical and medicolegal protocols for interconnectivity – including changes to workflow, careflow, and duty.

- Will more information to more clinicians always → better care?
  - Information overload – How do we use interconnected healthcare such that it actually improves care, and does not simply create information overload?
  - Care confusion – How do we redefine duty to the patient, such that shared decision making does not create unwanted multiple opinions and care confusion?

- Can we increase dataflow to physicians and expect that it will not increase work and impact workflow? How do we pay for this?
- Can we mobilize information to multiple clinicians and not ↑ risk?
- Will the public accept this new care paradigm?
Unintended consequences

To patients
- Inevitable privacy leaks
- Less openness with their clinicians?
- Being harmed by too close adherence to guidelines
- Dumping

Caring for “noncompliant” patients in a litigious environment with P4P

“When a longtime patient at risk for an MI refused a treadmill stress test, I showed him the door.”

Malpractice: How Fear Changes Practice
Medical Economics  April 8 2005
Unintended consequences

- To patients
  - Inevitable privacy leaks
  - Less openness with their clinicians?
  - Being harmed by too close adherence to guidelines
  - Dumping

- To clinicians
  - Cookbook medicine
  - Less choice / flexibility in treatment options
  - Potential for worsening onerous working conditions

Primary care medicine – endangered species

Number of First Year Residents:
Family Practice (FP) and Internal Medicine (IM)
User groups to the rescue!

- Current value
  - Voice of the customer
  - Knowledge sharing
  - Speaking out when things don’t seem right
    - How something works within Logician
    - Direction of the company

New challenges to CHUG

- Never be satisfied with “good enough” and “workarounds”
## Prescriptions

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<tr>
<th>Description</th>
<th>Quantity</th>
<th>Date</th>
<th>Authorization</th>
<th>Prescribing Method</th>
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<td>FASCIARY SUSP 250 MG/5 ML OROSOLUTIO</td>
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<td>02/09/2025</td>
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<td>PERSPECT 20 MG (POSANOXO)</td>
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<td>30</td>
<td>02/09/2025</td>
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</tbody>
</table>

**Prescription Information:**

- **Date of Prescription:** 02/09/2025
- **Prescribing Method:**
  - **Authorization:** Dr. MD, Peter
  - **Prescribing Method:** First time change to patient
  - **Prep/Holding:** C
  - **Start Date:** 02/09/2025
  - **Notes:**
New challenges to CHUG

- Never be satisfied with “good enough” and “workarounds”
- Just as your medical training obligates you to teach those who follow, so does your EHR experience
  - Your hospital
  - Your medical society
  - Your community

New challenges to CHUG

- Working with other user groups
  (Not to share proprietary information)
  - Essential process improvements
- Working with other stakeholders / policymakers
  - Present the viewpoints of end-users and clinicians
  - Make sure they get it right
Summary

- The Decade of the EHR arose “from the ashes” of the dotcom crash. Its parents were healthy (and vocal) skepticism from knowledgeable EMR end-users, and continuing real and growing societal needs in healthcare.
- Real needs, coupled with interest and support from politicians, policy makers, and other interested stakeholders helped to bring the EHR and HIT from obscurity to the forefront of American healthcare policy.

Summary - 2

- The EHR and HIT agendas are now multi-stakeholder, and no longer simply the province of clinicians and IT professionals.
- Informed users have had critical roles in EMR development, and will (as individuals or through user groups) have similar roles with EHRs – if the Decade of the EHR is to succeed.