

HRSA Health Information Technology and Quality Webinar

“Tips For Engaging Patients Using Health IT”

Date: 1/20/2011

US Department of Health and Human Services
Health Resources and Services Administration

Office of Health Information Technology and Quality

Additional HRSA Health IT and Quality Toolboxes and Resources including past webinars can be found at:

<http://www.hrsa.gov/healthit>

<http://www.hrsa.gov/quality>

Additional questions can sent to the following e-mail address:

HealthIT@hrsa.gov

- US Department of Health and Human Services
- Health Resources and Services Administration

Upcoming HRSA Health IT and Quality Announcements

- **HIMSS Jobmine for Safety Net Providers** (Free Job Postings for HRSA Grantees and Safety Net Providers). Email hfigge@himss.org for more information.
- **Competency Exam for Health IT Professionals** , vouchers available for free exams, email healthit@hrsa.gov
- **Next HRSA Health IT and Quality Webinar, “Tips for Preventing Scope Creep and Cost Over Runs When Implementing a Health IT System“**, February 24th, 2pm EST, Registration Open
- Next week the new HRSA “Health Center Network Guide” will be released on the HRSA Health IT website
- **AHRQ Webinar, “Evaluation of Personal Health Record Systems and their Impact on Chronic Disease”**, Wednesday, January 23rd ,1pm EST (Registration Link HRSA Health IT Website)

Introduction

Presenters:

- Dr. Kevin Larsen-Hennepin County Medical Center
- Michelle Dubois-East Boston Neighborhood Health Center
- Deb Stroud-Mayo Regional Hospital

Health Literacy and Patient Engagement Resources

- **New Health Affairs Article by HHS Asst. Secretary Dr. Howard Koh and Former CMS Administrator Dr. Don Berwick, “New Federal Policy Initiatives To Boost Health Literacy Can Help The Nation Move Beyond The Cycle Of Costly ‘Crisis Care’”**
- **Commonwealth Foundation Study, “ Health Literacy Practices In Primary Care Settings: Examples From the Field”**
- **AHRQ Health Literacy Group’s Homepage, (<http://www.ahrq.gov/browse/hlitix.htm>)**
 - **Contains:**
 - **Toolkits**
 - **Articles**
 - **Studies**
- **California Healthcare Foundation Study , ”Measuring the Impact of Patient Portals”**

EHRs and the Safety Net, A Hospital Perspective

Kevin Larsen MD,
CMIO HCMC
January, 20, 2012



Hennepin County
Medical Center

HCMC

- 420 bed urban safety net hospital
- Live on Epic for 5 years- HIMSS Level 6
- Level One Trauma Center
- US News and World Report - Best Hospital 15 years
- 25,000 hospital discharges a year
- 400,000 outpatient visits a year
- Clinical Service areas in primary care, mental health, chemical health, multi-speciality tertiary care
- 2 FQHCs
- Public Health Clinics, Jail clinics, HIV program

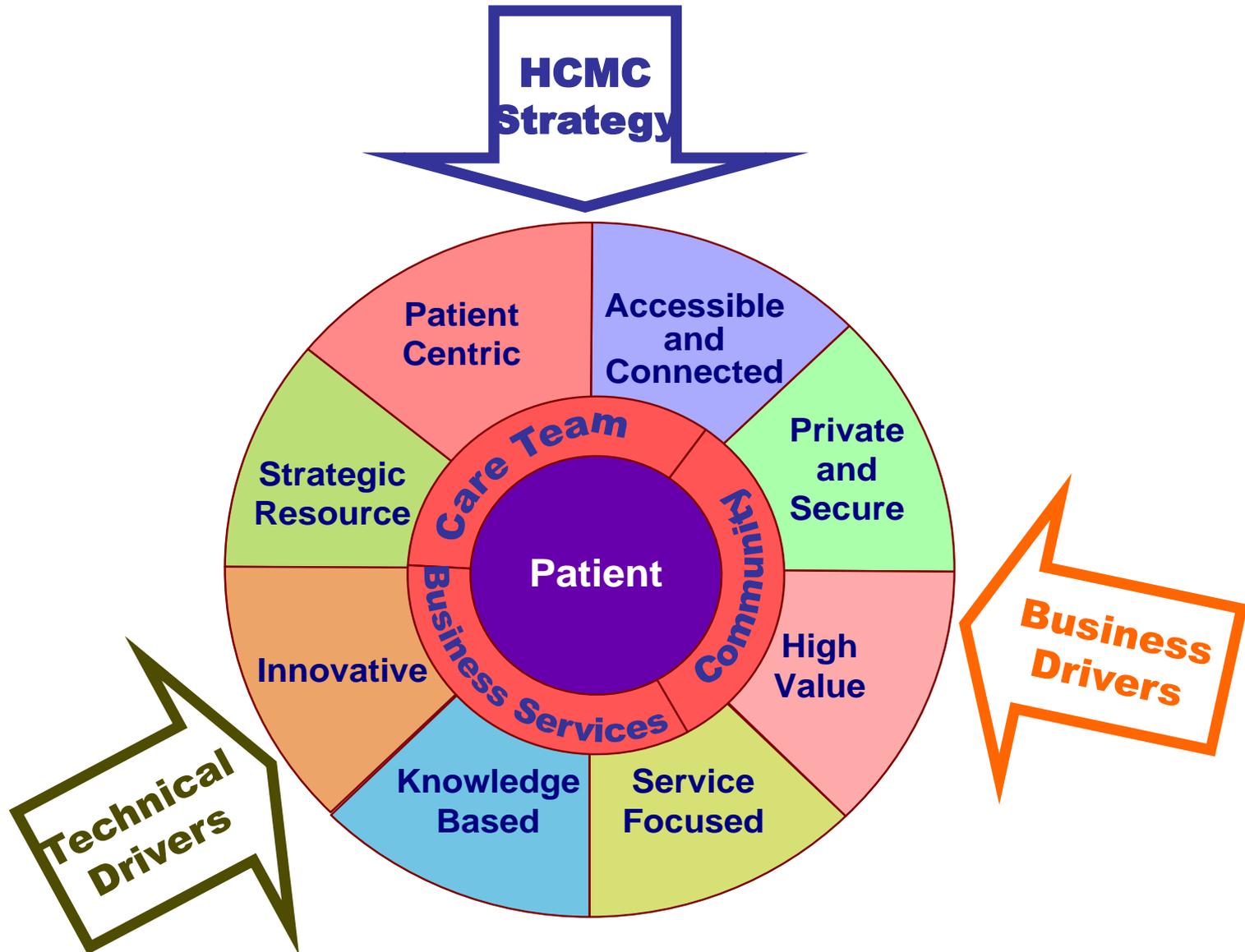


HCMC Vision Statement

The EHR (Electronic Health Record) supports standardized workflow transformation to create an environment that enhances the patient and provider experience, and improves clinical and financial performance.



HCMC Information Services Strategy Framework



Health Literacy and EHR

- What is health literacy
- Basic principles and Best Practices
- Examples of Health literacy applied to EHRs
 - After visit summary
 - Asthma Action Plan
 - Vendor selection of patient education material
 - Patient Portal

What is health literacy?

- “the ability to read, understand, and act on health care information”
—American Medical Association

Health literacy is a function of the **interface** between provider and patient.

How well do we communicate with patients?

- Average adult reading level = 8th grade, but most materials written at a 10th grade reading level or higher.
- According to 2003 National Assessment of Adult Literacy, only 12% of adults are “proficient” at understanding and using the health information we provide them.

“Best practice” recommendation:

Always involve patient education specialists
and **patients** in
developing, writing, editing, reviewing,
and formatting communications
with patients.

Guidelines for all communications

- Limit the number of messages (preferably 2-3 main messages); “need to know,” not “nice to know” information
- Use plain language (familiar, “living room” language; see www.plainlanguage.gov); avoid jargon and technical language
- Use short sentences and active voice; avoid long sentences and passive voice

Guidelines for all communications

- Reading level should be 5th–6th grade, no higher than 8th grade
- “Chunk” information into meaningful sections with clear headings; use bulleted lists rather than large blocks of text; Q&A is a good format (directly address the reader)
- Information should be relevant to patient’s needs, and timely; do not make assumptions about patient’s knowledge

Guidelines for all communications

- Focus on the actions or behaviors you want the patient to take, not medical facts
- Use Ask Me 3 (from the Partnership for Clear Health Communication) to help focus and structure information
 - What is my main problem?
 - What do I need to do?
 - Why is it important for me to do this?

Guidelines for printed materials

- Use at least a 12-point font
- Avoid using all capital letters, italics, and fancy script
- Use a serif font such as Times, Garamond, or Palatino (not a sans serif font)
- Keep line length between 40 and 50 characters

Guidelines for printed materials

- Leave right margins jagged (i.e., do not justify)
- Do not break words across lines
- Leave plenty of white space between lines and sections and in margins
- Use consistent designs, font sizes, and styles; avoid clutter

Additional guidelines for electronic text

- Use a sans serif font for text that is to be read on a computer screen (use a serif font for printed text)
- Minimize the amount of text per screen
- Minimize the need for scrolling
- Enhance text with video or audio as appropriate and feasible

Resources for electronic materials

“Accessible Health Information Technology (IT) for Populations with Limited Literacy: A Guide for Developers and Purchasers of Health IT.” Agency for Healthcare Research and Quality.

Available at

http://healthit.ahrq.gov/portal/server.pt/gateway/PTARGS_0_1248_803031_0_0_18/LiteracyGuide.pdf

“Connecting with Care: Checklist for Evaluating Health Plan Websites for User-Friendliness” and “Guidelines for Health Plan User-Friendly Web Development and Design.” America’s Health Insurance Plans. Available at

www.ahip.org/content/default.aspx?bc=39%7C341%7C22050.

AVS (After Visit Summary)

The Good News

- We love the AVS and so do patients!
- It is populated with info automatically
- It give patients more info than we ever gave them previously
- It increases visit satisfaction and reduces phone calls after visits

AVS

The Bad News

- The AVS is not easy for patients to read and understand.
- Writers of EHR content were not taught how to write in plain language (Epic analysts, IT, clerical staff, pharmacists, etc)
- The source information is often written in medical jargon, abbreviations, extraneous words, prompts for providers, codes, small print, all caps, etc.

Steps to Improve the AVS

3 steps

1. Applied known health literacy principles to improve readability
2. Asked staff what they **NEED**
3. Asked patients what they **WANT**

Steps to Improve the AVS

Step 1: Applied health literacy principles

- Eliminate all unnecessary words, codes, provider prompts, abbreviations, etc
- Use words that are meaningful vs. jargon
- Avoid use of all caps and italics
- Increase font size overall, with larger font for headers

Steps to Improve the AVS

Step 2: Asked staff what they need

Our guiding principle

- The AVS is for the patient, therefore the patients' needs will be considered above all others' needs when deciding what should remain on the AVS.
- Any workflows, such as for lab follow up or front desk clerk needing to find something, need a different solution.

Steps to Improve the AVS

Step 3: We asked patients

- The AVS is a very important document to them.
- It clearly states that the responsibility for the information is theirs.
- They feel it is their right to get one!
- They don't care how long it is or that it is not perfect.
- They appreciate that we are trying to improve it for them.
- They like having something they can save for future reference.
- It helps family members who assist with care.

Steps to Improve the AVS

Some changes were easy:

- The title: Visit Summary
- Allergies
- Immunizations
- the pharmacy phone number their prescription was sent to

We continue to struggle with:

- Medicines
- Appointments
- Diagnosis
- Orders

Medication Section

Stop Taking section caused much confusion.
Meds often appeared in both sections.

Medications and Orders

Stop Taking These Medicines

montelukast (SINGULAIR) 10 mg oral tablet	take 1 Tab by mouth before bedtime.
loratadine-pseudoephedrine (CLARITIN-D 12HR) 5-120 mg oral tablet 12 HR	take 1 Tab by mouth. Once a day.
albuterol-ipratropium (DUONEB) 2.5-0.5 mg/mL inhalation solution vial	by Nebulization route one time, AS instructed. One time in clinic now.
albuterol-ipratropium (DUONEB) 2.5-0.5 mg/mL inhalation solution vial	3 MLs by Nebulization route q4h. 1 neb in clinic
fluticasone (FLOVENT) 110 mcg/puff inhalation aerosol	1 Puff by Inhalation route bid.
mometasone (NASONEX) 50 mcg/act nasal suspension	2 Sprays by Nasal route hs.
albuterol (PROVENTIL;VENTOLIN) 90 mcg/puff inhalation aerosol soln	2 Puffs by Inhalation route qid.

Your Current Medicines Are

fluticasone (inhal) (FLOVENT) 110 mcg/act inhalation aerosol inhaler	2 Puffs by Inhalation route twice daily.
montelukast (SINGULAIR) 10 mg oral tablet	take 1 Tab by mouth daily.
NASONEX NASAL	1 Spray by Nasal route daily. 1 SPRAY IN EACH NOSTRIL DAILY.
albuterol (PROVENTIL;VENTOLIN) 90 mcg/puff inhalation aerosol soln	2 Puffs by Inhalation route. PRN
CLARITIN-D 12 HOUR ORAL	take 1 Tab by mouth daily.

Accuracy of the medication list is based, all or in part, upon information provided by the patient.

Medication Section

Still confusing to patients.
One med list would be best.

Medicines Ordered Today

	Refills	Start
hydrochlorothiazide 25 mg oral tablet Sig - Route: take 1 Tab by mouth daily. - Oral	5/5	4/15/2008
albuterol (PROVENTIL;VENTOLIN) 90 mcg/puff inhalation aerosol soln Sig - Route: 1-2 Puffs by Inhalation route four times daily. - Inhalation	0/0	4/15/2008
loratadine (CLARITIN) 10 mg oral tablet Sig - Route: take 1 Tab by mouth daily. - Oral	5/5	4/15/2008

Your Current Medicines Are

hydrochlorothiazide 25 mg oral tablet	take 1 Tab by mouth daily.
albuterol (PROVENTIL;VENTOLIN) 90 mcg/puff inhalation aerosol soln	1-2 Puffs by Inhalation route four times daily.
loratadine (CLARITIN) 10 mg oral tablet	take 1 Tab by mouth daily.
amoxicillin-potassium clavulanate 875-125 mg per tab (AUGMENTIN) 875-125 mg oral tablet	take 1 Tab by mouth twice daily.

Diagnosis codes, abbreviations and unfamiliar terms

Diagnoses

Routine Medical Exam [V70.0B] - Primary

HTN (Hypertension) [401.9AE]

Fatigue [780.79B]

Osteoporosis [733.00C]

Anxiety [300.00E]

SCREENING MAMMOGRAM [V76.12B]

Confusing abbreviations

The car has a therapist too?

Provider:	Department:
Car-Therapist	Cardiac Rehab
Car-Therapist	Cardiac Rehab
Car-Therapist	Cardiac Rehab
Ultrasound Equipment	Ultrasound Hcmc
Eye-Complete	Eye CI Hcmc
Eileen A O'Shaughnessy, MD	Nephrology CI Hfa
Eugene L Dela Cruz, DPM	Podiatry CI Hcmc
Drm-Derm Footcare	Dermatology CI Hcmc

Orders are a big problem

Who is this info for?

Future Orders

Please

ULT KIDNEYS COMPLETE

5/14/07

Standing Orders

Interval

CARDIAC REHAB PLAN OF CARE

X3/week

Comments: Cardiac Rehab Plan Of Care: Increase Exercise Tolerance: Endurance and Strength Tobacco Cessation: Ongoing Education and Counseling Nutrition Consult: Low Fat/Low Cholesterol, Low Sodium and Lipids Cardiac Rehab Education: Diagnosis, Home Exercise, Home Management, Medication, Risk Factor and Stress Management Length of program is based on achievement of outcomes up to 36 sessions or 3 months, maybe determined by insurance guidelines.

Orders are a big problem

Jargon, abbreviations, all caps
(no, we did not perform a mammogram and
colonoscopy at the clinic visit.

We Performed the Following

MAM MAMMOGRAM SCRN BIL DIGITAL
COLONOSCOPY
PANEL BASIC METABOLIC (BMP)
TSH
CBC WITH PLATELET

Not over yet

We hope that as awareness of health literacy needs of our patients increases, future upgrades will actually facilitate the making of patient centered print-outs such as the AVS.

An example of such a document:

The Asthma Action Plan

Patients and health literacy experts were involved from the beginning.

Asthma Action Plan (AAP)

- The key difference in how the AAP was developed compared to the AVS is:
health literacy experts and patients were involved from the beginning

It is an example of a partnership between providers, patients and literacy experts.

Draft Adult
9-8-08

My Asthma Action Plan

Date: 3/3/08

Name: **Mary Merry**

My Doctor or Clinic: HFA Internal Medicine

My Doctor or Clinic phone: 612-347-5000

My Asthma Severity: **Moderate persistent**

My Peak Flow Number: 450

Avoid your asthma triggers: smoke, colds, dust mites, molds, cats, dogs, cockroaches, pollen



Go



- I feel good
- No cough or wheeze
- Can work, sleep and play without asthma symptoms

My peak flow number is above 360

Green Zone: Asthma in good control

1. Take your asthma control medicine every day:
 - Fluticasone inhaler 44 mcg (Flovent) 2 puffs twice a day.
 - Salmeterol inhaler 50 mcg (Serevent) 1 puff twice a day.
2. If exercise triggers your asthma, take:
 - Albuterol inhaler (generic) 2 puffs
 - 15 minutes before exercise or sports, and
 - during exercise if you have asthma symptoms
3. Spacer to use with inhaler: Optichamber



Slow



I have any of these:

- I do not feel good
- Cough or wheeze
- Wake up at night
- Chest feels tight

My peak flow number is between 220 and 360

Yellow Zone: Asthma getting worse

1. Keep taking your Green Zone medicines.
2. Start taking your rescue medicine:
 - Albuterol inhaler (generic) 2 puffs every 20 minutes for up to 1 hour. Then every 4 hours for 1-2 days.
3. If you do not return to the Green Zone in 12-24 hours, or you get worse, start taking your oral steroid medicine:
 - Prednisone 20 mg tablets, 1 tablet twice a day for 5 days
4. If you stay in the Yellow Zone for more than 12-24 hours, call your doctor.



Stop



911

I have any of these:

- I feel awful
- Breathing getting harder
- Medicine not helping
- Trouble walking or talking
- Nose opens wide to breathe

My peak flow number is below 220

Red Zone - Medical Alert - Get help

1. Take your rescue medicine NOW:
 - Albuterol inhaler (generic) 4 puffs
2. Take your oral steroid medicine NOW:
 - Prednisone 20 mg tablets. 1 tablet twice a day for 5 days.
3. Call your doctor NOW.
4. If you are still in the Red Zone after 20 minutes, and you have not reached your doctor:
 - Take your rescue medicine again, and
 - Call 911 or go to the emergency room right away.

Clinic for follow up: HCMC Internal Medicine Clinic 612-666-6666

When: in 3 months

Electronically signed by **John Jones MD**

Name of person given Asthma Action Plan and Trigger Control sheet:

Sandra Merry

Patient Education Materials

- HCMC chose external vendor for materials
- Used internal health literacy experts to evaluate vendors
 - Tested them for reading level
 - Languages available
 - Health literacy best practices

Patient Portal

- Patient Advisory Council makes decisions about patient portal
 - Look and feel
 - Topics
- Connected to MedLine Plus
 - Free education content from National Library of Medicine available in English and Spanish
- Allow text messaging to patients that there is an update to PHR

General resources

“Quick Guide to Health Literacy.” U.S. Dept. of Health and Human Services. Available at

www.health.gov/communication/literacy/quickguide/ .

“Health Literacy: A Prescription to End Confusion.” Institute of Medicine. Available at www.iom.edu/?id=19750.

Resources for print materials

“How to Create and Assess Print Materials.” Rima Rudd. Harvard School of Public Health. Available at www.hsph.harvard.edu/healthliteracy/materials.html.

“Clear and Simple: Developing Effective Print Materials for Low-Literate Readers.” National Cancer Institute. Available at www.cancer.gov/cancerinformation/clearandsimple.

Kevin.larsen@hcmed.org





East Boston Neighborhood Health Center

Epic MyChart

January 2012

Michelle Dubois

Senior Application Analyst



EBNHC Overview

- Over 40 Years of Caring for the Community
- Over 825 Employees
- Over 300,000 Patient Visits per year
- Full Array of Primary Care Services
- 24/7 Emergency Facility
- Onsite Pharmacy
- Elderly Service Plan – PACE Program
- Transportation Services
- Education and Training Institute
- 45% of patients are best served in a language other than English



MyChart Outline

- Gives patients controlled access to the same Epic medical records their doctors use
- Provides convenient self-service functions that reduce costs and increase satisfaction
- Integration makes it easy for patients to get involved in their own health

MyChart Functionality

- View test results
- View upcoming & past appointments
- Schedule appointments
- View a copy of visit summary
- Get automated health maintenance reminders
- View problem-based education materials
- Request refills
- Send & receive secure messages with providers
- View a child's records and print growth charts
- Manage the care of elderly parents
- Pay bills securely

Access to MyChart

- Patients can access MyChart directly via our EBNHC internet site

The screenshot shows the website for the East Boston Neighborhood Health Center. The browser window title is "East Boston Neighborhood Health Center — East boston neighborhood health center - Windows Internet Explorer provided by EBNHC". The address bar shows "http://external.ebnhc.org/". The website has a blue header with navigation links: "Home | Contact Us | Español" and "Find a Provider | Elder Service Plan | Find a Job". The main content area features a large banner image of a doctor examining a child, with the text "EAST BOSTON NEIGHBORHOOD HEALTH CENTER Caring for the Community". Below this is a "Services QuickFind" menu with links to "About Us", "Services", "Programs", "Elder Service Plan", "Visitor/Patient Info", "Find a Provider", "Find a Job", "News/Press", and "Volunteer". A "MyChart Your medical record online" logo is circled in blue. Below the logo is a "Caring for an elder? We can help. Click Here" button and a search bar. To the right, there is a text block stating: "The East Boston Neighborhood Health Center has been a vital part of the community for 40 years. We provide easily accessible, high-quality health care to all who live and work in East Boston and the surrounding communities, without regard to age, income, insurance status, language, culture, or social circumstances. Our doors are always open." Below this is a "What's New:" section with a list of updates: "Free Career Advancement Classes", "Firework: EBNHC Rocks in Pink Glove Video", "EBNHC Named to Harvard Pilgrim Health Care's 2011 Physician Group Honor Roll", "EBNHC Receives 2011 Innovation Award", "Free Flu Vaccines Available", and "EBNHC Breaks Ground in Winthrop". The footer contains a search bar and a "Search" button. The browser's taskbar at the bottom shows several open applications, including "Inbox - Microsoft Outlook", "Hyperspace - LABORAT...", "Smar Term - [Epic Produ...", "Orchard Harvest LIS Cl...", "Document6 - Microsoft ...", and "East Boston Neighbo...". The system clock shows "12:53 PM".

Patient View



The screenshot shows a web browser window titled "MyChart - Windows Internet Explorer provided by EBNHC". The address bar shows the URL "https://mychart.ebnhc.org/mychart/inside.asp". The browser's menu bar includes "File", "Edit", "View", "Favorites", "Tools", and "Help". The address bar also contains a search box with the text "Live Search".

The main content area of the page features the East Boston Neighborhood Health Center logo and the "MyChart" title. A navigation bar includes "Home" and "Log Out" buttons. The page is personalized for a user named Michelle Dubois, with a "Welcome, Michelle Dubois" message.

On the left side, there is a vertical menu with the following categories:

- My Medical Record
 - Health Summary
 - Test Results
 - Medications
 - Allergies
 - Immunizations
 - Medical History
 - Current Health Issues
 - Health Trends
- Message Center
- Appointments
- My Family's Records
- Administrative
- Preferences

The main content area is titled "You Might Want To..." and contains two interactive buttons:

- "Send a message to your doctor's office." (with a doctor icon)
- "View your health summary." (with a health folder icon)

Below these buttons is a section titled "MyChart News for You". The text reads: "The health center is now pleased to offer you My Chart! MyChart provides secure on-line access to portions of your medical record. It enables you to securely use the Internet to help manage and receive information about your health. With MyChart, you can use the Internet to:"

- View upcoming medical appointment information.
- View your health summary from the MyChart electronic health record.
- View test results.
- Request prescription renewals.
- Communicate electronically and securely with your medical care team.

There is a section titled "Urgent Medical Matters" with the text: "Please do not use MyChart to send any messages requiring urgent attention. For urgent medical matters, contact your doctor's office. Do you have a question about a recent bill or your insurance? Just [Ask Customer Service!](#) Using the MyChart Message Center, you can get medical advice from your health center, but you can also contact customer service. This feature allows you to..."

The browser's status bar at the bottom shows the address "https://mychart.ebnhc.org/mychart/inside.asp", the system tray with various icons, and the time "12:54 PM".

MyChart Rollout (Phases)

Phase I (Implemented and LIVE)

- View test results – manual release not auto-release
- Review Health Summary
- Request refills
- Secure messaging
- View appointment information

Phase II (Implemented and LIVE)

- Proxy Access functionality
adult to child (up to age 12)
adult to adult

Phase III (no set date)

- Schedule appointments directly

Best Practices

- Set up medical advice messages to mimic current telephone workflow – route messages to specific pool (group of users) based on provider selected
- Set up refill requests to mimic current refill request workflow – route messages to specific pool based on prescribing provider
- Release lab results to MyChart with any necessary comments – replaces current letter workflow

Challenges

- “Selling” MyChart to providers
- Consistent workflows between providers
(releasing lab results – show actual numeric value to patient versus written paragraph)
- Language barrier limits sign up - we have signed up 900 patients since going live April 2010

What would we do differently?

- Bring providers into each decision – Request an Appointment versus Direct Scheduling
- Direct scheduling in Phase I

Thank you so much for your time!





Health IT at the Bedside

Mayo Regional Hospital

Presented by:

Deb Stroud, RN

POC Clinical Specialist

Mayo Regional Hospital

Dover-Foxcroft, Maine





Mayo Regional Hospital

- 25 Bed Critical Access
- 4 Bed ICU
- 2 Birthing suites
- 3 postpartum beds
- 18 Bed Med/Surg/Swing
- 24 hr ER
- 3 Suite OR





Mayo Regional Hospital

2011 Statistics

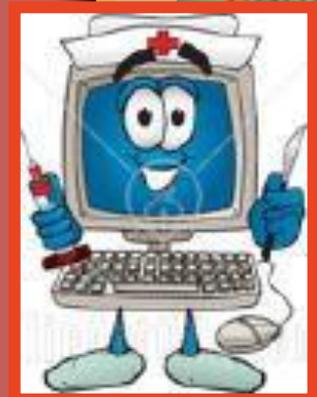
- Admits – 1,081
- Average daily census 11.4
- Patient days 3,723
- Births – 144
- Surgical Procedures – 1,912
- Radiology exams – 19,866
- Lab tests – 125,712
- Emergency visits – 12,336
- Physician office visits – 44,913
- Ambulance runs – 3,461





Implementation Timeline of Health IT applications

- **April 2008** – CPSI Bedside charting by nursing and ancillary departments and implementation of barcode scanning for medication administration on all patients in the MedSurg, ICU, OB, and Nursery.
- **July 2008** – Electronic documentation in the OR and PACU.
- **2009 & 2010** – Expanding current application and features
- **April 2011** – Implemented Computer Provider Order Entry (CPOE) on all inpatients by 100% of medical providers
- **June 2011** – Allscripts Emergency Room electronic documentation and order entry system implemented
- **July 2011** - Sage Physician practice documentation implementation.
- **Future:** Fully Electronic Medication Reconciliation system, Patient access portals to EHR, Quality Core Measures, Edit and E-sign of dictations, Further development of system





Patient Portals

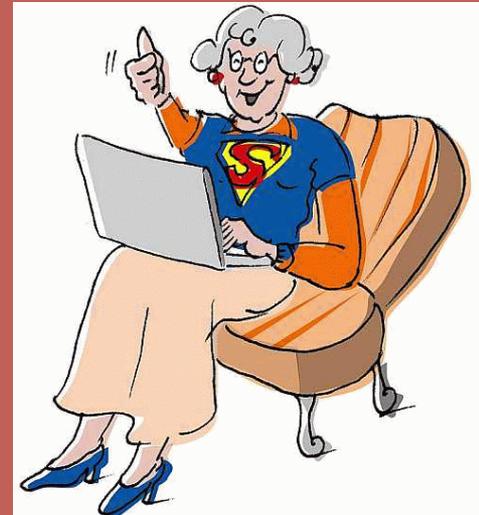
- Clinic records – Early fall
- Hospital records – Via HealthInfoNet





Communicating the use of Computers

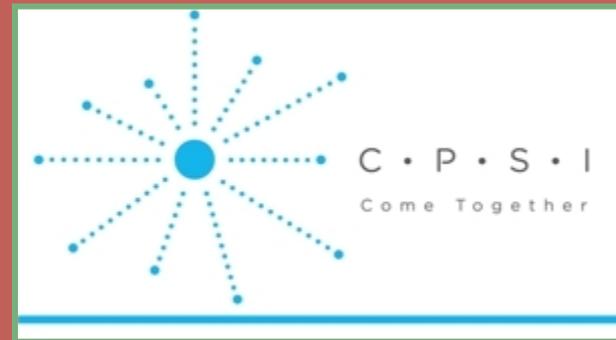
- Staff perceptions
- Patient complaints
- Staff actions
- Patients perceptions now





At Our Finger tips

- Physician, Nursing, and Ancillary departments working as one
- Information shared instantly
- Applications interacting





Health IT in Patient Care

- Computerized Provider Order Entry reduced errors in transcribing and understanding orders. Medications and treatments are implemented faster.
- Infection control alerts
- Allergies and Immunization information
- Radiology and Lab results appear instantly to nursing and Physicians
- View important vital signs in graph format to easily identify trends
- Medication administration ensures right patient, dose, route, time, and right medication.
- Performs clinical monitoring of medications as they are being ordered preventing a potentially harmful drug interaction.



Cont:

- Medication education documents
- The initial interview form sends information to other departments electronically based on answers selected.
- Multi disciplinary documentation and Care plan use
- Ability to view all past electronic medical records from the current account
- Thousands of customizable patient education documents for General care, Inpatient care, Discharge care, and Continuing care.
- Discharge instructions used to communicate with patients the follow up care that is needed in order to achieve better health outcomes.
- Discharge instructions also provide communication with the patients provider and pharmacy.





Staff

Then

- ❑ Lack of computer knowledge
- ❑ Trusting system
- ❑ Hard to let go of paper
- ❑ Afraid of dehumanization
- ❑ Caring for computer instead of patient
- ❑ Frustration with hardware and connectivity



The Transition

- ❑ Comfort came with time
- ❑ Trust: errors were identified before it reached the patient
- ❑ Slowly moving from paper reminders – still like checklists
- ❑ Use to the computer as an assistant in care
- ❑ Communication with patients
- ❑ Many computer options available – Identified workflow and tools needed
- ❑ Staff input on future equipment purchase





- It is essential to collect correct information but simply collecting information without addressing the human experience creates disconnection instead of connection.
- This often leads to dissatisfaction by both the patient and provider





Developing the Skill

- COMMUNICATION !!! (use of computer and why)
- Focusing on eye contact especially with emotion questions
- Looking at the patient often while they are talking.
- Letting the patient see how the computer assists in populating the health history.
- Sitting down with the computer while taking information.





Patient Complaints

THEN

- Staff focus on computer
- Staff uncomfortable with computer
- Physical disturbances
- Did not have high volume of complaints

NOW

Complaints

decreased as the use of the system became intuitive to the staff and the staff recognized how it assisted in organization of care, safety, and communication.





What are patient's saying now?

Random survey of MedSurg patients / families.

Average patient age = 70 years old



What is your understanding on why we are using an electronic system to help administer your medications and document your hospital events?

Pt #	Age	Comment	Action
1	74	"Accuracy."	
2	80	"So you can get every penny for every pill you give".	
3	64	"Compare information so nothing is missed"	Education on Medverify system and purpose, Pt then stated – "Oh that is great"
4	79	"Obama, and for safety"	
5	60	"Safer and easier"	
6	58	"Keep up with the Techy world, and I think there are less errors if you use it"	

Patients and family identified use of the computer as a safer method for delivery of medications and promoted accuracy of care

How do you feel about the nurse or the other care providers charting on the chart while they are taking care of you? Do you feel they have their head buried in the computer instead of focusing on you?

Pt #	Age	Comment	Action
1	74	"I think it is wonderful, this way they won't forget something they need to do. It is a safer way to give me my meds"	
2	80	"There is a little attention to the computer but I feel I still get the attention I need"	
3	64	"I think it is fine that they use the computer"	
4	79	"I don't want to be woken so much at night"	Pt had no issues with computer he did not want to be disturbed as much at night so we listed this as an expectation on his White board in the room. Also looked at the times his medications were being administered to see if there was anything that could be altered to ensure consecutive hours of sleep.
5	60	"The nurse explained what they were doing and I did not mind them using the computer"	
6	58	"I have no problem with them using the computer it is helping them do their job and cuts down on paper. I try not to talk to them when they are using the computer but I know I could if I wanted to."	

Do you feel your medications are delivered in a safer manner using the electronic system?

Pt #	Age	Comment
1	74	"Yes"
2	80	"Yes"
3	64	"Yes"
4	79	"Yes"
5	60	"Yes"
6	58	"Yes"

100% Family and patients felt reassured that they were getting the correct medication when the computer was used with the scanning device.



What have the nurses, other department care providers, or physicians said to you to explain the use of the system in your care?

Pt #	Age	Comment
1	74	"The nurse explained why they were using the computer and then also explained what the med was"
2	80	"The nurses always told me what they were doing"
3	64	"Everyone that gave me my medication would explain why they were scanning my armband"
4	79	"The nurse explained my meds and that they were scanning me and my meds for safety and then explained the medication to me"
5	60	"The nurse educated me on my medications"
6	58	"The nurses talked with me about my medications what they were for and why they had to use the computer."

Was pleased to identify that every patient / family interviewed stated the medical provider educated them on what they were doing, why, and in most cases also educated the patient on the medication. Patients are also now receiving medication education sheets on new meds started in the hospital.



Do you have any questions or concerns about how your information is kept safe?

Pt #	Age	Comment
1	74	"I have no concerns because I know you have to keep my information safe"
2	80	"I know you have to keep my information confidential so I feel it is safe"
3	64	"I have no concerns"
4	79	"I have no concerns on the safety of my information"
5	60	"I know my information is safe"
6	58	"I know there is a scare for people to get information out of a computer but I know you have to have a way to keep it safe so I do not worry about it"

Minimal concern about safety of information was identified.

There was a general feeling that safer medication administration and accuracy of care out weighed fear of information safety.





Tips From Staff

I emphasized the **patient safety aspect of the EMR**. The patients were very good about my struggle with new hardware and a new system when they knew how much safer it made things. It also worked so well with the **opportunity to educate** the patient about the meds they were taking. As I scanned the medications, I would tell the patient this is your (name of med) for your (Name of condition)”

Christina Pratley, RN Infection Prevention Nurse





I think the older generation are not as used to the technological world of computers so have **had more of an adjustment** to wheeling in a cart with a computer into a patient room to take care of them.

Using the tablet to scan, I felt like **I was crowding** their "personal space" . The addition of the hand held scanner was a huge help to me and allowed a little more distance when a patient would start coughing when I would lean over to scan their bracelet.

Explaining to the patient that scanning allowed us to be sure the medication and dose was for them, all of the **patients seemed to be reassured.**

I **always explain** that I am going to do a little charting while they take their nebulizer treatment because to get the best treatment they shouldn't talk during it anyways. I **make sure to make comments or stop in between to check them so they don't feel my entire focus is the computer.** I always **turn my computer so I am facing the patient and let them know I am still focused on them,** not just documenting or "taking care" of the computer.

I had one patient ask if I was "doing my facebook" :)

Kathy Hooper, RRT



I explain to the patient that using the computer and scanning the armband is **one of our safety checks** to make sure that we have the correct patient whom we are giving the correct medication to.

The patients always seem to agree that this is a good safety check and **feel reassured** that they are receiving the correct medications that are ordered for them to receive.

Jennifer Sudak, RN MedSurg



There is a **tendency to focus on the computer** during documentation and I had to remind myself to **continue to make eye contact** with the patient and **address questions to the patient and not the “machine”**

Patients were **told up front** that although we were now using electronic documentation, **there concerns were important to us and they were the focus of our attention, not the computer.**

Staff is encouraged to give feedback on any issues or improvements in documentation by **logging issues in a dedicated binder** so application administrators or IT can resolve.

Donna Kousaie, RN, BSN, CEN

Emergency Department Nurse Manager





This says it the best !!

When I am admitting a patient I ask them if they have been in our hospital and **do they know about our medication safety**. Then if not I explain to them how **Mayo cares about pt safety and the computers are a safety net for human error**.

I often joke they may feel they are at Wal-Mart getting price scanned but their health to us is priceless !!

Stephania Harvey, RN, BSN, AMSN



THANK YOU !!!!!

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Office of Health Information Technology and Quality

Additional HRSA Health IT and Quality Toolboxes and Resources including past webinars can be found at:

<http://www.hrsa.gov/healthit>

<http://www.hrsa.gov/quality>

Additional questions can be sent to the following e-mail address:

HealthIT@hrsa.gov

- US Department of Health and Human Services
- Health Resources and Services Administration

Health Literacy and Patient Engagement Resources

- **New Health Affairs Article by HHS Asst. Secretary Dr. Howard Koh and Former CMS Administrator Dr. Don Berwick, “New Federal Policy Initiatives To Boost Health Literacy Can Help The Nation Move Beyond The Cycle Of Costly ‘Crisis Care’”**
- **Commonwealth Foundation Study, “ Health Literacy Practices In Primary Care Settings: Examples From the Field”**
- **AHRQ Health Literacy Group’s Homepage, (<http://www.ahrq.gov/browse/hlitix.htm>)**
 - **Contains:**
 - **Toolkits**
 - **Articles**
 - **Studies**
- **California Healthcare Foundation Study , ”Measuring the Impact of Patient Portals”**