Electronically Embedded: Librarians and the Electronic Medical Record

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Terminology

- **Electronic Medical Records (EMRs)**
  - Controlled by & restricted to the clinician/health care system

- **Personal Health Records (PHRs)**
  - Controlled by the patient

- **Integrated Health Record (IHR)**
  - A combination of the EMR & PHR
Drivers for EMR Implementation

- Money (especially reimbursement from Medicare)
- Government Regulations
- Patient Safety
- Coordination of Care
- Patient Satisfaction
“I support the concept of a patient–centered medical home, and as part of my health care plan, I will encourage and provide appropriate payment for providers who implement the medical home model, including physician–directed, interdisciplinary teams, care management and care coordination programs, quality assurance mechanisms, and health IT systems which collectively will help to improve care.”  

*President Barack Obama*
Patient–Centered Care/Medical Home Model

- Goal: Right care – right place – right time –every time by the right member of the team.

- Goal: Knowledgeable, activated patient engaged in self management

- Goal: Highly Functional Team, with each member working to the top of his/her licensure
www.planetree.org
PATIENT–CENTERED CARE PRINCIPLE #5: Empower Veterans through Information and Education

- In order to make good health-care decisions and enhance safe care, veterans and families need to be knowledgeable and informed.

- Veterans are educated in self-care, receive information on their diagnosis and treatment plan, and understand any variation from recommended clinical guidelines.

- Veterans have access to their electronic medical record, and may contribute to documentation in their records.

- Veterans are provided decision support to understand treatment choices, including appropriate library/media resources, computer services and other technology.

- Health literacy and cultural competency are considered in all education and communications to assure that learning occurs.
Opportunities for Librarians

- Excellence in clinical care and evidence-based practice requires access to knowledge-based resources.

- If team members are to work to the top of their licensure, they must turn tasks over to more qualified personnel.
Opportunities for Librarians

- Patients need appropriate consumer health resources to self-manage
- Health literacy issues
- Patient access to understandable health information can be facilitated by Librarians’ consumer health information services (Information Therapy)
Information Rx
http://nnlm.gov/hip/infoRx/

Welcome to the Information Rx Tool Kit!

Information Rx is a free program offered by the National Library of Medicine and the American College of Physicians Foundation to assist physicians in referring their patients to MedlinePlus.

The Tool Kit is an online guide to help health sciences librarians promote Information Rx to physicians, patients and their families, and to other libraries and community groups.

Click here to get started

The Website Your Doctor Prescribes

MedlinePlus®
Trusted Health Information for You

Success Stories...

Success Stories
Share your success stories and outreach ideas.
Advantages of Evidence-Based Resources on the EMR toolbar

- Providers’ ability to answer clinical questions at the point of care enhances quality & cost-effective care

- Patient Education materials can be reviewed and discussed during the patient’s visit, enhancing understanding & satisfaction
Information Overload
Table 8
Physical location you conducted or requested your search for information*

<table>
<thead>
<tr>
<th>Location</th>
<th>Overall (n=14,046)</th>
<th>Physicians (n=5,078)</th>
<th>Residents (n=2,005)</th>
<th>Nurses (n=5,984)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office</td>
<td>7,154 (51%)</td>
<td>3,972 (78%)</td>
<td>841 (42%)</td>
<td>1,729 (29%)</td>
</tr>
<tr>
<td>Patient care unit</td>
<td>7,002 (50%)</td>
<td>1,711 (34%)</td>
<td>1,170 (58%)</td>
<td>3,806 (64%)</td>
</tr>
<tr>
<td>Home</td>
<td>4,578 (33%)</td>
<td>2,124 (42%)</td>
<td>1,047 (52%)</td>
<td>1,096 (18%)</td>
</tr>
<tr>
<td>Library</td>
<td>1,868 (13%)</td>
<td>563 (11%)</td>
<td>499 (25%)</td>
<td>651 (11%)</td>
</tr>
<tr>
<td>Other</td>
<td>490 (4%)</td>
<td>182 (4%)</td>
<td>58 (3%)</td>
<td>196 (3%)</td>
</tr>
</tbody>
</table>

* Respondents were able to select all that applied, so column percent does not equal 100.
Table 9
Access to the information resource used*

<table>
<thead>
<tr>
<th>Access point</th>
<th>Overall (n=14,544)</th>
<th>Physicians (n=5,230)</th>
<th>Residents (n=2,047)</th>
<th>Nurses (n=6,249)</th>
</tr>
</thead>
<tbody>
<tr>
<td>On your institution’s intranet</td>
<td>7,565 (52%)</td>
<td>2,534 (48%)</td>
<td>1,248 (61%)</td>
<td>3,292 (53%)</td>
</tr>
<tr>
<td>On your institution’s library website</td>
<td>7,258 (50%)</td>
<td>3,131 (60%)</td>
<td>1,471 (72%)</td>
<td>2,122 (34%)</td>
</tr>
<tr>
<td>Search engine such as Google</td>
<td>5,357 (37%)</td>
<td>1,984 (38%)</td>
<td>806 (39%)</td>
<td>2,169 (35%)</td>
</tr>
<tr>
<td>Personal/departmental subscription</td>
<td>3,623 (25%)</td>
<td>1,869 (36%)</td>
<td>546 (27%)</td>
<td>960 (15%)</td>
</tr>
<tr>
<td>In your institution’s library</td>
<td>2,762 (19%)</td>
<td>1,099 (21%)</td>
<td>532 (26%)</td>
<td>896 (14%)</td>
</tr>
<tr>
<td>Via patient’s electronic medical record</td>
<td>2,558 (18%)</td>
<td>933 (18%)</td>
<td>329 (16%)</td>
<td>1,082 (17%)</td>
</tr>
<tr>
<td>Mobile device</td>
<td>2,297 (16%)</td>
<td>1,051 (20%)</td>
<td>632 (31%)</td>
<td>477 (8%)</td>
</tr>
<tr>
<td>Asked librarian or library staff</td>
<td>2,043 (14%)</td>
<td>798 (15%)</td>
<td>255 (12%)</td>
<td>773 (12%)</td>
</tr>
<tr>
<td>Asked colleague</td>
<td>1,344 (9%)</td>
<td>364 (7%)</td>
<td>142 (7%)</td>
<td>720 (12%)</td>
</tr>
</tbody>
</table>

* Respondents were able to check all that applied, so column percent does not equal 100.
Breaking an Electronic Health Record System: a sandbox workshop – 4 CE MLA

Instructor: PJ Grier, Outreach and Access Coordinator, SE/A RML

Dates: Upon request throughout 2013

Note:
This is the second class in the NN/LM SE/A Health Information Technology (HIT) series, and is held in-person. Prior to attending this class, students should have a working knowledge of national healthcare policies underlying the institutional adoption of EHRs. Students are encouraged to gain this knowledge on their own, through the Office of the National Coordinator or to enroll in the first class of the series, entitled “Informatics for librarians: peeling the onion.”

Abstract
The overall objective of this course is to give librarians an opportunity to “touch and feel” the functionality of a certified electronic health record system (EHR-S) in a “safe harbor” environment. Because many clinical health sciences librarians are currently excluded from accessing their institutional electronic health record system (EHR-S) on an operational, day-to-day basis, this class provides that opportunity, albeit in a “practice” environment.
National Network of Libraries of Medicine

Southeastern Atlantic Region

New SEA Currents posting!

This is to let you know that a new SEA Currents article has become available. You can find this article online here.

For simplicity’s sake, we’ve posted the article below:

Electronic Health Record (EHR) information resources on the NET

By PJ Grier, Outreach and Access Coordinator, NN/LM, SE/A Region

Do you want quick access to published literature on EHRs? If you answered yes, then there is a readily available PubMed search accessible from the main landing page under Topic Specific Queries. Tweak the search with limits as needed, run it, and if satisfied, insert it into your NCBI account as a “named” saved search for future use. Though not a MeSH heading, a suggestion is to incorporate the term “app” to the search to yield results that include mobile, clinical, and consumer “app” technologies.

Due to institutional adoptions of EHRs, you may need to keep current with news of the latest trends. Below is a generalized list of resources culled from the Internet. The list is updated frequently as it is also used in the NN/LM SE/A class: Breakin’ on EHRs: small workshops on...
VA’s Computerized Patient Record System (CPRS)
Mr. Zdemo visited the Patients' Library after Diabetes class. He expressed great concern with lifestyle changes and ability to monitor blood glucose. Checked video "Diabetes home video guide: skills for self-care" out to him; encouraged him to take notes and list questions for next clinic visit. Referred him to web sites My HealtheVet and American Diabetes Association. Also gave handout on how to set goals and make action plans to make small incremental steps to make lifestyle changes. Confirmed that he had telephone number for Diabetes Educator.
My Health, My Care: 24/7 Access to VA

www.myhealth.va.gov
Welcome to My HealtheVet

My HealtheVet is the VA’s Personal Health Record. It was designed for Veterans, active duty Servicemembers, their dependents and caregivers. My HealtheVet helps you partner with your health care team. It provides you opportunities and tools to make informed decisions.

All users who have a My HealtheVet account are able to view their self-entered information. If you are a Veteran enrolled at a VA facility and have an upgraded account, you may be able to view:

- Information you self-entered into My HealtheVet
- Parts of your official VA health record (as it becomes available)
- Your Department of Defense (DoD) Military Service Information

In the past year, more features have been added that allow you to view VA appointments and check lab results. The most popular feature is still online prescription refills. You can also view your prescription history. If you have an upgraded account, you may also send a non-urgent Secure Message to participating members of your VA health care team. Secure Messaging is safe and secure, because the messages you send and receive are all kept within My HealtheVet.
In-Person Authentication (IPA)

In-Person Authentication (IPA) is a process used to verify a My HealtheVet (MHV) user’s identity. Registered MHV users who are VA patients that have completed the IPA process will be able to view the names of their VA prescriptions.

Before In Person Authentication can occur, several requirements must be met:

- The user must be registered as a VA patient in their MHV account
- The user must view the MHV Orientation Video
- The user must download, read and sign the VA Form, 10-5345a-MHV (PDF)
- The user must present a form of government issued photo identification to a qualified VA staff member at their VA facility to be physically proofed

VA medical facilities currently use a manual process to allow VA patients access to paper copies of their medical records. Completing the In-Person Authentication process is the first step in providing on-line access to copies of key portions of VA medical records. Initially, once IPA has been completed, medication names will be available. In the future, other portions of your VA electronic medical record will become accessible on-line through your MHV account as part of your Personal Health Record. Notices will be posted to our website as each portion of the medical record becomes available on-line.

MHV Orientation Video

Related Links
- House Committee on Veterans’ Affairs
Secure Messaging Overview

- Only for non-urgent communication

- Patients can request appointments, prescription renewals, ask health or administrative questions, etc.

- Health care team responds within 3 business days

- Patients and care team receive notifications of new Secure Messages via e-mail

- Patients must be In-Person Authenticated (IPA) to participate

Secure Messaging is a new eHealth clinical service that includes an online tool for secure electronic communication between patients and their health care teams.
<table>
<thead>
<tr>
<th>Secure Messaging</th>
<th>E-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can only be sent to other Secure Messaging participants</td>
<td>Can be sent to anyone with an e-mail address</td>
</tr>
<tr>
<td>Messages are non-reputable because authorship is guaranteed</td>
<td>Message authorship can be denied because authorship can be faked</td>
</tr>
<tr>
<td>Allows for triaging of messages prior to clinician involvement</td>
<td>Designed to have messages read by the addressee only</td>
</tr>
<tr>
<td>Messages can be made part of the patient’s VA electronic health record</td>
<td>Totally separate from patient health records</td>
</tr>
<tr>
<td>Launched from My Health eVet and Computerized Patient Record System (CPRS); requires no special software</td>
<td>Requires the launch of a separate application or browser instance</td>
</tr>
<tr>
<td>Does not require the users to have e-mail service</td>
<td>Requires users to have e-mail service</td>
</tr>
<tr>
<td>Automated escalation process to facilitate timely responses</td>
<td>By default, messages can sit in an Inbox indefinitely</td>
</tr>
<tr>
<td>Self-contained within the My Health eVet system which resides behind VA firewalls</td>
<td>Requires an e-mail server that is usually shared with other systems</td>
</tr>
</tbody>
</table>
Benefits of Secure Messaging

- Increased patient satisfaction
- Improved self-management
- Improved accessibility
- Minimize “telephone tag”
- Provides patients with a sense of “personal touch”

- Improved patient–provider collaboration
- Communicate with patients between visits
- Increased opportunity for information sharing
Secure Messaging

Secure Messaging can be used to request an appointment at your VA facility, request a VA medication renewal, request an address change, or ask your primary care team questions. If your clinic is not currently participating in Secure Messaging, please be patient. It will take some time to implement this feature at every clinic nationwide.

Please note: Secure Messaging is offered through primary care providers. You should continue to follow your normal methods to contact other clinics.
Secure Messaging

From: MHVNTETRIAGE1
To: MHVNTETRIAGE1
Subject: MHVNTETRIAGE2
Composition:

Use a Predefined Message?

Attention
This messaging system should be only used for non-urgent, non-critical communication! Please direct any urgent or critical concerns to your provider's office via telephone or in-person.
Secure Messaging

Compose Message:

Please note that we need 3 business days to respond to secure messaging.

[ ] I received a recall letter/post card/phone CALL TO schedule a follow up appointment.

[ ] I am due FOR an appointment.

[ ] Other (please enter information here INCLUDING NAME AND LOCATION OF clinic).

Please let us know IF you would prefer a morning OR afternoon appointment. IF possible, we will try TO give you...
Compose Message:

Can you please schedule an appointment with my doctor on May 1st at 11am?

Thank you,
Twenty MHVNETPatient
Veteran’s Inbox
Secure Messaging

Sent: 05/04/2010 03:13 PM
From: MHVPERFSMDOCTOR, ALFRED ONE
To: MHVNETPATIENT, TWENTY
Message ID#: 1388677
Subject: Schedule Appointment

Your appointment has been scheduled for May 1, 2010 at 11:15 am EST with Dr. MHVPERFSMDoctor at the Martinsburg VA Medical Center.

Previous Messages in Thread

-----Original Message-------------------
Sent: 05/04/2010 03:08 PM
From: MHVNETPATIENT, TWENTY
To: MHVNETRIAGE1
Subject: Schedule Appointment

Can you please schedule an appointment with my doctor on May 1st at 11am?

Thank you,
Twenty MHVNETPatient
You have one or more new Secure Messages waiting to be read. Please access Secure Messaging through the CPRS Tools menu to read the message(s). To change the frequency of this notification, access Secure Messaging, click on Preferences and under New Message Notification, select another option from the Notify Me: dropdown menu.

Go to https://perfsmclinician.myhealth.va.gov/mhv-sm-web/loginClinicianIntegration.action?station=658&DUZ=50246 to log into Secure Messaging. If you have problems opening the URL by clicking on it, copy and paste the entire link into your web browser's address window.

Please do not reply to this message.
Secure Messaging

Please log in using your Network ID and password

Username: 

Password: 

Login
## Secure Messaging

### Inbox

- **New Message**
- **Escalated** [0]
- **Drafts** [0]
- **Sent**
- **Completed**
- **Deleted**

### My Folders
- **edit**
- **add new folder**

### Messages

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>Subject</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>MHVNTEPATIENT, TWENTY</td>
<td>MHVNTETRIAGE1</td>
<td>Schedule Appointment</td>
<td>05/04/2010 03:08 PM</td>
</tr>
<tr>
<td>MHVNTEPATIENT, EIGHTEEN</td>
<td>MHVNTETRIAGE1</td>
<td>Request Lab Results</td>
<td>05/04/2010 03:06 PM</td>
</tr>
<tr>
<td>MHVNTEPATIENT, SEVENTEEN</td>
<td>MHVNTETRIAGE1</td>
<td>Lab Results</td>
<td>05/04/2010 03:04 PM</td>
</tr>
<tr>
<td>MHVNTEPATIENT, SIXTEEN</td>
<td>MHVNTETRIAGE1</td>
<td>Medication Renewal</td>
<td>05/04/2010 03:02 PM</td>
</tr>
<tr>
<td>MHVNTEPATIENT, FOURTEEN</td>
<td>MHVNTETRIAGE1</td>
<td>What's Up Doc?</td>
<td>05/04/2010 03:00 PM</td>
</tr>
<tr>
<td>MHVNTEPATIENT, ELEVEN</td>
<td>MHVNTETRIAGE1</td>
<td>TUMS?</td>
<td>05/04/2010 02:58 PM</td>
</tr>
<tr>
<td>MHVNTEPATIENT, NINE</td>
<td>MHVNTETRIAGE1</td>
<td>Chest Pains</td>
<td>05/04/2010 02:55 PM</td>
</tr>
</tbody>
</table>

Select: **All**, **None**, **Read**, **Unread**

Messages 1 to 7 of 7
Can you please schedule an appointment with my doctor on May 1st at 11am?

Thank you,
Twenty MHVNTEPatient
Your appointment has been scheduled for May 1, 2010 at 11:15am EST with Dr. MHVPERFSMDoctor at the Martinsburg VA Medical Center.

Can you please schedule an appointment with my doctor on May 1st at 11am?

Thank you,
Twenty MHVNTEPatient
Finish Message Options
You have replied to a message that has not been assigned. This message has been automatically assigned to you. You may choose to assign it to a different member of your triage team, or leave it assigned to you.

Assign To: MHVPERFSMDOCTOR, ALFRED ONE

Would you like to change the status of this message to Complete?
- [ ] Yes
- [ ] No

Save Message as a CPRS Progress Note?
- [ ] Yes
- [ ] No

Enter any comments below for the Healthcare Team (not included in messages sent to patient):

Enter comments here...

[Done] [Cancel]
Save Message as a CPRS Progress Note

Create CPRS Progress Note

Patient Name: MHVNTEPATIENT, EIGHTEEN
Facility: SALEM VAMC
Date: 05/04/2010 03:29 PM

Message Content to Save as a CPRS Progress Note:

-----Original Message------------------------
Sent: 05/04/2010 03:06 PM
From: MHVNTEPATIENT, EIGHTEEN
To: MHVNTEERAGE1
Subject: Request Lab Results

What are the results from my blood work from yesterday? Please explain levels.

Thanks,
Eighteen MHVNTEPatient

-----Original Message------------------------
Sent: 05/04/2010 03:28 PM
From: MHVPERFSMDOCTOR, BERNICE TWO
To: MHVNTEPATIENT, EIGHTEEN
Subject: Request Lab Results

Explain levels.
Local Title: Secure Messaging
Standard Title: MHV Dialog Note
Date of Note: Apr 20, 2010 16:34:06
Entry Date: Apr 20, 2010 09:34:10
Author: EXP Cosigner
Urgency: Status: Completed

Original Message

Sent: 04/20/2010 11:30 AM
From: MHVZVISNTTWENTY, TEST
To: Primary Care_Portland
Subject: Prescription

Hey Doc: Can you please renew my prescription.

Your patient.

Original Message

Sent: 04/20/2010 16:42 AM
From: MHVZVISNTTWENTY, TEST
To: Primary Care_Portland
Subject: Prescription

Your prescription has been renewed. It should arrive in 7-10 days.

Your Doctor

/es/

CHIEF HEALTH INFORMATICS OFFICER/ATTENDING PSYCHIATRIST
Signed: 04/20/2010 09:34
Emerging Technology and Hospital Libraries

Thursday #medlibs will discuss the 2013 Horizon Report- Higher Education edition, “a decade-long research project designed to identify and describe emerging technologies likely to have an impact on learning, teaching, and creative inquiry in higher education.”

When we are talking higher education it is barely just a hop, skip, and a jump to think of how all of it will impact libraries in higher education. While academic libraries will see the impact quicker, hospital libraries aren’t immune to the changes. Because what is considered trending technology by medical students will be common place when they enter their residency programs in the hospitals and will be outdated when they are staff physicians.

So what kind of technology does the Horizon Report list and what will be talking about on #medlibs?

Happening in one year or less according Horizon:
(I say it is happening now)

- Massively Open Online Courses (MOOCs)
- Tablet Computing

Happening 2-3 years:

- Big Data and Learning Analytics
- Game Based Learning

Happening 4-5 years:
Video Clip: Dr. Eric Topal
http://www.youtube.com/watch?v=0B–jUOOrtks
Mobile Applications and Internet-based Approaches for Supporting Non-professional Caregivers: A Systematic Review

November 2012

Prepared for:
Department of Veterans Affairs
Veterans Health Administration
Quality Enhancement Research Initiative
Health Services Research & Development Service
Washington, DC 20420

Prepared by:
Evidence-based Synthesis Program (ESP) Center
Portland VA Medical Center
Portland, OR
Devan kansagara, M.D., M.C.R., Director

Investigators:
Principal Investigator:
Edward A. Dyer, M.D.

Co-Investigators:
Devan kansagara, M.D., M.C.R.
D. Keith McIntees, Sc.D., M.Sc.
Michele Freeman, M.P.H.
Susan Woods, M.D., M.P.H.

http://www.hsrd.research.va.gov/publications/esp/mobile_apps.cfm
Challenges For Librarians:

- Visibility
- Professional recognition
- Changing customer expectations
- IT/Privacy issues
- Funding
- Proving Value
Resourcress Extraordinaire

February 15, 2013
1:30 p.m. to 3:30 p.m.

Bldg 2
Room 3C451
formerly B332
Key Points

- Link library resources within the EMR
- Set up the ability for clinicians to send consults/alerts/information requests to Librarians via the EMR
- Participate in a secure messaging feature to an integrated health record
- Find other electronic means: know the technology and communication mediums
Key Points

- Find the key issues (e.g. patient-centered care) that can gain you a place at the table
- Cultivate an influential physician champion
- Brand your services & resources
- Know what others are doing
“If you don’t like change, you’ll like irrelevance even less.”

- Secretary Eric K. Shinseki
Department of Veterans Affairs
Questions?
References


References

- Planetree http://planetree.org/
References

- Patient–Centered Communication Standards and Advancing Effective Communication, Cultural Competence, and Patient– and Family–Centered Care: A Roadmap for Hospitals
  [link](http://www.jointcommission.org/NR/rdoi...727.pdf)

- AHRQ Patient Centered Medical Home Resource Center
  [link](http://www.pcmh.ahrq.gov/portal/server.pt/community/pcmh__home/1483)

- Joint Principles of the Patient–Centered Medical Home
  [link](http://www.aafp.org/online/etc/medialib/aafp_org/documents/policy/fed/jointprinciplespcmh0207.Par.0001.File.dat/022107medicalhome.pdf)