

# Meaningful use and Pharmacists

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Bad artists copy.

Great artists steal.

- Pablo Picasso

MYCONFINEDSPACE.COM

# Pre-Thanks

- Chad Hardy @ <http://RxInformatics.com>
- George Robinson – Medispan (Partners)
- ASHP Informatics Section's Clinical Information Systems SAG
- **PharmacyOneSource**

# Agenda

- Just the facts
- Crystal Balling for Phase II and III
- Comment on Roles and Rules
  - Predictions and Comments are my own and do not reflect those of my employer, sponsor or anyone else.
- Resources

# President Obama's First Weekly Address Saturday, January 24th, 2009



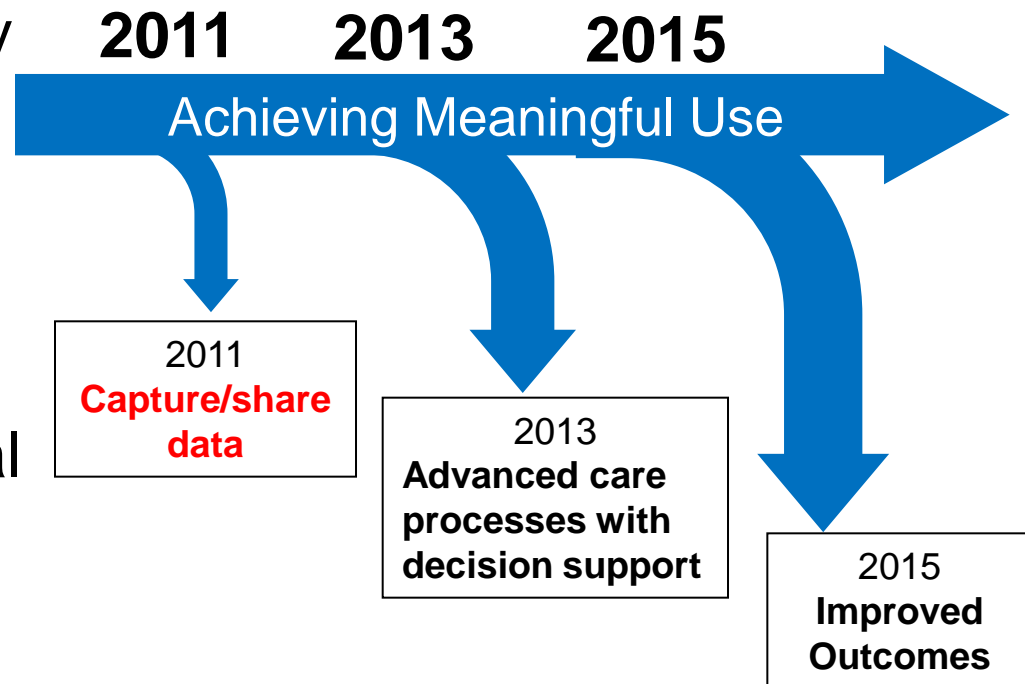
*“To lower health care cost, cut medical errors, and improve care, **we’ll computerize the nation’s health records in five years, saving billions of dollars in health care costs and countless lives.**”*

*The government firmly believes in the benefits of using electronic health records and is ready to invest federal resources to proliferate its use.*

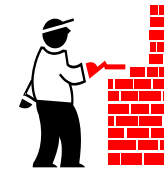
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# The Facts

- Key to preparing for “Meaningful Use”
  - ARRA provides reimbursement incentives for successful users
  - To use technology to enable the exchange and use of health information to best inform clinical decisions at the point of care



# EHR Building Blocks of Knowledge



ARRA  
HITECH  
HHS  
CMS/ONC

Snapshot of the hierarchy.....

## ARRA – American Recovery and Reinvestment Act

HITECH – Health Information Technology for Economic and Clinical Health Act

HHS - Department of Health and Human Services

CMS – Centers for Medicare and Medicaid Services

ONC – Office of the National Coordinator for Health Information Technology

- HIT Standards Committee
- HIT Policy Committee

# EHR Building Blocks of Knowledge



ARRA  
HITECH  
HHS  
CMS/ONC

Announced by HHS on July 13, 2010...

**CMS** – **Final Rule** on Medicare and Medicaid Programs: Electronic Health Record Incentive Program -“Meaningful Use”. Describes the criteria that providers and hospitals must meet by using certified EHR products in order to receive incentive payments. A three stage approach.

***Burden is on “us”***

**ONC** – **Final Rule** for initial set of standards, implementation specifications, and certification criteria for EHR technology. Matches the requirements of the CMS Final Rule to the product requirements. Focuses on how products get certified and how will the certifying bodies get created.

***Burden is on the EHR “products”***

# Meaningful Use Core and Menu Requirements for both Eligible Providers and Hospitals

## Core set (must meet all)

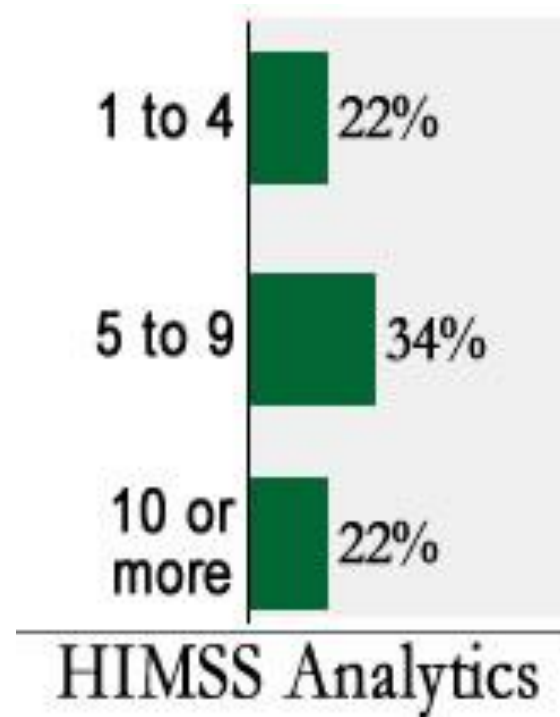
1. Record patient demographics (race/ethnicity)
2. **Record vital signs/chart changes**
3. **Maintain a current and active problem list**
4. **Maintain an active medication list**
5. **Maintain an active allergy list**
6. **Record adult smoking status**
7. Provide patient clinical summaries (EP)
8. **Provide electronic health information copy on demand**
9. Generate and transmit prescriptions electronically (EP)
10. **Use computerized physician order entry for medication ordering**
11. **Implement drug-drug/drug-allergy interaction checks**
12. **Be capable of electronic clinical information exchange**
13. **Implement and track one clinical decision support rule**
14. Protect patient data privacy and security
15. Report clinical quality measures to CMS or states

## Menu set (must choose 5 for stage 1)

- Implement drug formulary checks
- Record advance directives for patients 65 years old or older (hospital)
- Incorporate clinical lab test results
- Generate patient lists by condition
- Identify patient-specific education resources
- **Perform medication reconciliation between care settings**
- Provide summary of care for transferred patients
- Submit electronic immunization data to registries \*\*
- Submit electronic data on reportable lab results to public health agencies (hospital) \*\*
- Submit electronic epidemiology data to public health agencies \*\*
- Send care reminders to patients (EP)
- **Provide timely patient electronic access to health information (EP)**

\*\* must choose at least one of these as one of the 5

# Are Hospitals Ready?



# ARRA HIT Stimulus Funds

An Eligible Provider



Using.....

A Certified EMR



...and Demonstrating.....

Meaningful Use



Qualifies for.....

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# CPOE

<b>Stage 1 Final Rule</b>	<b>Proposed Stage 2</b>	<b>Proposed Stage 3</b>
CPOE for medication orders <b>(30%)</b>	CPOE (by licensed professional) for at least 1 medication, and 1 lab or radiology order for 60% of unique patients who have at least 1 such order (order does not have to be transmitted electronically)	CPOE (by licensed professional) for at least 1 medication, and 1 lab or radiology order on 80% of patients who have at least 1 such order (order does not have to be transmitted electronically)

# DDI and Allergy Checking

<b>Stage 1 Final Rule</b>	<b>Proposed Stage 2</b>	<b>Proposed Stage 3</b>
Drug-drug/drug-allergy interaction checks	Employ drug-drug interaction checking and drug allergy checking on appropriate evidence-based interactions	Employ drug-drug interaction checking, drug allergy checking, drug age checking (medications in the elderly), drug dose checking (e.g., pediatric dosing, chemotherapy dosing), drug lab checking, and drug condition checking (including pregnancy and lactation) on appropriate evidence-based interactions

# Allergy Lists

<b>Stage 1 Final Rule</b>	<b>Proposed Stage 2</b>	<b>Proposed Stage 3</b>
Maintain active medication allergy list <b>(80%)</b>	Continue Stage 1	80% medication allergy lists are up-to-date (Have been reviewed – this visit)

# Medication Lists

<b>Stage 1 Final Rule</b>	<b>Proposed Stage 2</b>	<b>Proposed Stage 3</b>
Maintain active med list <b>(80%)</b>	Continue Stage 1	80% medication lists are up-to-date

# ePrescribing

<b>Stage 1 Final Rule</b>	<b>Proposed Stage 2</b>	<b>Proposed Stage 3</b>
E-prescribing (eRx) (EP) <b>(40%)</b>	50% of orders (outpatient and hospital discharge) transmitted as eRx	80% of orders (outpatient and hospital discharge) transmitted as eRx

# Drug Formulary

<b>Stage 1 Final Rule</b>	<b>Proposed Stage 2</b>	<b>Proposed Stage 3</b>
Implement drug formulary checks*	Move current measure to core	80% of medication orders are checked against relevant formularies

# Patient Lists

<b>Stage 1 Final Rule</b>	<b>Proposed Stage 2</b>	<b>Proposed Stage 3</b>
Generate patient lists for specific conditions*	Make core requirement. Generate patient lists for multiple patient-specific parameters	Patient lists are used to manage patients for high-priority health conditions

# CDS!

<b>Stage 1 Final Rule</b>	<b>Proposed Stage 2</b>	<b>Proposed Stage 3</b>
Implement 1 CDS rule	Use CDS to improve performance on high-priority health conditions. Establish CDS attributes for purposes of certification: 1. Authenticated (source cited); 2. Credible, evidence-based; 3. Patient-context sensitive; 4. Invokes relevant knowledge; 5. Timely; 6. Efficient workflow; 7. Integrate with EHR; 8. Presented to the appropriate party who can take action	Use CDS to improve performance on high-priority health conditions. Establish CDS attributes for purposes of certification: 1. Authenticated (source cited); 2. Credible, evidence-based; 3. Patient-context sensitive; 4. Invokes relevant knowledge; 5. Timely; 6. Efficient workflow; 7. Integrated with EHR; 8. Presented to the appropriate party who can take action

# Patient Reminders

<b>Stage 1 Final Rule</b>	<b>Proposed Stage 2</b>	<b>Proposed Stage 3</b>
Send patient reminders <b>(20%)*</b>	Make core requirement.	20% of active patients who prefer to receive reminders electronically receive preventive or follow-up reminders

# Physician documentation

<b>Stage 1 Final Rule</b>	<b>Proposed Stage 2</b>	<b>Proposed Stage 3</b>
<b>(NEW)</b>	30% of visits have at least one electronic EP note	90% of visits have at least one electronic EP note

<b>Stage 1 Final Rule</b>	<b>Proposed Stage 2</b>	<b>Proposed Stage 3</b>
<b>(NEW)</b>	30% of EH patient days have at least one electronic note by a physician, NP, or PA	80% of EH patient days have at least one electronic note by a physician, NP, or PA

# Vital Signs

<b>Stage 1 Final Rule</b>	<b>Proposed Stage 2</b>	<b>Proposed Stage 3</b>
Record vital signs <b>(50%)</b>	80% of unique patients have vital signs recorded	80% of unique patients have vital signs recorded

# Power of Comments

- June 2009 wording
  - **Conduct Medication Administration using Bar Coding**
- Comment Period

# Comment submitted

- This objective should not be included until the benefit of bar code medication administration technology is proven to promote safe and effective care. The Committee should consider replacing this 2013 objective with “documenting medication administration within an electronic medication administration record”

# eMAR

<b>Stage 1 Final Rule</b>	<b>Proposed Stage 2</b>	<b>Proposed Stage 3</b>
<b>(NEW)</b>	30% of EH medication orders automatically tracked via electronic medication administration recording	80% of EH inpatient medication orders are automatically tracked via electronic medication administration recording

# Med Rec

<b>Stage 1 Final Rule</b>	<b>Proposed Stage 2</b>	<b>Proposed Stage 3</b>
Perform medication reconciliation <b>(50%)*</b>	Medication reconciliation conducted at 80% of care transitions by receiving provider (transitions from another setting of care, or from another provider of care, or the provider believes it is relevant)	Medication reconciliation conducted at 90% of care transitions by receiving provider

# Registries

<b>Stage 1 Final Rule</b>	<b>Proposed Stage 2</b>	<b>Proposed Stage 3</b>
Submit immunization data*	EH and EP: Mandatory test. Some immunizations are submitted on an ongoing basis to Immunization Information System (IIS), if accepted and as required by law	EH and EP: Mandatory test. Immunizations are submitted to IIS, if accepted and as required by law. During well child/adult visits, providers review IIS records via their EHR.

# Information Exchange

- Capable of exchanging key clinical information among providers of care and patient authorized entities electronically
  - EP: problem list, medication list, medication allergies, diagnostic test results
  - Hospital/CAH: discharge summary, procedures, problem list, medication list, medication allergies, diagnostic test results
- Performed at least one test of certified EHR technology's capability
- Information provided in structural document format with **adherence to minimal terminology constraints**

# Terminology

- Medication Terminology Standard
  - RxNorm
- Problems
  - ICD or Snomed
- Immunizations
  - CVX Codes
- Allergies
  - Stay Tuned

# Meaningful Yoose

- <http://vimeo.com/user6272566/meaningful-yoose-rap>
- Ross Martin, MD - The American College of Medical Informatimusicology



# Resources

- <http://MU4Pharm.posterous.com>
- <http://RxInformatics.com>
- <http://evernote.com/pub/poikonen/PublicPharmacoinformatics>
- ASHP Resource Page

Thank you

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