





FACULTY OF MEDICINE AND HEALTH SCIENCES

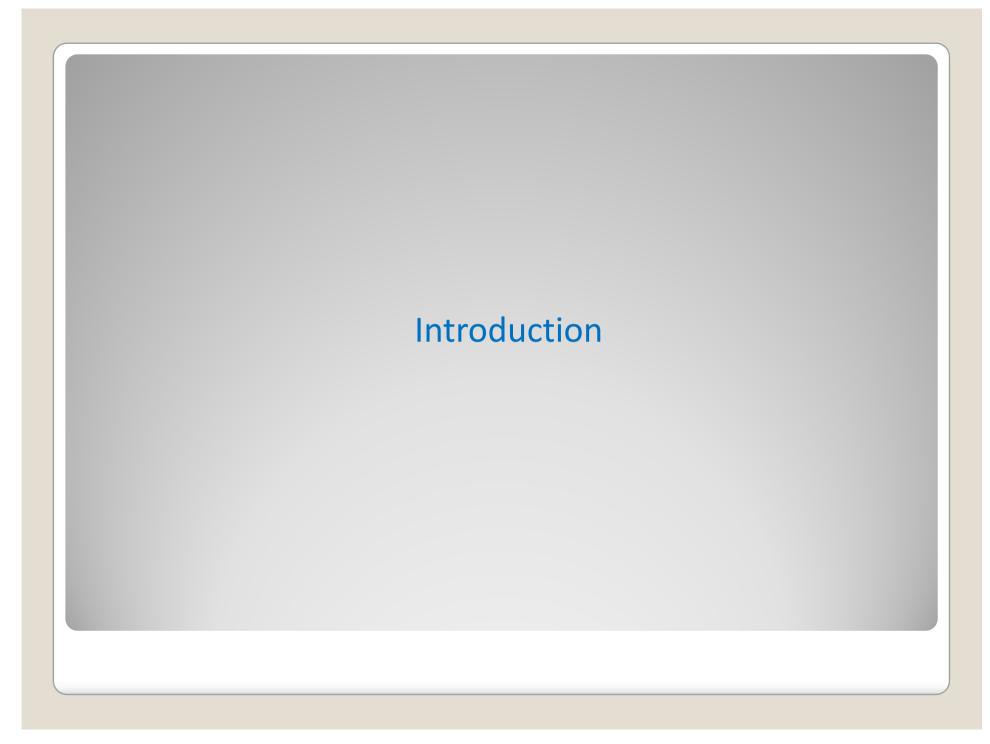
The Meaningful Use: **Key Features of the USA Policy**

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May 26th 2010

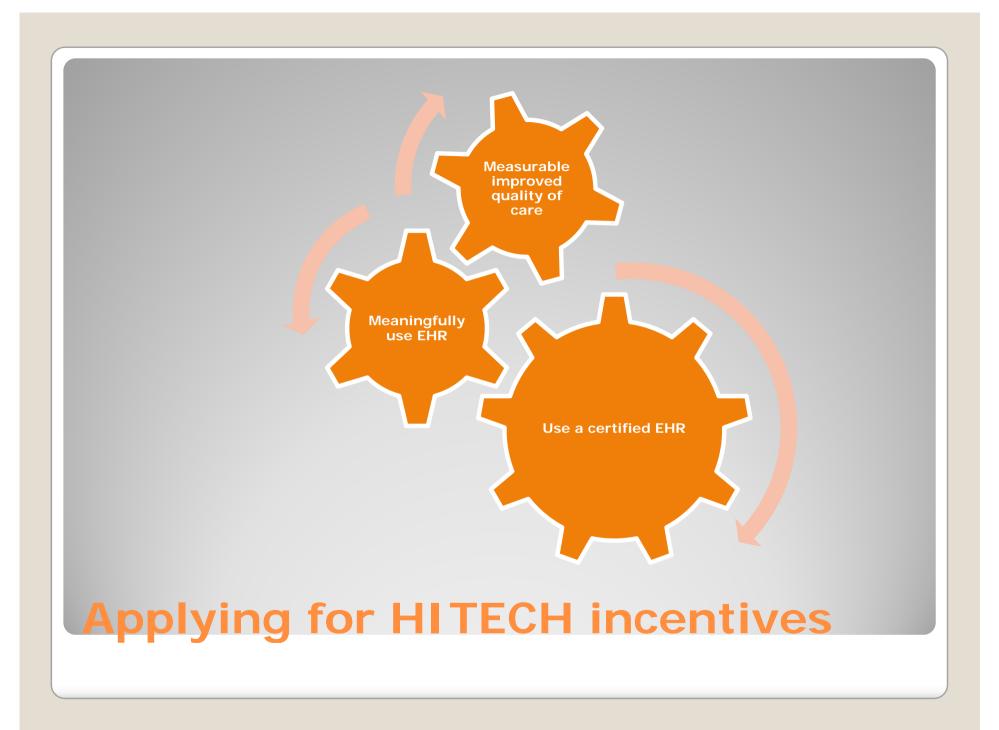
- Introduction
- Meaningful Use definitions
- Staged approach of Meaningful Use
- Stage 1 of Meaningful Use
- Financial Incentives & Penalties
- Meaningful Use Test Methods

Overview



- American Recovery and Reinvestment Act (ARRA) of 2009
- Health Information Technology for Economic and Clinical Health Act (HITECH Act)
- Allocate approx. \$19 billion to health information technology
- Office of the National Coordinator for Health Information Technology (ONC)
- Centers for Medicare and Medicaid Services (CMS)

Introduction





Wednesday, January 13, 2010

Part II

Department of Health and Human Services

Centers for Medicare & Medicaid Services

42 CFR Parts 412, et al. Medicare and Medicaid Programs; Electronic Health Record Incentive Program; Proposed Rule



Wednesday, January 13, 2010

Part III

Department of Health and Human Services

45 CFR Part 170
Health Information Technology: Initial Set of Standards, Implementation
Specifications, and Certification Criteria for Electronic Health Record Technology; Interim Final Rule

http://www.gpoaccess.gov/fr/

Source documents



- Use of <u>certified EHR technology</u> in a <u>meaningful manner</u>
- Certified EHR technology must be connected so electronic exchange of health information is possible to improve quality of care
- Provider submits to the Secretary information on <u>clinical</u> <u>quality measures</u> and such other measures selected by the Secretary

What is "meaningful use"?

A <u>complete EHR</u> or combination of <u>EHR modules</u>, each of which:

- Meets the requirements included in the definition of a qualified EHR
- Has been tested and certified in accordance with the certification program established with the ONC as having met all applicable certification criteria adopted by the Secretary

Certified EHR technology

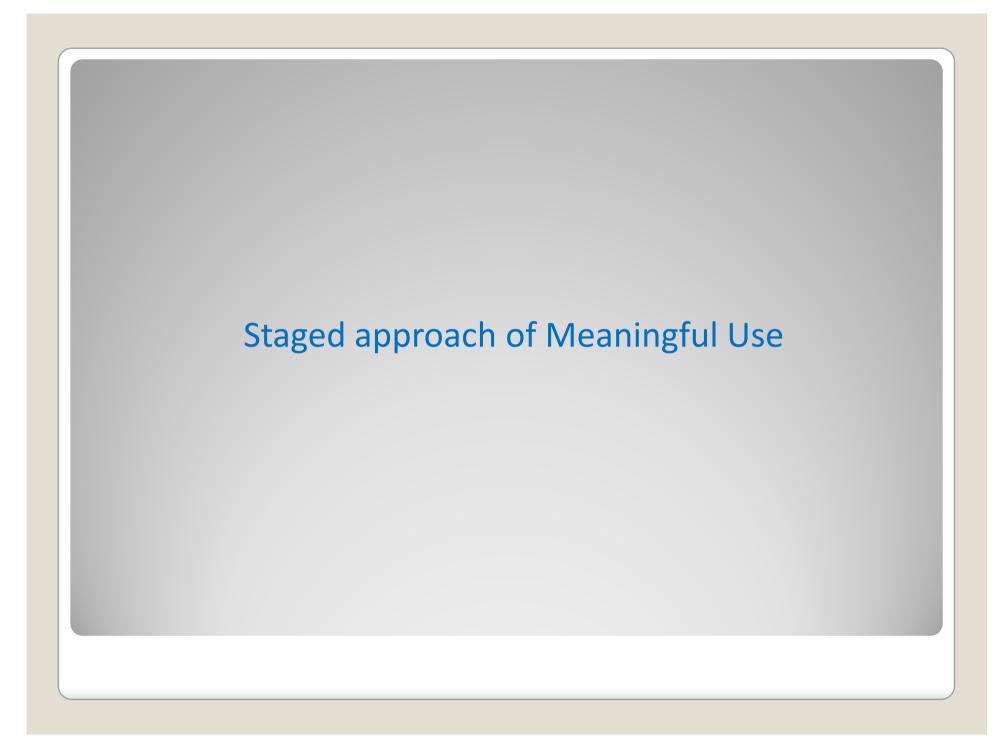
Electronic record of health-related information on an individual that:

- Includes patient demographic and clinical health information
- Has the capacity to:
 - Provide clinical decision support
 - Support physician order entry
 - Capture and query information relevant to health care quality
 - Exchange electronic health information with, and integrate such information from other sources

Qualified EHR

- Eligible professional (EP) or eligible hospital that...
- ...during a specified reporting period....
- ...demonstrates meaningful use of certified EHR technology

Who is a "meaningful user"?



2011

• Stage 1: Data capture and - sharing

2013

• Stage 2 : Advanced clinical processes

2015

• Stage 3 : Improved outcomes

Staged approach

- Focus on electronically capturing health information in a coded format
- Use that information to track key clinical conditions
- Communicating that information for care coordination purposes
- Implementing clinical decision support tools
- Reporting clinical quality measures and public health information

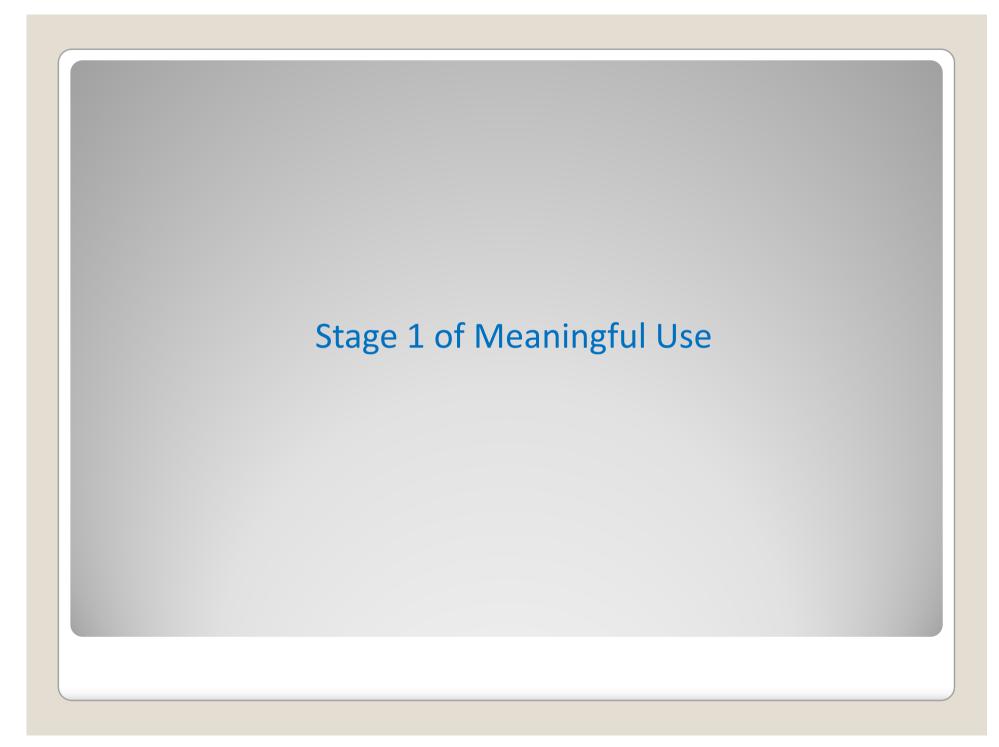
Stage 1

- Encourage the use of health IT for continuous quality improvement at the point of care
- Exchange of information in the most structured format possible
- Electronic transmission of diagnostic test results
- Apply criteria more broadly to inpatient and outpatient hospital settings

Stage 2

- Promoting improvements in quality, safety and efficiency
- Decision support for national high priority conditions
- Patient access to self management tools
- Access to comprehensive patient data
- Improving population health

Stage 3



- 5 health outcomes policy priorities
- Each of the priorities is mapped to care goals
- For each care goal meaningful use objectives and measures have been proposed
 - Eligible professionals
 - Eligible hospitals

Meaningful Use Matrix

- Improve the quality, safety, efficiency of health care, and reduce health disparities
- Engage patients and families in their health care
- Improve care coordination
- Improve population and public health
- Ensure adequate privacy and security protections for personal health information

Health Outcomes Policy Priorities

"Improve the quality, safety, efficiency of health care and reduce health disparities"

- Provide access to comprehensive patient health data for patient's health care team
- Use evidence-based order sets and CPOE
- Apply clinical decision support at the point of care
- Generate lists of patients who need care and use them to reach out to patients
- Report information for quality improvement and public reporting

Care goals for priority 1

"Engage patients and families in their health care"

 Provide patients and families with timely access to data, knowledge, and tools to make informed decisions and to manage their health

"Improve care coordination"

 Exchange meaningful clinical information among professional health care team

Care goals for priorities 2 & 3

"Improve population and public health"

Communicate with public health agencies

"Ensure adequate privacy and security protections for personal health information"

- Ensure privacy and security protections for confidential information through operating policies, procedures, and technologies and compliance with applicable law
- Provide transparency of data sharing to patient

Care goals for priorities 4 & 5

Overview of Stage 1 Objectives for Meaningful Use for **Eligible Professionals and Eligible Hospitals**

Use CPOE

 Implement drug-drug, drug-allergy, drug-formula checks

 Maintain an up-to-date problem list of current and active diagnoses based on ICD-9-CM or SNOMED CT®

Use CPOE

Used for at least 80% of all orders; 10% for hospitals

 Implement drug-drug, drug-allergy, drug-formula checks

Function is enabled

 Maintain an up-to-date problem list of current and active diagnoses based on ICD-9-CM or SNOMED CT®

At least 80% of all unique patients have at least one entry or indication of none recorded

Stage 1 Measures for Meaningful Use

- Maintain active medication list
- Maintain active medication allergy list
- Record demographics
- Record and chart changes in vital signs

Maintain active medication list

At least 80% of all unique patients have at least one entry or an indication of none

Maintain active medication allergy list

At least 80% of all unique patients have at least one entry or an indication of none

Record demographics

At least 80% of all unique patients have demographics recorded

Record and chart changes in vital signs

For at least 80% of all unique patients aged > 2 years, record blood pressure and BMI; additionally, plot growth chart for children 2 – 20 years

Stage 1 Measures for Meaningful Use

- Record smoking status for patients aged > 13 years
- Incorporate clinical lab-test results into EHR as structured data
- Generate lists of patients by specific conditions to use for quality improvement, reduction of disparities, and outreach

Record smoking status for patients aged > 13 years

At least 80% of all unique patients aged > 13 y have "smoking status" recorded

 Incorporate clinical lab-test results into EHR as structured data

At least 50% of all clinical lab tests results are incorporated

 Generate lists of patients by specific conditions to use for quality improvement, reduction of disparities, and outreach

Generate at least one report listing patients with a specific condition

Stage 1 Measures for Meaningful Use

 Report ambulatory quality measures to CMS or the States

 Implement 5 clinical decision support rules relevant to specialty or high clinical priority, including diagnostic test ordering, along with the ability to track compliance with those rules

 Report ambulatory quality measures to CMS or the States

For 2011, through attestation

 Implement 5 clinical decision support rules relevant to specialty or high clinical priority, including diagnostic test ordering, along with the ability to track compliance with those rules

Implement 5 clinical decision support rules

Stage 1 Measures for Meaningful Use

 Check insurance eligibility electronically from public and private payers

Submit claims electronically to public and private payers

 Check insurance eligibility electronically from public and private payers

Checked for at least 80% of all unique patients

Submit claims electronically to public and private payers

At least 80% of all claims are filed electronically

Stage 1 Measures for Meaningful Use

 Provide patients with an electronic copy of their health information upon request

 Capability to electronically exchange key clinical information among providers of care and patientauthorized entities

 Provide patients with an electronic copy of their health information upon request

At least 80% of all patients who request an electronic copy of their health information are provided it within 48 hours

 Capability to electronically exchange key clinical information among providers of care and patientauthorized entities

Perform at least one test of certified EHR technology's capacity to electronically exchange key clinical information

Stage 1 Measures for Meaningful Use

 Perform medication reconciliation at relevant encounters and each transition of care

 Provide summary care record for each transition of care and referral

 Perform medication reconciliation at relevant encounters and each transition of care

Performed for at least 80% of relevant encounters & transitions of care

 Provide summary care record for each transition of care and referral

Provided for at least 80% of transitions of care & referrals

- Capability to submit electronic data to immunization registries and actual submission where required and accepted
- Capability to provide electronic syndromic surveillance data to public health agencies and actual transmission according to applicable law and practice

Stage 1 Objectives for Meaningful Use

 Capability to submit electronic data to immunization registries and actual submission where required and accepted

Performed at least one test of certified EHR technology's capacity

 Capability to provide electronic syndromic surveillance data to public health agencies and actual transmission according to applicable law and practice

Performed at least one test of certified EHR technology's capacity

 Protect electronic health information created or maintained by the certified EHR technology through the implementation of appropriate technical capabilities

Stage 1 Objectives for Meaningful Use

 Protect electronic health information created or maintained by the certified EHR technology through the implementation of appropriate technical capabilities

Conduct or review a security risk analysis and implement security updates as necessary

Overview of Stage 1 Objectives for Meaningful Use for **Eligible Professionals only**

Generate and transmit permissible prescriptions electronically

 Send reminders to patients per patient preference for preventive/follow-up care

Stage 1 Objectives for Meaningful Use

Generate and transmit permissible prescriptions electronically

At least 75% is transmitted using certified EHR technology

 Send reminders to patients per patient preference for preventive/follow-up care

Reminder sent to at least 50% of all unique patients seen by the EP that are aged > 50 years

 Provide patients with timely electronic access to their health information within 96 hours of information being available to the EP

Provide clinical summaries for patients for each office visit

Stage 1 Objectives for Meaningful Use

 Provide patients with timely electronic access to their health information within 96 hours of information being available to the EP

At least 10% of all unique patients seen by the EP are provided timely electronic access to their health information

Provide clinical summaries for patients for each office visit

Clinical summaries are provided for at least 80% of all office visits

Overview of Stage 1 Objectives for Meaningful Use for **Eligible Hospitals only**

- Provide patients with an electronic copy of their discharge instructions and procedures at time of discharge, upon request
- Capability to provide electronic submission of reportable lab results, as required by state or local law, to public health agencies and actual submission where it can be received

Stage 1 Objectives for Meaningful Use

 Provide patients with an electronic copy of their discharge instructions and procedures at time of discharge, upon request

At least 80% are provided with this upon request

 Capability to provide electronic submission of reportable lab results, as required by state or local law, to public health agencies and actual submission where it can be received

Perfomed at least one test of certified EHR technology's capacity

- Eligible professionals
 - 25 Objectives & Measures (8 require 'yes/no' and 17 require calculation)
- Eligible hospitals
 - 23 Objectives & Measures (10 require 'yes/no' and 13 require calculation)

Summary of Stage 1 Criteria for Meaningful Use



- 90 Clinical Quality Measures
- Two sets
 - Core Set
 - Tobacco use
 - Blood pressure measurement
 - Drugs to be avoided in the elderly
 - Specialty Set

- 90 Clinical Quality Measures
- Two sets
 - Core Set

"Percentage of patients aged 18 or older who were queried about tobacco use one or more times within 24 months"

- Tobacco use
- Blood pressure measurement
- Drugs to be avoided in the elderly
- Specialty Set

- 90 Clinical Quality Measures
- Two sets
 - Core Set
 - Tobacco use

"Percentage of patient visits with blood pressure measurement recorded among all patient visits for patients aged > 18 years with diagnosed hypertension"

- Blood pressure measurement
- Drugs to be avoided in the elderly
- Specialty Set

- 90 Clinical Quality Measures
- Two sets
 - Core Set
 - Tobacco use
- "Percentage of patient aged 65 years and older who received at least one drug to be avoided in the elderly in the measurement year [+two different drugs....]"
- Blood pressure measurement
- Drugs to be avoided in the elderly
- Specialty Set

- 90 Clinical Quality Measures
- Two sets
 - Core Set
 - Tobacco use
 - Blood pressure measurement
 - Drugs to be avoided in the elderly

Specialty Set

Measure Number	Clinical Quality Measure Title & Description	Clinical Quality Measure Developer & Contact Information	Electronic Measure Specifications Information	Core/Specialty Measure Group
PQRI 1 Title: Diabetes Mellitus: Hemoglobin A1c Poor Control in Diabetes Mellitus NQF 0059 Description: Percentage of patients aged 18 through 75 years with diabetes mellitus who had most recent hemoglobin A1c greater than 9.0%		National Committee for Quality Assurance (NCQA) Contact Information: www.ncqa.org	http://www.cms.hhs.gov/ PQRI/20_AlternativeRep ortingMechanisms.asp#T opOfPage	Endocrinology, Primary Care
PQRI 2 NQF 0064	Title: Diabetes Mellitus: Low Density Lipoprotein (LDL-C) Control in Diabetes Mellitus Description: Percentage of patients aged 18 through 75 years with diabetes mellitus who had most recent LDL-C level in control (less than 100 mg/dl)	NCQA Contact Information: www.ncqa.org http://www.cms.hhs.gov/ PQRI/20 AlternativeRep ortingMechanisms.asp#T opOfPage		Endocrinology
PQRI 3 NQF 0061	Title: Diabetes Mellitus: High Blood Pressure Control in Diabetes Mellitus Description: Percentage of patients aged 18 through 75 years with diabetes mellitus who had most recent blood pressure in control (less than 140/80 mmHg)	NCQA Contact Information: www.ncqa.org	http://www.cms.hhs.gov/ PQRI/20_AlternativeRep ortingMechanisms.asp#T opOfPage	Endocrinology
PQRI 5 NQF 0081	Title: Heart Failure: Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD) Description: Percentage of patients aged 18 years and older with a diagnosis of heart failure and LVSD who were prescribed ACE inhibitor or ARB therapy	American Medical Association- sponsored Physician Consortium for Performance Improvement (AMA-PCPI) Contact Information: cpe@ama-assn.org	http://www.cms.hhs.gov/ PQRI/20 AlternativeRep ortingMechanisms.asp#T opOfPage	Cardiology
PQRI 7 NQF 0070	Title: Coronary Artery Disease (CAD): Beta-Blocker Therapy for CAD Patients with Prior Myocardial Infarction (MI) Description: Percentage of patients aged 18 years and older with a diagnosis of CAD and prior MI who were prescribed beta- blocker therapy	AMA-PCPI Contact Information: cpe@ama-assn.org	http://www.cms.hhs.gov/ PQRI/20_AlternativeRep ortingMechanisms.asp#T opOfPage	Cardiology
PQRI 110 NQF 0041	Title: Preventive Care and Screening: Influenza Immunization for Patients ≥ 50 Years Old Description: Percentage of patients aged 50 years and older who received an influenza immunization during the flu season (September through February)	AMA-PCPI Contact Information: cpe@ama-assn.org	http://www.cms.hhs.gov/ PQRI/20_AlternativeRep ortingMechanisms.asp#T opOfPage	Primary Care

Extract from Clinical Quality Measures for EPs

- Eligible hospitals must report summary data on 35 quality measures for applicable cases
- Example:

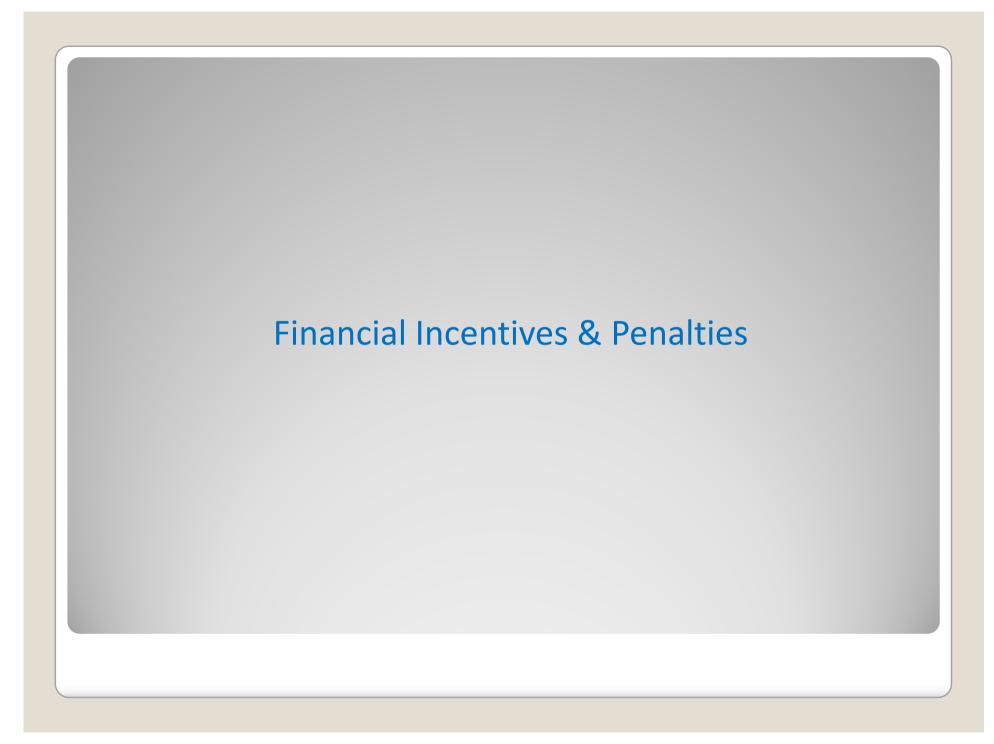
ED-1	Title: Emergency Department Throughput—admitted patients. Median time from ED arrival to ED departure for admitted patients.
NQF 0495	Description: Median time from emergency department arrival to time of departure from the emergency room for patients admitted to the facility from the emergency department.

RHQDAPU AMI-2	Title: Aspirin Prescribed at Discharge.
NQF 0142	Description: Acute myocardial infarction (AMI) patients who are prescribed aspirin
antisprintial (in Previously 1955) I introduction than the particle of space and space according to	at hospital discharge.
	Measure Developer: CMS/OFMQ.

Clinical Quality Measures for Eligible Hospitals

- In 2011 providers required to submit quality measures by attestation
- From 2012 on quality measures will be submitted electronically
- EPs: required to submit clinical quality measures on the core set and on one specialty subset
- Hospitals: report on summary quality measures for all applicable cases

Clinical Quality Measures Overview



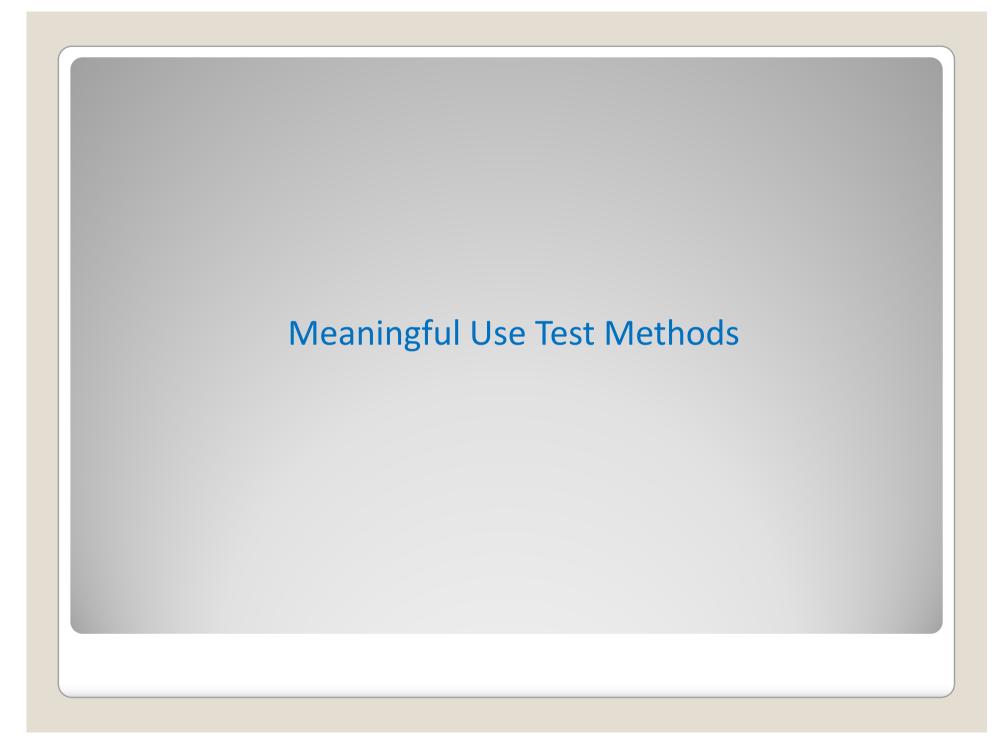
2011	2012	2013	2014	2015	2016+	Max
Stage 1 \$18k	Stage 1 \$12k	Stage 2 \$8k	Stage 2 \$4k	Stage 3 \$2k	Stage 3 \$0k	\$44k
	Stage 1 \$18k	Stage 1 \$12k	Stage 2 \$8k	Stage 3 \$4k	Stage 3 \$2k	\$44k
		Stage 1 \$15k	Stage 2 \$12k	Stage 3 \$8k	Stage 3 \$4k	\$39k
			Stage 1 \$12k	Stage 3 \$8k	Stage 3 \$4k	\$24k
				< Stage 3 Penalty	< Stage 3 Penalty	

Source: Practice Fusion

Incentives for EPs / Medicare

- Payments for Medicaid Eligible Professionals: up to \$ 63750
- Eligible hospitals (e.g. Medicare):
 - Payment = initial amount x medicare share x transition factor
 - Initial amount: \$ 2 million + [\$ 200 per discharge for the 1150th –
 23000th discharge]

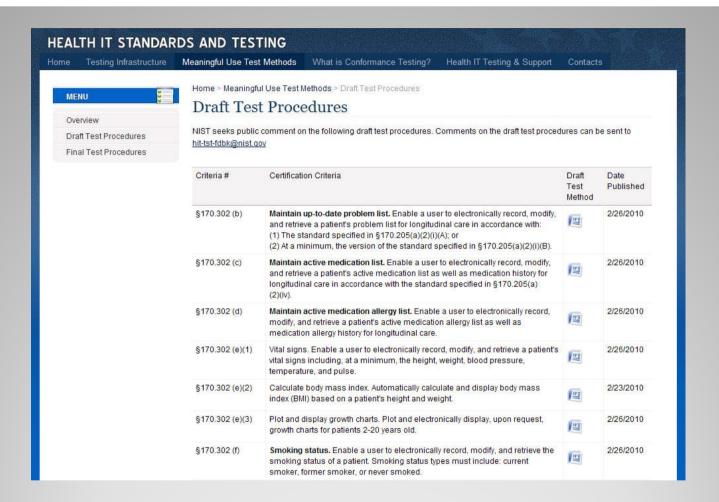
Incentives





http://healthcare.nist.gov

NIST Health IT Standards and Testing



NIST Draft Test Procedures

- Certification criteria
- Informative Test Description
- Referenced standards
- Normative test procedures
 - Required vendor information
 - Required test procedure
 - Inspection test guide
- Example test data
- Conformance test tools

Example

Test Procedure for §170.302 (f) Smoking Status

This document describes the draft test procedure for evaluating conformance of complete EHRs or EHR modules to the certification criteria defined in 45 CFR Part 170 Subpart C of the Interim. Final Rule (IFR) as published in the Federal Register on January 13, 2010. The document is organized by test procedure and derived test requirements with traceability to the normative certification criteria as described in the Test Procedure Overview document located at http://healthcare.nist.gov. These test procedures will be updated to reflect the certification criteria defined in the ONC Final Rule.

CERTIFICATION CRITERIA

§170.302 (f) <u>Smoking Status</u>. Enable a user to electronically record, modify, and retrieve the smoking status of a patient. Smoking status types must include: current smoker, former smoker, or never smoked.

INFORMATIVE TEST DESCRIPTION

This section provides an informative description of how the test procedure is organized and conducted. It is not intended to provide normative statements of the certification requirements.

This test evaluates the capability for a Complete EHR or combination of EHR Modules to enable a user to electronically record, modify, and retrieve the smoking status of a patient. Smoking status types must include: current smoker, former smoker, or never smoked.

This test procedure is organized into three sections:

- · Record evaluates the capability to enter patient smoking status data
 - The Tester enters the NIST-supplied patient smoking status data
- Modify evaluates the capability to edit patient smoking status data that have been previously
 entered into the EHR
 - The Tester displays the patient smoking status data entered during the Record Patient Smoking Status test
 - The Tester edits the previously entered patient smoking status data using NIST-supplied patient smoking status data
- <u>Retrieve</u> evaluates the capability to display and view the patient smoking status data which have been previously entered into the EHR during the test
 - The Tester displays the patient smoking status data entered during the test
 - The Tester validates that the displayed patient smoking status data are accurate and complete

REFERENCED STANDARDS

None

Office of the National Coordinator for Health IT

http://www.hhs.gov/healthit

Centers for Medicare & Medicaid Services (CMS)

http://www.cms.gov

NIST Health IT Standards and Testing

http://healthcare.nist.gov

Links

