Meaningful Use:
A Brief Overview for Society of Health Systems

Kevin Martin
May 20, 2011
Multiple regulatory changes are simultaneously impacting the future direction of health care delivery and payment.

These changes impact every aspect of the organization. Preparing for the changes is essential.
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ARRA</strong></td>
<td>American Reinvestment and Recovery Act (the Stimulus Bill)</td>
</tr>
<tr>
<td><strong>HITECH</strong></td>
<td>Health Information Technology for Economic and Clinical Health Act; part of “ARRA”</td>
</tr>
<tr>
<td><strong>MU</strong></td>
<td>Meaningful Use; HITECH requirement to receive incentives</td>
</tr>
<tr>
<td><strong>PPACA</strong></td>
<td>Patient Protection and Affordable Care Act</td>
</tr>
<tr>
<td><strong>HIE</strong></td>
<td>Health Information Exchange</td>
</tr>
<tr>
<td><strong>ACO</strong></td>
<td>Accountable Care Organization</td>
</tr>
<tr>
<td><strong>VBP</strong></td>
<td>Value Based Purchasing</td>
</tr>
<tr>
<td><strong>EP</strong></td>
<td>Eligible Provider</td>
</tr>
</tbody>
</table>

While HITECH & PPACA are separate legislation, one is essential for the other and both have end goal of improving quality and reducing cost of health care in US.
Defined the criteria for achieving “Meaningful Use” of EHR technology
- 24 for hospitals (14 core /10 menu)
- 25 for physicians (15 core / 10 menu)
  (known as “EP” or Eligible Providers”)

Established timelines

Outlined the incentive payment programs and penalties
Prevailing misperception that implementing Epic, Cerner, McKesson, Meditech, Siemens, Allscripts, eClinical Works or any other EHR complies with HITECH requirements and incentive qualification

EHR implementation is only one part of meaningful use

MU depends on workflow, evidence based clinical practice, measurement and reporting
Delivery System Redesign – “Flip the Triangle”

- Prevent health conditions from becoming chronic health conditions
- Manage chronic health for 45% of Americans with one or more of the conditions – 75% of total medical costs
- Reduce errors & waste in the system
- Reduce incentives for high cost, low value, procedure based care
Future US Healthcare System
“Flip the Triangle”

- Increase Preventative Care
- Promote Early Intervention
- Improve the Coordination Of Care
- Expand the Use of Evidence-Informed Care
- Decrease Overuse & Underuse of Services
- Reduce Error Rates & Waste

Direct Payment to Patients
Bundled Payments
P4P for Outcome Measures
Provider Bonuses & Incentives
Community Incentive Pools
Case Rates
Grants & Seed Money
Global SubCapitated Rates

Meaningful Use of HIT

Accountable Care Organization
- Medical Homes
- Specialty Clinics
- Hospitals

New Payment Models
New Organization Structures
The Financial Risks of ARRA & PPACA

Medicare payments will be reduced 2% for all hospitals, and over 8% for those hospitals that do not demonstrate meaningful use of EHRs and high quality care.*

Non-specific coding under ICD10 may further reduce payments

Potential Medicare Payment Reductions Under ARRA & PPACA

Medicaid payments will also be cut

* Medicaid payments will also be cut

** Recent historical IPPS annual update percentage is 3.2%
Payers – Aetna, Highmark, UnitedHealth Group and WellPoint have announced they will align their pay-for-performance programs with federal meaningful use criteria.

In some cases, physicians who meet a payer’s P4P criteria and demonstrate meaningful use will receive a higher P4P payment; in other cases the payment won’t rise but demonstrating meaningful use will become a criteria for getting the P4P payment.

WellPoint Shakes Up Hospital Payments

BY JANET ADAMY

WellPoint Inc. is raising the stakes for reimbursing about 1,500 hospitals across the country, cutting off annual payment increases if they fail to deliver on the big health insurer’s definition of quality patient care.

WellPoint is replacing the system it uses to help offset rising medical and other costs at hospitals in 14 states that serve its Blue Cross Blue Shield plans, which cover 34 million people. In recent years, it has raised its payments to those hospitals by an average 8% a year.
Various aspects of PPACA take effect across this timeline

**Preparation**
- CMS/ONC development of policy, education and plans for execution
- Providers and vendor assess readiness, plan and implement

**Stage 1**
- Demonstrate availability of systems to capture and share data.
- Components are known and in the market

**Stage 2**
- Demonstrate use of systems to change care processes and inform clinical decision making
- Converge and refine components to bring to market

**Stage 3**
- Improve outcomes of national high priority conditions
- Work in progress, development required

**ICD10 Conversion**
- 10/1

**Value & Innovation**
Three Stages of Meaningful Use

**Stage 1 (2011 and 2012)**
- Capture and Share Data
- 15 Core Requirements
- Quality Reporting
- Aggregate Numerator/Denominator

**Stage 2**
- Advanced Care Processes with Decision Support
- 10 Menu Items (Pick 5)
- Remaining Menu Items must be implemented in Stage 2
- Patient Level Detail
- Standardized Nomenclature (ICD-10/SNOMED)

**Stage 3**
- Improved Outcomes
- Advanced Adoption of Technology
- Value & Innovation

Health Information Exchange
<table>
<thead>
<tr>
<th>Hospital Core Criteria</th>
<th>Measure</th>
<th>Additional information</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPOE</td>
<td>30%</td>
<td>Medication orders only</td>
</tr>
<tr>
<td>Drug-drug /drug-allergy checks</td>
<td>Yes/No</td>
<td>Must enable the functionality for the full reporting period</td>
</tr>
<tr>
<td>Demographics</td>
<td>50%</td>
<td>Recorded as structured data</td>
</tr>
<tr>
<td>Problem List</td>
<td>80%</td>
<td>Maintain up-to-date list of current and active diagnoses</td>
</tr>
<tr>
<td>Medication List</td>
<td>80%</td>
<td>Recorded as structured data</td>
</tr>
<tr>
<td>Medication Allergy List</td>
<td>80%</td>
<td>Recorded as structured data</td>
</tr>
<tr>
<td>Vital Signs</td>
<td>50%</td>
<td>Record and chart changes as structured data</td>
</tr>
<tr>
<td>Smoking Status</td>
<td>50%</td>
<td>Recorded as structured data</td>
</tr>
<tr>
<td>Clinical Decision Support</td>
<td>Yes/No</td>
<td>Implement one rule</td>
</tr>
<tr>
<td>Clinical Quality Measures</td>
<td>15</td>
<td>2011 – aggregate through attestation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2012 – electronic submission</td>
</tr>
<tr>
<td>Health Information</td>
<td>50%</td>
<td>Provide electronic copy</td>
</tr>
<tr>
<td>Discharge Instructions</td>
<td>50%</td>
<td>Provide electronic copy</td>
</tr>
<tr>
<td>Exchange Clinical Information</td>
<td>Yes/No</td>
<td>One test</td>
</tr>
<tr>
<td>Privacy/Security</td>
<td>Yes/No</td>
<td>Protect information</td>
</tr>
</tbody>
</table>
## Menu Set Criteria for Hospitals

<table>
<thead>
<tr>
<th>Hospital Menu Criteria</th>
<th>Measure</th>
<th>Additional information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug Formulary Checks</td>
<td>Yes/No</td>
<td>Implement access to at least one internal or external formulary</td>
</tr>
<tr>
<td>Advance Directives</td>
<td>50%</td>
<td>Recorded as structured data</td>
</tr>
<tr>
<td>Clinical Lab Test Results</td>
<td>40%</td>
<td>Recorded as structured data</td>
</tr>
<tr>
<td>Patient List</td>
<td>Yes/No</td>
<td>At least one report listing patients with a specific condition</td>
</tr>
<tr>
<td>Patient-Specific Education</td>
<td>10%</td>
<td>Use EHR to suggest resources</td>
</tr>
<tr>
<td>Medication Reconciliation</td>
<td>50%</td>
<td>Between transitions of care</td>
</tr>
<tr>
<td>Summary of Care Record</td>
<td>50%</td>
<td>For 50% of transitions of care and referrals</td>
</tr>
<tr>
<td>Immunization Registries</td>
<td>Yes/No</td>
<td>At least one test</td>
</tr>
<tr>
<td>Lab Results to Public Health Agencies</td>
<td>Yes/No</td>
<td>At least one test</td>
</tr>
<tr>
<td>Syndromic Surveillance</td>
<td>Yes/No</td>
<td>At least one test</td>
</tr>
</tbody>
</table>

Select 4 of the basic Menu items

Select 1 public health measure
Quality Measures

- Emergency Department Throughput – admitted patients Median time from ED arrival to ED departure for admitted patients
- Emergency Department Throughput – admitted patients – Admission decision time to ED departure time for admitted patients
- Ischemic stroke – Discharge on anti-thrombotics
- Ischemic stroke – Anticoagulation for A-fib/flutter
- Ischemic stroke – Thrombolytic therapy for patients arriving within 2 hours of symptom onset
- Ischemic or hemorrhagic stroke – Antithrombotic therapy by day 2
- Ischemic stroke – Discharge on statins
- Ischemic or hemorrhagic stroke – Stroke education
- Ischemic or hemorrhagic stroke – Rehabilitation assessment
- VTE prophylaxis within 24 hours of arrival
- Intensive Care Unit VTE prophylaxis
- Anticoagulation overlap therapy
- Platelet monitoring on unfractionated heparin
- VTE discharge instructions
- Incidence of potentially preventable VTE
## Objectives That Continue From Stage 1

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Quality Measures</td>
<td>Report per workgroup/ CMS</td>
<td>No add’l details</td>
<td>No add’l details</td>
<td>New measures will likely be required by the workgroup</td>
</tr>
<tr>
<td>Problem list</td>
<td>80%</td>
<td>Same</td>
<td>Same</td>
<td>Must be kept up-to-date</td>
</tr>
<tr>
<td>Active meds list</td>
<td>80%</td>
<td>Same</td>
<td>Same</td>
<td>Must be kept up-to-date</td>
</tr>
<tr>
<td>Active med allergy list</td>
<td>80%</td>
<td>Same</td>
<td>Same</td>
<td>Must be kept up-to-date</td>
</tr>
<tr>
<td>Patient list</td>
<td>Menu</td>
<td>Core</td>
<td>Same</td>
<td></td>
</tr>
<tr>
<td>All public health surveillance items</td>
<td>Menu</td>
<td>Core</td>
<td>Same</td>
<td></td>
</tr>
</tbody>
</table>
# Objectives That Have Increased Thresholds

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPOE</td>
<td>med orders – 30%</td>
<td>at least 1 med, and 1 lab or rad order - 60%</td>
<td>At least 1 med, and 1 lab or rad order - 80%</td>
<td>Doesn’t require electronic order transmittal</td>
</tr>
<tr>
<td>Record Demographics</td>
<td>50%</td>
<td>80%</td>
<td>90%</td>
<td>Used in quality reports</td>
</tr>
<tr>
<td>Chart vital signs</td>
<td>50%</td>
<td>80%</td>
<td>80%</td>
<td></td>
</tr>
<tr>
<td>Record smoking status</td>
<td>50%</td>
<td>80%</td>
<td>90%</td>
<td></td>
</tr>
<tr>
<td>Lab results stored as structured data</td>
<td>Menu – 40%</td>
<td>Core - 40%</td>
<td>90% (reconciled with orders)</td>
<td></td>
</tr>
<tr>
<td>E-copy of health information</td>
<td>50%</td>
<td>50%</td>
<td>90%</td>
<td></td>
</tr>
<tr>
<td>E-copy of d/c instructions</td>
<td>50%</td>
<td>80% offered as electronic</td>
<td>90% offered as electronic</td>
<td></td>
</tr>
<tr>
<td>Medication Reconciliation</td>
<td>Menu - 50%</td>
<td>Core - 80%</td>
<td>Core - 90%</td>
<td></td>
</tr>
<tr>
<td>Summary of Care Record</td>
<td>Menu - 50%</td>
<td>Core - 50%</td>
<td>Core – 80%</td>
<td></td>
</tr>
</tbody>
</table>
## Objectives That Have Increased Functionality

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Decision Support rule</td>
<td>Implement one rule</td>
<td>Now categorized</td>
<td>Now categorized</td>
<td></td>
</tr>
<tr>
<td>Drug-drug/ drug-allergy interaction checks</td>
<td>Technology enabled</td>
<td>Evidence-based checks</td>
<td>Employ add'l checks (age, dosage, labs, and condition)</td>
<td></td>
</tr>
<tr>
<td>Drug formulary checks</td>
<td>Menu</td>
<td>Core</td>
<td>80% of med orders</td>
<td></td>
</tr>
<tr>
<td>Advance directives</td>
<td>Menu - 50% EH only</td>
<td>Core - 50% EP and EH</td>
<td>Core – 90% EP and EH</td>
<td></td>
</tr>
<tr>
<td>Patient-specific education</td>
<td>10%</td>
<td>Same</td>
<td>20%, and in different languages</td>
<td></td>
</tr>
<tr>
<td>HIE</td>
<td>Perform test</td>
<td>Connect to three providers or one HIE</td>
<td>Connect to 30% of external providers or one HIE</td>
<td></td>
</tr>
</tbody>
</table>
# New Objectives

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Stage 2</th>
<th>Stage 3</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>One electronic note</td>
<td>30% of patient days</td>
<td>80% of patient days</td>
<td>EH only</td>
</tr>
<tr>
<td>Med orders tracked by eMAR</td>
<td>30% of orders</td>
<td>80% of orders</td>
<td></td>
</tr>
<tr>
<td>Electronic inpatient summaries viewable online</td>
<td>80% of patients offered ability</td>
<td>Same</td>
<td></td>
</tr>
<tr>
<td>List of care team members available in EHR</td>
<td>10%</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>Record a longitudinal care plan for 20% of patients with high-priority health conditions</td>
<td>20%</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>Send patient reminders</td>
<td>20%</td>
<td>20% electronic</td>
<td>Seeking input on how to define</td>
</tr>
</tbody>
</table>
Two Methods for Calculating ED Inclusion

**Observation Services Method**

For patients presenting to the ED and then admitted to the Inpatient setting, actions taken within the ED would count for purposes of measuring MU.

For patients presenting to the ED and then treated in the ED Observation area, who receive services under both POS 21 and 23, would count for purposes of measuring MU.

**All ED Visits Method**

All ED visits (those with POS code for 23) would count for purposes of measuring MU, along with those inpatients with POS code 21.

Hospitals can choose their preferred method for calculation.
What exactly is “structured data”?

The term is not explicitly defined in the regulations, but there is general consensus in the industry on the following:

**Structured Data**
- Data in databases or spreadsheets
- Data stored in an EHR in predefined fields
- Numerical or codified data
- Binary data
- Discrete data
- Computer-readable data

**Unstructured Data**
- Scanned data
- Images
- Free-text
- Data that is readable by humans only
- Dictated voice data
- Transcribed text

Criteria requiring structured data:

**Core Criteria:**
- Problem list
- Medication list
- Medication allergy list
- Demographics
- Vital signs
- Smoking status

**Menu Criteria:**
- Lab test results
- Advanced directives

“We believe that entering the data as structured data encourages future exchange of information.”

Source: Page 44360 of 42 CFR, Published: 7/28/2010
Must understand the hospital’s strategic direction – Process Improvement Initiatives must be focused on the patient (horizontal) not the department (vertical)

Great opportunity to form cross-functional teams to solve problems (nurses, physicians, ancillary staff, etc)

The less electronic documentation/integration that currently exists in your hospital means the more PI / ME’s are needed to ensure success

Optimal implementation of Meaningful Use will require PI / ME’s; prime examples include:
- CPOE
- Record Demographics (Registration)
- Problem List
- Medication Reconciliation
- Record Vital Signs

Use Meaningful Use as the catalyst for change

It’s all or nothing with money on the line – hospitals want/need this to succeed
Additional Information
Meaningful Use References

- www.cms.gov/EHRIncentivePrograms/
- www.healthit.hhs.gov
- www.himss.org/ASP/topics_meaningfuluse.asp
Meaningful Use Timeline

CMS Medicare and Medicaid EHR Incentive Programs

Milestone Timeline

- January 2011: Registration for the EHR Incentive Programs begins
- April 2011: Attestation for the Medicare EHR Incentive Program begins
- February 29, 2012: Last day for EPs to register and attest to receive an Incentive Payment for CY 2011
- Medicare payment adjustments begin for EPs and eligible hospitals that are not meaningful users of EHR technology
- Last year to receive Medicaid EHR Incentive Payment

Timeline:
- Fall 2010
- Winter 2011
- Spring 2011
- Fall 2011
- Winter 2012
- 2014
- 2015
- 2016
- 2021

- January 2011: For Medicaid providers, States may launch their programs if they so choose
- May 2011: EHR Incentive Payments begin
- November 30, 2011: Last day for eligible hospitals and CAHs to register and attest to receive an Incentive Payment for FY 2011
- Last year to Initiate participation in the Medicare EHR Incentive Program
- Last year to receive a Medicare EHR Incentive Payment

Meaningful Use Timeline

Acronyms

- ACA – Patient Protection and Affordable Care Act
- A/I/U – Adopt, implement, or upgrade
- CAH – Critical Access Hospital
- CCN – CMS Certification Number
- CHIPRA – Children’s Health Insurance Program Reauthorization Act of 2009
- CMS – Centers for Medicare & Medicaid Services
- CNM – Certified Nurse Midwife
- CPOE – Computerized Physician Order Entry
- CQM – Clinical Quality Measures
- CY – Calendar Year
- EHR – Electronic Health Record
- EP – Eligible Professional
- eRx – E-Prescribing
- FFS – Fee-for-service
- FQHC – Federally Qualified Health Center
- FFY – Federal Fiscal Year
- HHS – U.S. Department of Health and Human Services
- HIT – Health Information Technology
- HITECH Act – Health Information Technology for Economic and Clinical Health Act
- HITPC – Health Information Technology Policy Committee
- HIPAA – Health Insurance Portability and Accountability Act of 1996
- HPSA – Health Professional Shortage Area
- MA – Medicare Advantage
- MCMP – Medicare Care Management Performance Demonstration
- MU – Meaningful Use
- NCVHS – National Committee on Vital and Health Statistics
- NP – Nurse Practitioner
- NPI – National Provider Identifier
- NPRM – Notice of Proposed Rulemaking
- OMB – Office of Management and Budget
- ONC – Office of the National Coordinator of Health Information Technology
- PA – Physician Assistant
- PECOS – Provider Enrollment, Chain, and Ownership System
- PPS – Prospective Payment System (Part A)
- PQRI – Medicare Physician Quality Reporting Initiative
- RHC – Rural Health Clinic
- RHQDA PU – Reporting Hospital Quality Data for Annual Payment Update
- TIN – Taxpayer Identification Number