



“Interconnectivity”

Respiratory Therapy and the Electronic Health Record

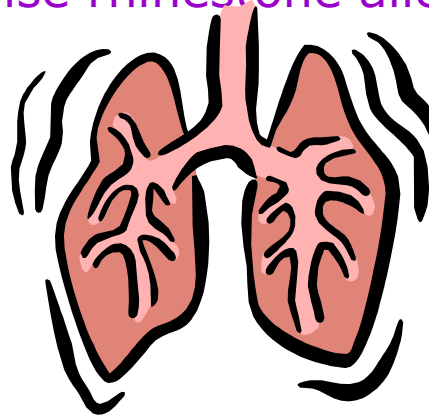
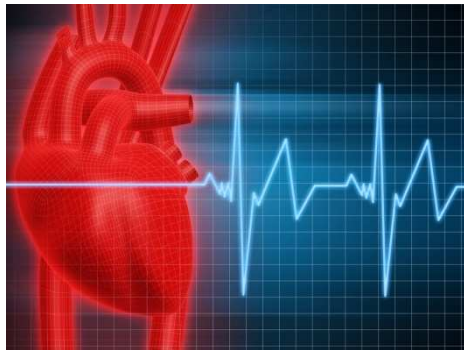
A non-geeks understanding

Prepared for the ISRC state conference June 2011

Speaker:

Patti Baltisberger RRT

(turquoise rhinestone alien)





Disclaimer:

- “ Though I am employed by Pekin Hospital, this presentation is general information on the CMS guidelines for “meaningful use” and the nationwide necessity for the Electronic Health Record which is not specific to any single organization. No specific products or organization will be promoted for profit.”

Mandatory Electronic Health Records

Presented today:

- Meaningful Use (EHR)
- Where it originated
- What terminology is used
- The goals
- The incentives
- How it is used in Respiratory Care



2nd disclaimer

- No apology, no excuses
- The weight of a flash drive....
- Lengthy discussion, no time limits
(LOL)



Meaningful use??????





First draft meaningful use 2009

- **First draft of EHR "meaningful use" definition unveiled**
But the national health IT chief, Dr. David Blumenthal asks for revised recommendations, which will help determine who gets stimulus dollars. *Posted June 29, 2009.*
- *2009 The Health Care Community was following the EHR with much interest. The federal stimulus bill provides approximately \$19 billion in net Medicare and Medicaid incentives for physicians, hospitals and others not only to adopt certified EHRs but also to use them in a meaningful way. The incentives start with bonuses for early adopters but turn into penalties for those who don't act fast enough. (economic stimulus package)*
- **Incentive pay rules**
- *Physicians with approved EHRs in place before 2011 or 2012 will be eligible for the maximum Medicare incentive payments allowed by the stimulus package. Doctors who have not adopted an EHR before 2015 and who fail to obtain a hardship exemption will see a 1% cut to Medicare pay, a reduction that phases up to 3% for 2017 and remains each year after that.*

Time and money.....





Terminology

- CMS – Centers for Medicare and Medicaid Services
- HIT – Health Information Technology
- EHR – Electronic Health Record
- EP – Eligible Professionals
- CAH – Critical Access Hospitals
- HCAHPS - Hospital Consumer Assessment of Healthcare Providers & Systems
- CPOE – Computer Physician Order Entry

Meaningful Use

- **CMS FINALIZES DEFINITION OF MEANINGFUL USE OF CERTIFIED ELECTRONIC HEALTH RECORDS (EHR) TECHNOLOGY 7/16/2010**





Meaningful Use is Established

July 16th 2010

- The Centers for Medicare & Medicaid Services (CMS) announced a final rule to implement provisions of the American Recovery and Reinvestment Act of 2009 (Recovery Act) that provide incentive payments for the meaningful use of certified EHR technology.
- The Medicare EHR incentive program will provide incentive payments to eligible professionals (EPs), eligible hospitals, and critical access hospitals (CAHs) that are meaningful users of *certified* EHR technology
- The Medicaid EHR incentive program will provide incentive payments to eligible professionals and hospitals for efforts to adopt, implement, upgrade or meaningfully use certified EHR technology.



Qualified EHR

- Definitions of terms in HITECH ACT section 13400 of Subtitle D
 - “an electronic health record of health-related information on an individual that is created, gathered, managed, and consulted by authorized clinicians and staff.”
 - Includes pt demographics, clinical health information, med hx, problem lists



Qualified EHR cont'd

- Has the capacity to;
 - Provide clinical decision support
 - Support Physician order entry
 - Capture and query info relevant to health care quality
 - Exchange electronic health info with, and integrate such info from other source

Federal Register Dept HHS 07/28/2010



Technology to improve the quality, efficiency and safety of Health Information

- “Certified EHR technology used in a *meaningful way* is one piece of a broader Health Information Technology infrastructure needed to reform the health care system and improve health care quality, efficiency, and patient safety.
- **CMS’ goal is for the definition of meaningful use to be consistent with applicable provisions of Medicare and Medicaid law while continually advancing the contributions *certified EHR technology* can make to improving health care quality, efficiency, and patient safety. To accomplish this, CMS’ final rule would phase in more robust criteria for demonstrating meaningful use in three stages.”**

Quote from the US Dept of HHS, CMS Centers for Medicare & Medicaid Services



3 Stages

Establishing Meaningful Use

- **Stage 1 Criteria for Meaningful Use**
- **The Stage 1 criteria for meaningful use focus on electronically capturing health information in a coded format, using that information to track key clinical conditions, communicating that information for care coordination purposes, and initiating the reporting of clinical *quality measures* and public health information.**
- **The criteria for meaningful use are based on a series of specific objectives, each of which is tied to a measure to demonstrate that they are meaningful users of certified EHR technology.**
- **For Stage 1, which begins in 2011, there will be 24 objectives/measures for eligible hospitals. These have been divided into a core set and menu set. Eligible hospitals must meet all objectives/measures in the core set (14 for eligible hospitals). They can choose to defer up to five remaining objectives/measures. Each objective/measure was evaluated for its potential applicability to all EPs and eligible hospitals.**

Eligible Hospital and CAH Meaningful Use Table of Contents Core Objectives

- **(1) Use CPOE for medication orders directly entered by any licensed healthcare professional who can enter orders into the medical record per State, local, and professional guidelines.**
- **(2) Implement drug-drug and drug-allergy interaction checks.**
- **(3) Maintain an up-to-date problem list of current and active diagnoses.**
- **(4) Maintain active medication list.**
- **(5) Maintain active medication allergy list.**
- **(6) Record all of the following demographics:**
 - **(A) Preferred language.**
 - **(B) Gender.**
 - **(C) Race.**
 - **(D) Ethnicity.**
 - **(E) Date of birth.**
 - **(F) Date and preliminary cause of death in the event of mortality in the eligible hospital or CAH.**



Core Objectives cont'd



- **7) Record and chart changes in the following vital signs:**
 - (A) Height (B) Weight (C) Blood pressure (D) BMI
 - (E) Plot and display growth charts for children 2 -20 years, including BMI.
- **(8) Record smoking for patients 13 years old or older.**
- **(9) Report hospital clinical quality measures to CMS or, in the case of Medicaid eligible hospitals, the States.**
- **(10) Implement one clinical decision support rule related to a high priority hospital condition along with the ability to track compliance with that rule.**

Core Objectives Cont'd



- **(11) Provide patients with an electronic copy of their health information (including diagnostic test results, problem list, medication lists, medication allergies, discharge summary, procedures), upon request.**
- **(12) Provide patients with an electronic copy of their discharge instructions at time of discharge, upon request.**
- **(13) Capability to exchange key clinical information (for example, problem list, medication list, medication allergies, and diagnostic test results), among providers of care and patient authorized entities electronically.**
- **(14) Protect electronic health information created or maintained by the certified EHR technology through the implementation of appropriate technical capabilities.**



Eligible Hospital and CAH Menu Set Objectives

- **(1) Implement Drug Formulary Checks**
- **(2) Record advance directives for patient 65 years old or older.**
- **(3) Incorporate clinical lab-test results into EHR as structured data.**
- **(4) Generate lists of patients by specific conditions to use for quality improvement, reduction of disparities, research, or outreach.**
- **(5) Use certified EHR technology to identify patient-specific education resources and provide those resources to the patient if appropriate.**
- **(6) The eligible hospital or CAH who receives a patient from another setting of care or provider of care or believes an encounter is relevant should perform medication reconciliation.**

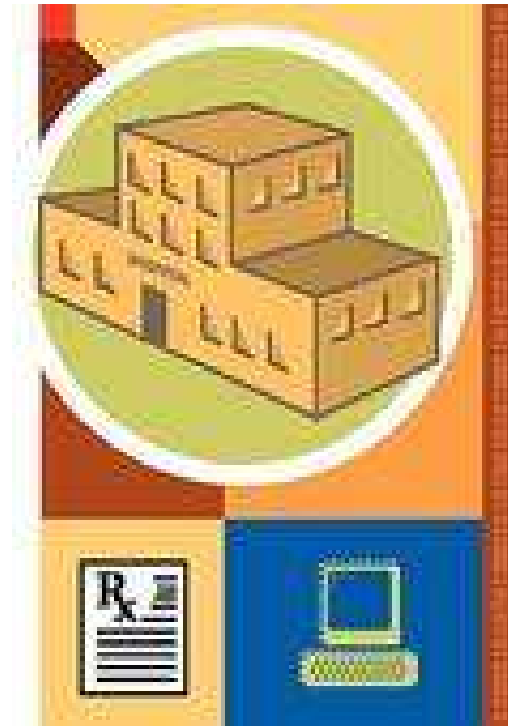


Menu set Objectives cont'd

- **(7) The eligible hospital or CAH that transitions their patient to another setting of care or provider of care or refers their patient to another provider of care should provide summary care record for each transition of care or referral.**
- **(8) Capability to submit electronic data to immunization registries or immunization information systems and actual submission according to applicable law and practice.**
- **(9) Capability to submit electronic data on reportable (as required by State or local law) lab results to public health agencies and actual submission according to applicable law and practice.**
- **(10) Capability to submit electronic syndromic surveillance data to public health agencies and actual submission according to applicable law and practice.**

Interconnectivity


- Each site:
office/clinic/facility
must interconnect
to provide
continuity in
patient care





The Medicare EHR Incentive Program

- Participation can begin as early as 2011.
- Eligible professionals can receive up to **\$44,000** over five years under the Medicare EHR Incentive Program. There's an additional incentive for eligible professionals who provide services in a Health Professional Shortage Area (HSPA).
- **To get the maximum incentive payment, Medicare eligible professionals must begin participation by 2012.**
- Incentive payments for eligible hospitals and CAHs may begin as early as 2011 and are based on a number of factors, beginning with a **\$2 million** base payment.



Important! For 2015 and later, Medicare eligible professionals, eligible hospitals, and CAHs that do not successfully demonstrate meaningful use will have a payment adjustment in their Medicare reimbursement.





The Medicaid EHR Incentive Program

- The Medicaid EHR Incentive Program is voluntarily offered by individual states and territories and may begin as early as 2011, depending on the state.
- Eligible professionals can receive up to **\$63,750** over the six years that they choose to participate in the program.
- Eligible hospital incentive payments may begin as early as 2011, depending on when the state begins its program. The last year a Medicaid eligible hospital may begin the program is 2016. Hospital payments are based on a number of factors, beginning with a **\$2 million** base payment.
- There are **no** payment adjustments under the Medicaid EHR Incentive Program.



Important Dates

- **April 18, 2011** – Attestation for the Medicare EHR Incentive Program begins.
- **May 2011 – EHR Incentive Payments expected to begin.**
- **July 3, 2011** – Last day for eligible hospitals to begin their 90-day reporting period to demonstrate meaningful use for the Medicare EHR Incentive Program.
- **September 30, 2011** – Last day of the federal fiscal year. Reporting year ends for eligible hospitals and CAHs.
- **October 1, 2011** – Last day for eligible professionals to begin their 90-day reporting period for calendar year 2011 for the Medicare EHR Incentive Program.
- **November 30, 2011** – Last day for eligible hospitals and critical access hospitals to register and attest to receive an Incentive Payment for Federal fiscal year (FY) 2011.
- **December 31, 2011** – Reporting year ends for eligible professionals.
- **February 29, 2012** – Last day for eligible professionals to register and attest to receive an Incentive Payment for calendar year (CY) 2011.



Summarizing stage 1 - 2012

- In the next 2 years, all hospitals must prove implementation of the EHR and its use, providing quality measures to CMS to receive incentive payments. The federal payments are dependent upon Medicare utilization and guidelines.



Beyond the Stage 1 Criteria for Meaningful Use

- The policy goals of meaningful use will be most fully realized by building on findings from Stage 1 and by making full use of the greater proliferation of certified EHR technology and supporting HIT/E infrastructure that will take place under Stage 1. CMS intends to propose through future rulemaking two additional stages of the criteria for meaningful use.

Stage 2





Stage 2 - 2013

- **“Stage 2 would expand upon the Stage 1 criteria in the areas of disease management, clinical decision support, medication management support for patient access to their health information, transitions in care, quality measurement and research, and bi-directional communication with public health agencies. These changes will be reflected by a larger number of core objective requirements for Stage 2. CMS may also consider applying the criteria more broadly to the outpatient hospital settings (and not just the emergency department). Information exchange is a critical part of care coordination and we expect that the infrastructure will support greater requirements for using health information exchanges for Stage 2.”**

Centers for Medicare & Medicaid Services



Accountable Care Organizations

- The ACO concept, an integral piece of the government's current health reform agenda, aims to create a health system focused on coordinated care and clinical best practices by holding all members of a patient's care team jointly responsible for the quality and cost of care and by sharing the economic gains with them.
- <http://www.youtube.com/watch?v=IF8bK7AJyL0&feature=related>
 - Quality
 - Outcomes
 - HCAHPS scores - Hospital Consumer Assessment of Healthcare Providers & Systems

The ACO model

- Built on the concept of cross-provider care coordination – requires communication across the community, bringing many health care entities together.
- Successful ACOs must possess a strong IT infrastructure





Core Measures

- In November of 2003, CMS and The Joint Commission began to work to precisely and completely align these common measures so that they are identical. This resulted in the creation of one common set of measure specifications documentation known as the Specifications Manual for National Hospital Inpatient Quality Measures to be used by both organizations. The goal is to minimize data collection efforts for these common measures and focus efforts on the use of data to improve the health care delivery process.
- Standardized order sets





2014

- PROOF of use of the EHR, all goals met and provided to CMS.
Utilization the technology throughout the health system with the EHR available from office to clinic to hospital, etc.



Ancillary Care in the EHR

- Respiratory Care
- Pulmonary Function Labs
- Cardiac Diagnostics
- Cardiovascular Lab
- Laboratory
- Neurodiagnostics
- Surgery, etc, etc, etc.....



Interconnectivity





Patient folder

- How to “connect” each piece of medical equipment and its report to the EHR.
- A unified view of the patient across organizations and care settings





Stage 3 - 2015

Focus:

Quality

Safety

Efficiency

Support for
national high
priority conditions

Patient access:

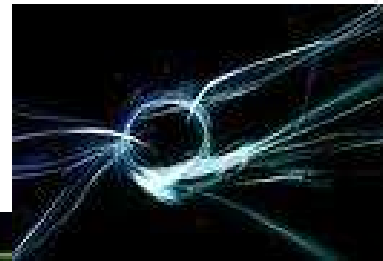
Self management tools

Access to
comprehensive patient
data

Improving population
health outcomes

“Most Wired”

(100 most wired)





How it affects Respiratory

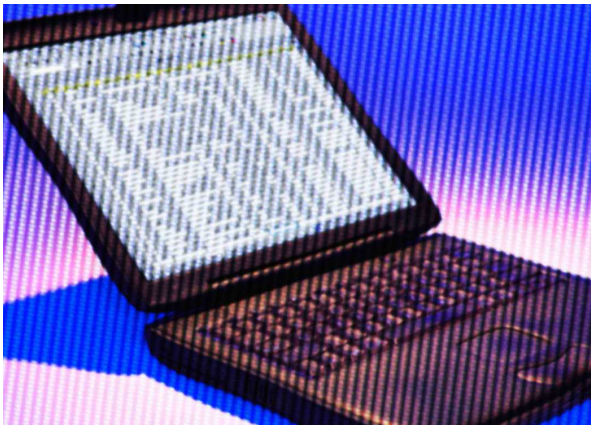
- Bedside charting
 - RT driven protocols
- Medication Administration (bar code scanning)
- Ventilator checks
 - VAP protocols
- Pre and Post assessments (HR)
- Policy and Procedure
- CPOE (Computerized Physician Order Entry)
 - Standardized order sets

Bedside charting

- Computer in the room
- Workstation on Wheels
- Paper flowsheets (must be scanned into the chart)



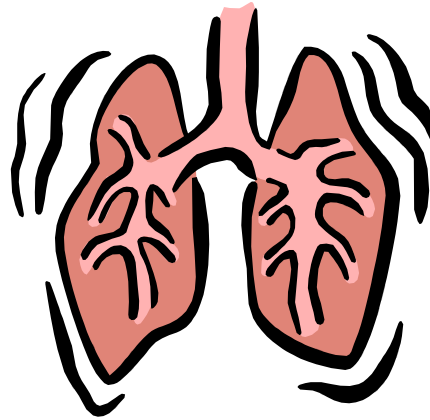
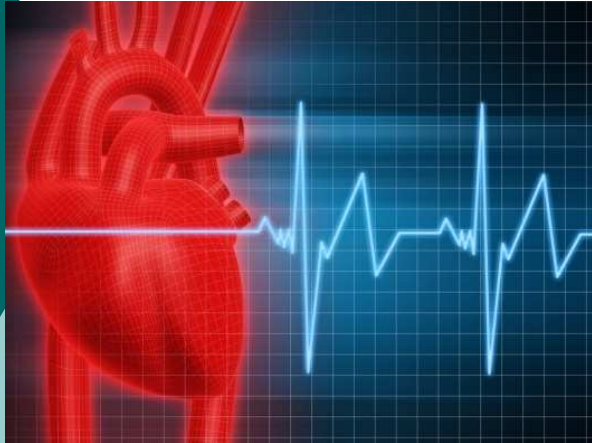
Bedside Charting





Protocols and order sets

- Registration, living will
- Oxygen protocols
- RT Driven protocols
- Vent weaning
- Rapid Response order sets
- Home education
- Physician standardized orders
 - (Hospitalists)



Imagine my dilemma

EKG, Stress, ECHO, Holter, PFT, Spirometry, Vents, nebs,
EEGs.....interconnected



References:

- **Health and Human Services** ○ www.hhs.gov
- **CMS Centers for Medicare & Medicaid Services** ○ www.cms.gov
- **American Medical News** ○ www.amednews.com
- **Health IT** ○ www.HealthIT.hhs.gov
- **Medicity September 2010**

2015

Questions?

