



Department of Health & Human Services
Office of the National Coordinator for
Health Information Technology

Overview of Meaningful Use and ONC Programs

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Quality Landscape

- CDC- 100,000 Americans die from hospital-acquired infections 2009
- In 2000, the Institute of Medicine estimated that up to 98,000 Americans die each year from preventable medical errors.
 - Medical errors are killing more people per year, in the U.S., than breast cancer, AIDS, or motor vehicle accidents.
 - 80 percent of errors were initiated by miscommunication.

1 Kohn, L., J. Corrigan, and M. Donaldson. To Err Is Human: Building a Safer Health System. Committee of Health Care in America, Institute of Medicine. 2000.

2 Institute of Medicine and Centers for Disease Control and Prevention. National Center for Health Statistics: Preliminary Data for 1998 and 1999. 2000.

3 Smith, Peter, et. al. "Missing Clinical Information During Primary Care Visits," The Journal of the American Medical Association. February 2005.

4&5 National Coalition on Health Care, **Facts About Health Care** - <http://www.nchc.org/facts/cost.shtml>

Core Measures Getting Worse

Topic	Measure	Blacks	Asians	AI/ANs	Hispanics
Cancer	Adults age 50 and over who report they ever received a colonoscopy, sigmoidoscopy, proctoscopy, or fecal occult blood test	*	*	*	*
	Cancer deaths per 100,000 population per year for colorectal cancer	*			*
Heart disease	Hospital patients with heart failure who received recommended hospital care			*	*
Respiratory diseases	Adults age 65 and over who ever received pneumococcal vaccination		*		*
	Hospital patients with pneumonia who received recommended hospital care	*	*	*	*

Background and History of ONC

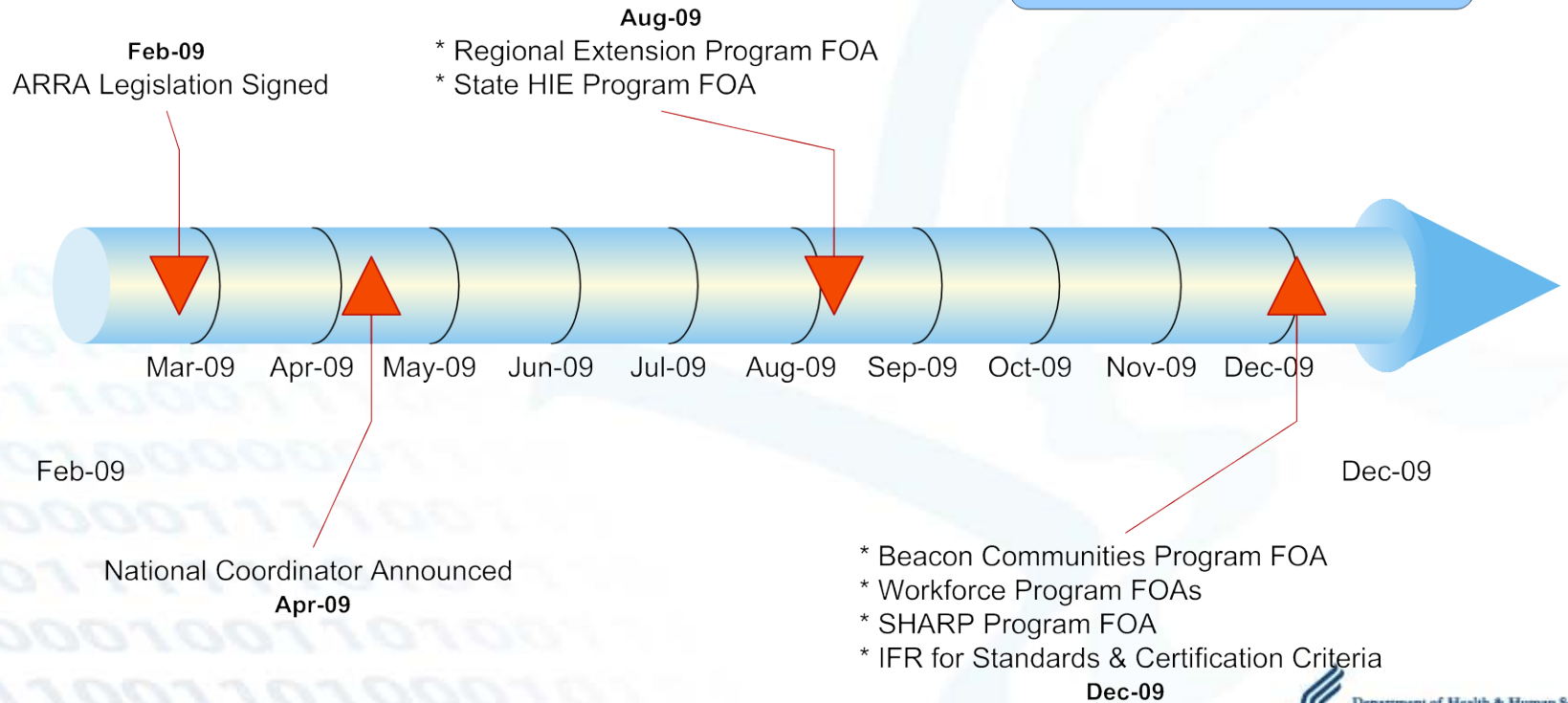
- Initially established in 2004 by Executive Order 13335
- Codified in law in February 2009 under the Health Information Technology for Economic and Clinical Health Act (HITECH Act) provisions of the American Reinvestment and Recovery Act of 2009 (ARRA)
- ONC's purpose is the development of a nationwide health IT infrastructure that allows for the electronic use and exchange of information to:
 - Increase transparency and efficiency in health care
 - Improve individual and population health outcomes
 - Improve the ability to study and improve care delivery

HITECH Vision

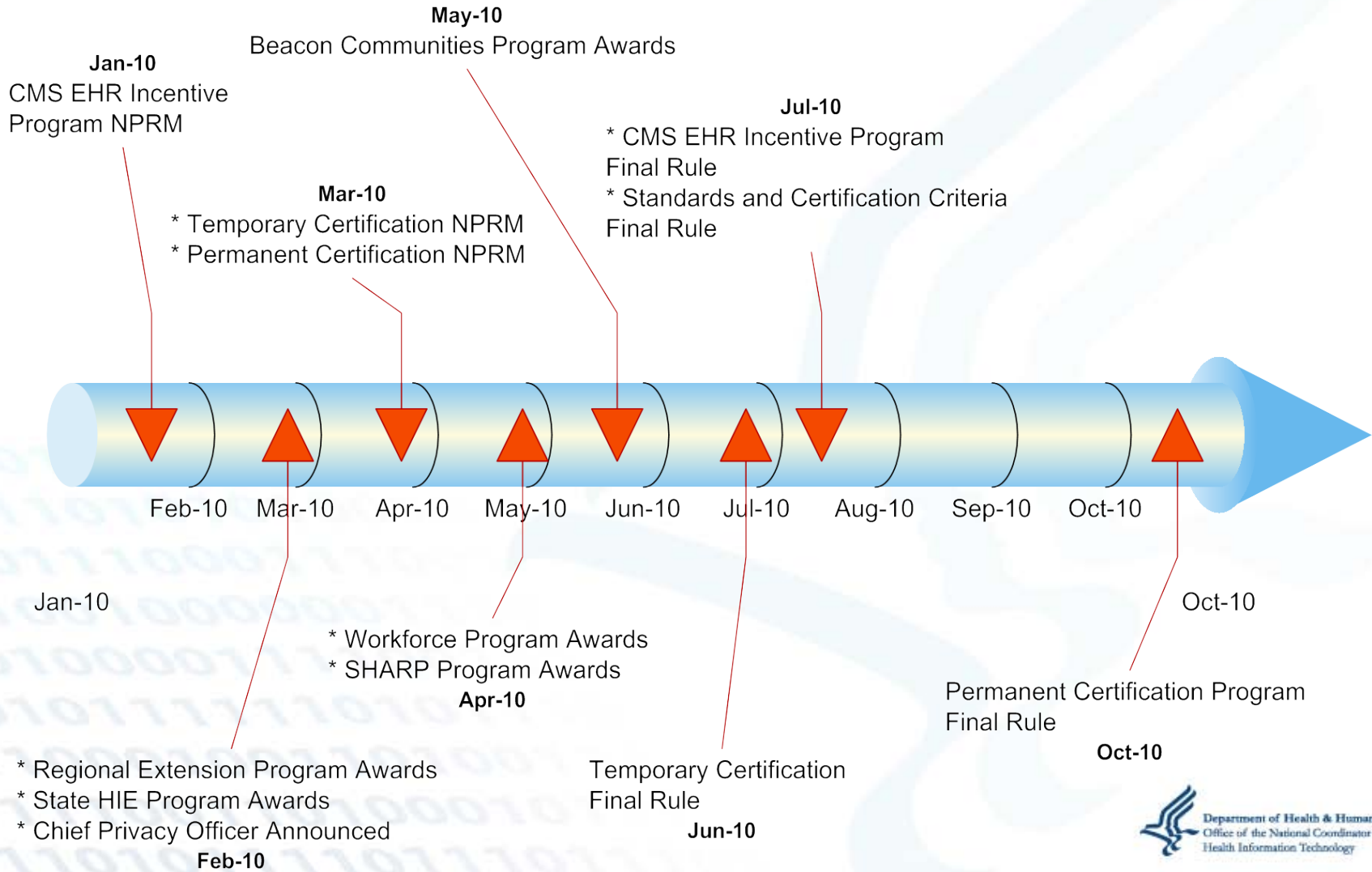
- Furnish tools to begin a major transformation in American health care
- Provide best opportunity for each patient to receive optimal care through nationwide health information exchange
- Address the most pressing obstacles to adoption and meaningful use of electronic health records (EHR) through programs and regulations

HITECH Timeline

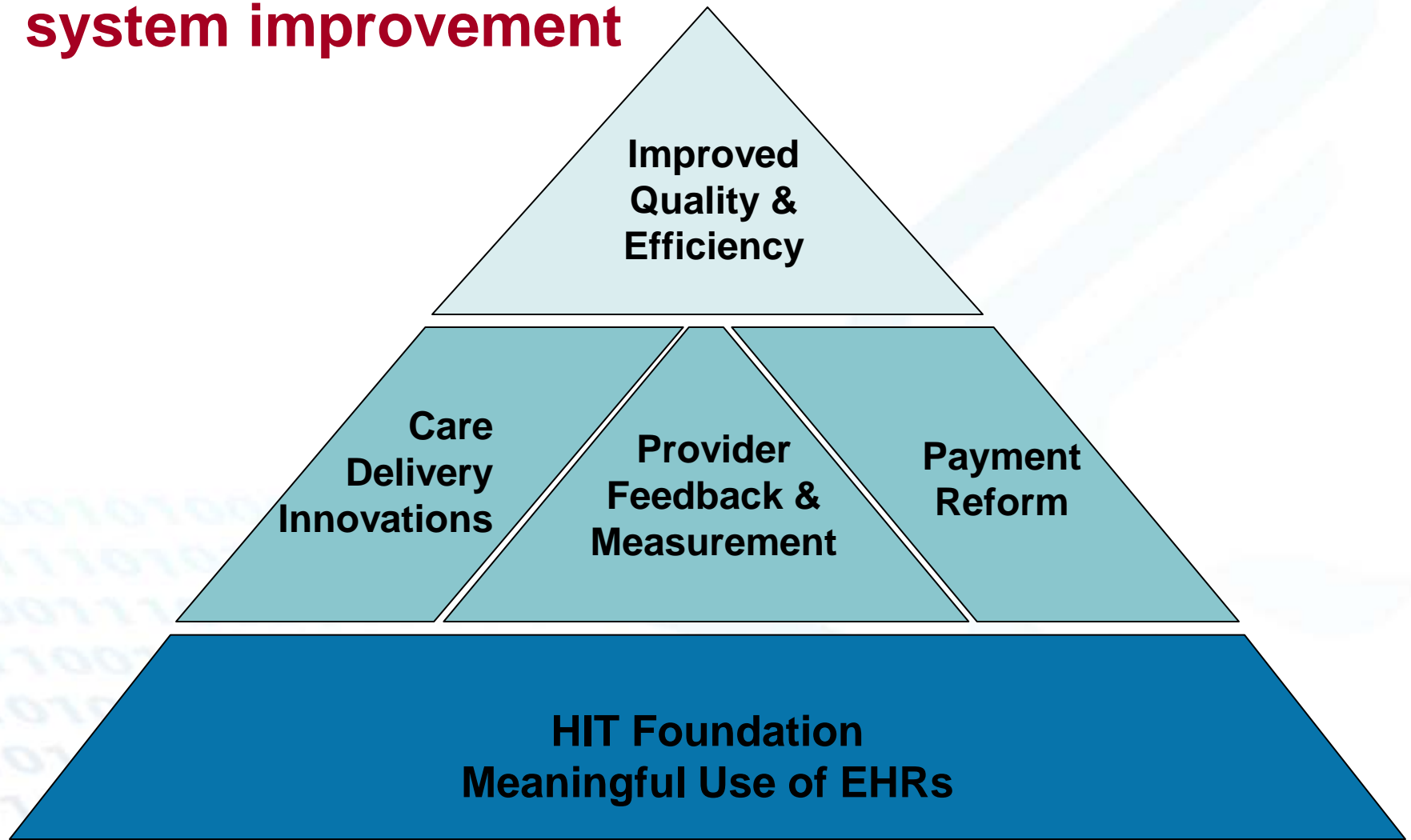
HITECH Program Funding Totals:
- \$693m Regional Extension Program
- \$564m State HIE Program
- \$235m Beacon Communities Program
- \$118m Workforce Program
- \$60m SHARP Program
- \$330m Other



HITECH Timeline (continued)



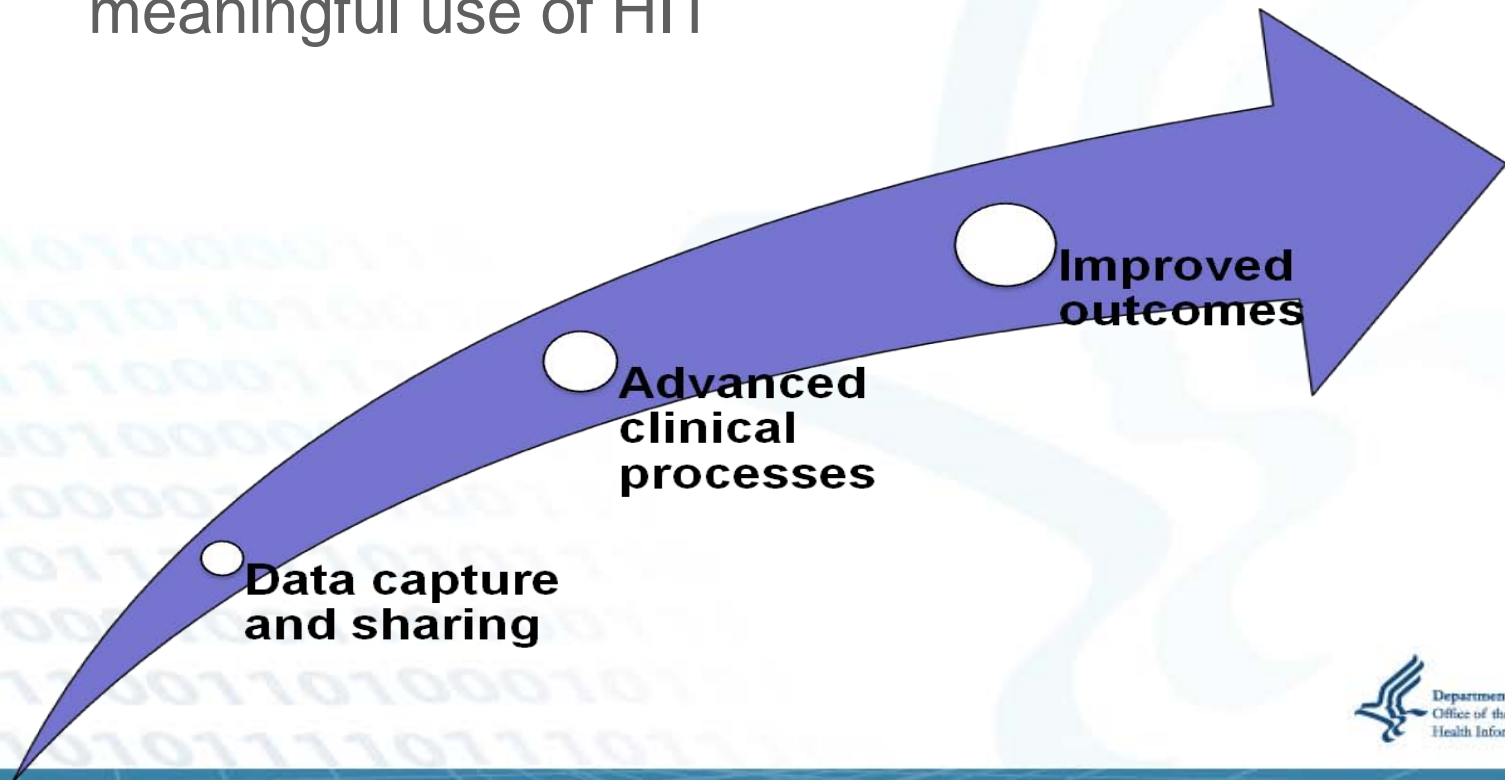
HIT as a tool and foundation for delivery system improvement



Making Meaning of “Meaningful Use”

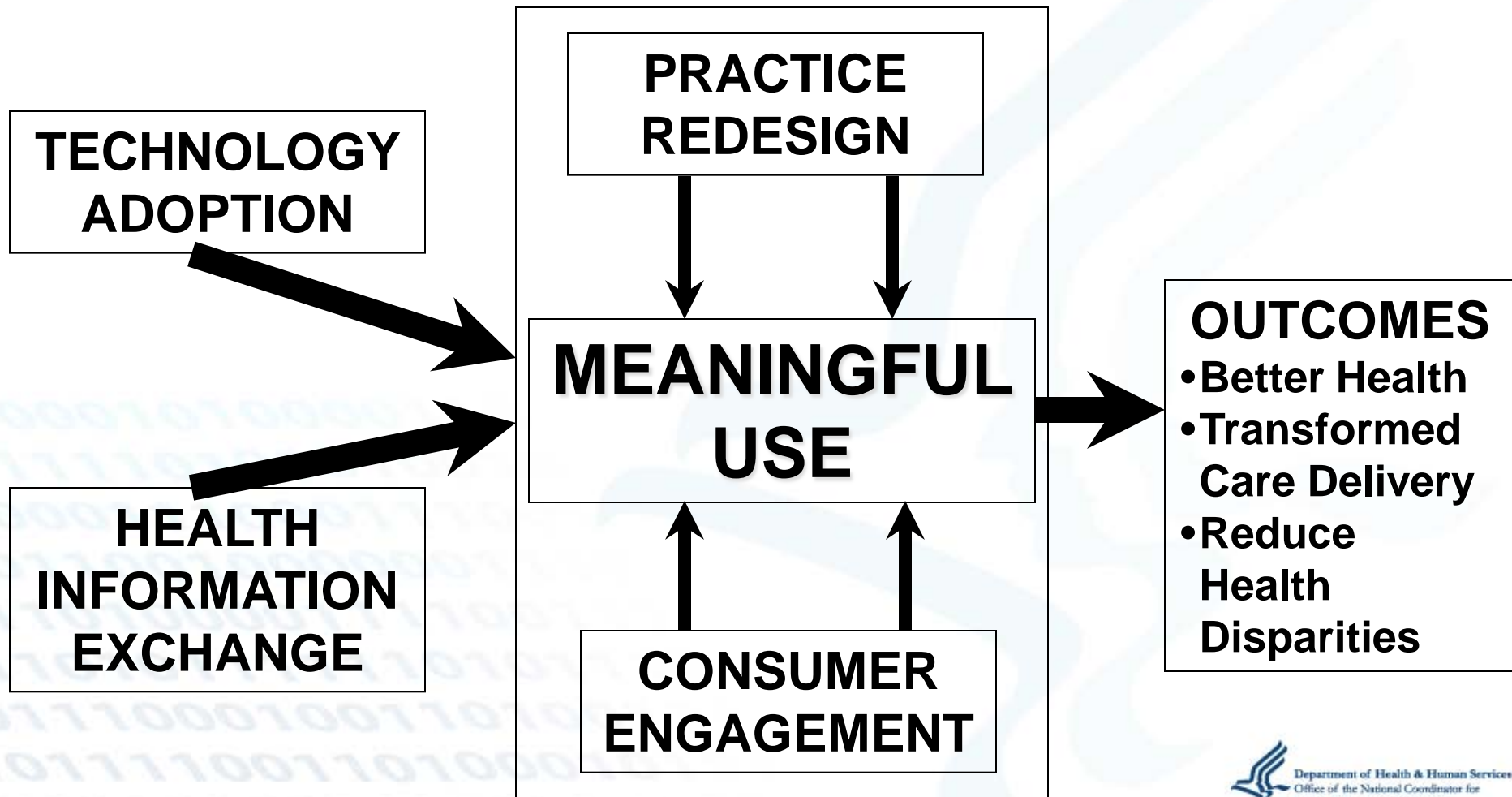
- **HITECH goals**

- Not about technology
- Improving health and transforming health care through meaningful use of HIT



Getting to Meaningful Use...

...To Improve Health & Health Care



A Seasonal View of Meaningful Use



Snow



Meaningful Use of Snow

Framework: HIT Policy Committee's Recommended Five Priorities

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

HIT Policy Committee Hearing on Health Disparities- June 9, 2010

1. General Themes

- HIT implementation should not exacerbate disparities
- Broad use of technology for patient engagement (e.g.-mobil technologies)
- Underserved is not one group
- Engage the community

Health Disparities Hearing

2. Suggestions from testimony for future stages of Meaningful Use:

- Report & track measures stratified by disparities
- IOM 2009 report on race, ethnicity, language (REL): standardization and granularity
- Patient materials that are appropriate to language and culture

Meaningful Use

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Key Themes Guiding Changes from NPRM to Final Rule

- **Flexibility**
 - **Simplicity**
 - **Consistency**
 - **Quality**
- Moved away from all-or-nothing approach
 - **Feasibility: Easier to calculate & report HIT functionality measures (electr. denominator calculations)**
 - **Medicare-Medicaid; all start calendar year 2011**
 - **MU principles of driving high-quality care intact**

WHO IS A MEDICARE ELIGIBLE PROVIDER?

Eligible Providers in Medicare FFS

Eligible Professionals (EPs)

Doctor of Medicine or Osteopathy

Doctor of Dental Surgery or Dental Medicine

Doctor of Podiatric Medicine

Doctor of Optometry

Chiropractor

Eligible Hospitals

Acute Care Hospitals*

Critical Access Hospitals (CAHs)

*Subsection (d) hospitals that are paid under the PPS and are located in the 50 States or Washington, DC (including Maryland)

WHO IS A MEDICAID ELIGIBLE PROVIDER?

Eligible Providers in Medicaid

Eligible Professionals (EPs)

Physicians

Nurse Practitioners (NPs)

Certified Nurse Midwives (CNMs)

Dentists

Physician Assistants (PAs) working in a Federally Qualified Health Center (FQHC) or rural health clinic (RHC) that is so led by a PA

Eligible Hospitals

Acute Care Hospitals (now including CAHs)

Children's Hospitals

ADOPT / IMPLEMENT / UPGRADE (A/I/U)

- **Adopted – Acquired and Installed**
 - Ex: Evidence of installation prior to incentive
- **Implemented – Commenced Utilization of**
 - Ex: Staff training, data entry of patient demographic information into EHR
- **Upgraded – Expanded**
 - Upgraded to certified EHR technology or added new functionality to meet the definition of certified EHR technology

Meaningful Use: Changes from the NPRM to the Final Rule

NPRM	Final Rule
Meet all MU reporting objectives	Must meet “core set”/can defer 5 from optional “menu set”
25 measures for EPs/23 measures for eligible hospitals	25 measures for EPs/24 for eligible hospitals
Measure thresholds range from 10% to 80% of patients or orders (most at higher range)	Measure thresholds range from 10% to 80% of patients or orders (most at lower to middle range)
Denominators – To calculate the threshold, some measures required manual chart review	Denominators – No measures require manual chart review to calculate threshold
Administrative transactions (claims and eligibility) included	Administrative transactions removed
Measures for Patient-Specific Education Resources and Advanced Directives discussed but not proposed	Measures for Patient-Specific Education Resources and Advanced Directives (for hospitals) included

Notable Differences Between the Medicare & Medicaid EHR Programs

Medicare	Medicaid
Federal Government will implement (will be an option nationally)	Voluntary for States to implement (may not be an option in every State)
Payment reductions begin in 2015 for providers that do not demonstrate Meaningful Use	No Medicaid payment reductions
Must demonstrate MU in Year 1	A/I/U option for 1st participation year
Maximum incentive is \$44,000 for EPs (bonus for EPs in HPSAs)	Maximum incentive is \$63,750 for EPs
MU definition is common for Medicare	States can adopt certain additional requirements for MU
Last year a provider may initiate program is 2014; Last year to register is 2016; Payment adjustments begin in 2015	Last year a provider may initiate program is 2016; Last year to register is 2016
Only physicians, subsection (d) hospitals and CAHs	5 types of EPs, acute care hospitals (including CAHs) and children's hospitals

MEANINGFUL USE – STAGE 1 CORE SET

Health Outcomes Policy Priority	Stage 1 Objective	Stage 1 Measure
Improving quality, safety, efficiency, and reducing health disparities	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	More than 30% of unique patients with at least one medication in their medication list seen by the EP or admitted to the eligible hospital or CAH have at least one medication entered using CPOE
	Implement drug-drug and drug-allergy interaction checks	The EP/eligible hospital/CAH has enabled this functionality for the entire EHR reporting period
	EP Only: Generate and transmit permissible prescriptions electronically (eRx)	More than 40% of all permissible prescriptions written by the EP are transmitted electronically using certified EHR technology
	Record demographics: preferred language, gender, race, ethnicity, date of birth, and date and preliminary cause of death in the event of mortality in the eligible hospital or CAH	More than 50% of all unique patients seen by the EP or admitted to the eligible hospital or CAH have demographics as recorded structured data
	Maintain up-to-date problem list of current and active diagnoses	More than 80% of all unique patients seen by the EP or admitted to the eligible hospital or CAH have at least one entry or an indication that no problems are known for the patient recorded as structured data

MEANINGFUL USE – STAGE 1 CORE SET (CONT'D)

Health Outcomes Policy Priority	Stage 1 Objective	Stage 1 Measure
Improving quality, safety, efficiency, and reducing health disparities	Maintain active medication list	More than 80% of all unique patients seen by the EP or admitted to the eligible hospital or CAH have at least one entry (or an indication that the patient is not currently prescribed any medication) recorded as structured data
	Maintain active medication allergy list	More than 80% of all unique patients seen by the EP or admitted to the eligible hospital or CAH have at least one entry (or an indication that the patient has no known medication allergies) recorded as structured data
	Record and chart vital signs: height, weight, blood pressure, calculate and display BMI, plot and display growth charts for children 2-20 years, including BMI	For more than 50% of all unique patients age 2 and over seen by the EP or admitted to the eligible hospital or CAH, height, weight, and blood pressure are recorded as structured data
	Record smoking status for patients 13 years old or older	More than 50% of all unique patients 13 years or older seen by the EP or admitted to the eligible hospital or CAH have smoking status recorded as structured data
	Implement one clinical decision support rule and the ability to track compliance with the rule	Implement one clinical decision support rule
	Report clinical quality measures to CMS or the States	For 2011, provide aggregate numerator, denominator, and exclusions through attestation; For 2012, electronically submit clinical quality measures

MEANINGFUL USE – STAGE 1 CORE SET (CONT'D)

Health Outcomes Policy Priority	Stage 1 Objective	Stage 1 Measure
Engage patients and families in their healthcare	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	More than 50% of all unique patients of the EP, eligible hospital or CAH who request an electronic copy of their health information are provided it within 3 business days
	Hospitals Only: Provide patients with an electronic copy of their discharge instructions at time of discharge, upon request	More than 50% of all patients who are discharged from an eligible hospital or CAH who request an electronic copy of their discharge instructions are provided it
	EPs Only: Provide clinical summaries for each office visit	Clinical summaries provided to patients for more than 50% of all office visits within 3 business days
Improve care coordination	Capability to exchange key clinical information (ex: problem list, medication list, medication allergies, diagnostic test results), among providers of care and patient authorized entities electronically	Performed at least one test of the certified EHR technology's capacity to electronically exchange key clinical information
Ensure adequate privacy and security protections for personal health information	Protect electronic health information created or maintained by certified EHR technology through the implementation of appropriate technical capabilities	Conduct or review a security risk analysis per 45 CFR 164.308(a)(1) and implement updates as necessary and correct identified security deficiencies as part of the EP's, eligible hospital's or CAH's risk management process

MEANINGFUL USE – STAGE 1 MENU SET

Health Outcomes Policy Priority	Stage 1 Objective	Stage 1 Measure
Improving quality, safety, efficiency, and reducing health disparities	Implement drug-formulary checks	The EP/eligible hospital/CAH has enabled this functionality and has access to at least one internal or external drug formulary for the entire EHR reporting period
	Hospitals Only: Record advance directives for patients 65 years old or older	More than 50% of all unique patients 65 years old or older admitted to the eligible hospital or CAH have an indication of an advance directive status recorded
	Incorporate clinical lab-test results into certified EHR technology as structured data	More than 40% of all clinical lab test results ordered by the EP, or an authorized provider of the eligible hospital or CAH, for patients admitted during the EHR reporting period whose results are either in a positive/negative or numerical format are incorporated in certified EHR technology as structured data
	Generate lists of patients by specific conditions to use for quality improvement, reduction of disparities, research or outreach	Generate at least one report listing patients of the EP, eligible hospital or CAH with a specific condition
	EPs Only: Send reminders to patients per patient preference for preventive/follow-up care	More than 20% of all unique patients 65 years or older or 5 years old or younger were sent an appropriate reminder during the EHR reporting period

MEANINGFUL USE – STAGE 1 MENU SET (CONT'D)

Health Outcomes Policy Priority	Stage 1 Objective	Stage 1 Measure
Engage patients and families in their health care	EPs Only: Provide patients with timely electronic access to their health information (including lab results, problem list, medication lists, medication allergies) within 4 business days of the information being available to the EP	More than 10% of all unique patients seen by the EP are provided timely (available to the patient within 4 business days of being updated in the certified EHR technology) electronic access to their health information subject to the EP's discretion to withhold certain information
	Use certified EHR technology to identify patient-specific education resources and provide those resources to the patient, if appropriate	More than 10% of all unique patients seen by the EP or admitted to the eligible hospital or CAH are provided patient-specific education resources
Improve care coordination	The EP, 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	The EP, eligible hospital or CAH performs medication reconciliation for more than 50% of transitions of care in which the patient is transitioned into the care of the EP or admitted to the eligible hospital or CAH
	The EP, eligible hospital or CAH who receives a patient from another setting of care or provider of care or refers their patient to another provider of care should provide a summary of care record for each transition of care or referral	The EP, eligible hospital or CAH who transitions or refers their patient to another setting of care or provider of care provides a summary of care record for more than 50% of transitions of care and referrals

MEANINGFUL USE – STAGE 1 MENU SET (CONT'D)

Health Outcomes Policy Priority	Stage 1 Objective	Stage 1 Measure
<p>Improve population and public health¹</p>	<p>Capability to submit electronic data to immunization registries or Immunization Information Systems and actual submission in accordance with applicable law and practice</p>	<p>Performed at least one test of the certified EHR technology's capacity to submit electronic data to immunization registries and follow-up submission if the test is successful (unless none of the immunization registries to which the EP, eligible hospital or CAH submits such information have the capacity to receive such information electronically)</p>
	<p>Hospitals Only: Capability to submit electronic data on reportable (as required by state or local law) lab results to public health agencies and actual submission in accordance with applicable law and practice</p>	<p>Performed at least one test of certified EHR technology's capacity to provide submission of reportable lab results to public health agencies and follow-up submission if the test is successful (unless none of the public health agencies to which the EP, eligible hospital or CAH submits such information have the capacity to receive such information electronically)</p>
	<p>Capability to submit electronic syndromic surveillance data to public health agencies and actual submission in accordance with applicable law and practice</p>	<p>Performed at least one test of certified EHR technology's capacity to provide electronic syndromic surveillance data to public health agencies and follow-up submission if the test is successful (unless none of the public health agencies to which the EP, eligible hospital or CAH submits such information have the capacity to receive such information electronically)</p>

¹Unless an EP, eligible hospital or CAH has an exception for all of these objectives and measures they must complete at least one as part of their demonstration of the menu set in order to be a meaningful EHR user.

MEANINGFUL USE: APPLICABILITY OF OBJECTIVES AND MEASURES

- **Some MU objectives are not applicable to every provider's clinical practice, thus they would not have any eligible patients or actions for the measure denominator.**
- **In these cases, the EP, eligible hospital or CAH would be excluded from having to meet that measure**
 - Ex: Dentists who do not perform immunizations;
Chiropractors do not e-prescribe

CLINICAL QUALITY MEASURES (CQM)

OVERVIEW

- **2011 – EPs, eligible hospitals and CAHs seeking to demonstrate Meaningful Use are required to submit aggregate CQM numerator, denominator, and exclusion data to CMS or the States by attestation**
- **2012 – EPs, eligible hospitals and CAHs seeking to demonstrate Meaningful Use are required to electronically submit aggregate CQM numerator, denominator, and exclusion data to CMS or the States**

CQM: ELIGIBLE PROFESSIONALS

- **Core, Alternate Core, and Additional CQM sets for EPs**
 - EPs must report on 3 required core CQM, and if the denominator of 1 or more of the required core measures is 0, then EPs are required to report results for up to 3 alternate core measures
 - EPs also must select 3 additional CQM from a set of 38 CQM (other than the core/alternate core measures)
 - In sum, EPs must report on 6 total measures: 3 required core measures (substituting alternate core measures where necessary) and 3 additional measures

STATES' FLEXIBILITY TO REVISE MEANINGFUL USE

- **States can seek CMS prior approval to require 4 MU objectives be core for their Medicaid providers:**
 - Generate lists of patients by specific conditions for quality improvement, reduction of disparities, research or outreach (can specify particular conditions)
 - Reporting to immunization registries, reportable lab results and syndromic surveillance (can specify for their providers how to test the data submission and to which specific destination)

INCENTIVE PAYMENTS FOR MEDICARE EPs

First Calendar Year (CY) for which the EP Receives an Incentive Payment

	CY 2011	CY 2012	CY 2013	CY2014	CY 2015 and later
CY 2011	\$18,000				
CY 2012	\$12,000	\$18,000			
CY 2013	\$8,000	\$12,000	\$15,000		
CY 2014	\$4,000	\$8,000	\$12,000	\$12,000	
CY 2015	\$2,000	\$4,000	\$8,000	\$8,000	\$0
CY 2016		\$2,000	\$4,000	\$4,000	\$0
TOTAL	\$44,000	\$44,000	\$39,000	\$24,000	\$0

ADDITIONAL INCENTIVE PAYMENTS FOR MEDICARE EPS PRACTICING IN HPSAs

First Calendar Year (CY) for which the EP Receives an Incentive Payment

	CY 2011	CY 2012	CY 2013	CY2014	CY 2015 and later
CY 2011	\$1,800				
CY 2012	\$1,200	\$1,800			
CY 2013	\$800	\$1,200	\$1,500		
CY 2014	\$400	\$800	\$1,200	\$12,000	
CY 2015	\$200	\$400	\$800	\$8,000	\$0
CY 2016		\$200	\$400	\$4,000	\$0
TOTAL	\$4,400	\$4,400	\$3,900	\$2,400	\$0

INCENTIVE PAYMENTS FOR MEDICAID EPs

First Calendar Year (CY) for which the EP Receives Incentive Payment

	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016
CY 2011	\$21,250					
CY 2012	\$8,500	\$21,250				
CY 2013	\$8,500	\$8,500	\$21,250			
CY 2014	\$8,500	\$8,500	\$8,500	\$21,250		
CY 2015	\$8,500	\$8,500	\$8,500	\$8,500	\$21,250	
CY 2016	\$8,500	\$8,500	\$8,500	\$8,500	\$8,500	\$21,250
CY 2017		\$8,500	\$8,500	\$8,500	\$8,500	\$8,500
CY 2018			\$8,500	\$8,500	\$8,500	\$8,500
CY 2019				\$8,500	\$8,500	\$8,500
CY 2020					\$8,500	\$8,500
CY 2021						\$8,500
TOTAL	\$63,750	\$63,750	\$63,750	\$63,750	\$63,750	\$63,750

REGISTRATION: REQUIREMENTS

1. Name of the EP, eligible hospital or qualifying CAH
2. National Provider Identifier (NPI)
3. Business address and business phone
4. Taxpayer Identification Number (TIN) to which the provider would like their incentive payment made
5. CMS Certification Number (CCN) for eligible hospitals
6. Medicare or Medicaid program selection (may only switch once after receiving an incentive payment before 2015) for EPs
7. State selection for Medicaid providers

REGISTRATION: MEDICAID

- **States will connect to the EHR Incentive Program website to verify provider eligibility and prevent duplicate payments**
- **States will ask providers for additional information in order to make accurate and timely payments**
 - Patient Volume
 - Licensure
 - A/I/U or Meaningful Use
 - Certified EHR Technology

Regional Extension Program

- Objective: **Provides grants for the establishment of HIT Regional Extension Centers (RECs).**
 - RECs will offer technical assistance, guidance and information on best practices to support and accelerate health care providers' efforts to become meaningful users.
 - RECs will support at least 100,000 primary care providers, through participating non-profit organizations.
- Funding: **ONC funded 60 RECs in virtually every geographic region of the United States.**

State HIE Program

- Objective: Funds states' efforts to rapidly build capacity for exchanging health information across the health care system both within and across states.
- Funding: ONC funded 56 cooperative agreements to states, territories and qualified State Designated Entities.

Beacon Community Program: Overview

15 Beacon Communities

Extend advanced health IT and exchange infrastructure



Leverage data to inform specific delivery system and payment strategies



Demonstrate a vision of the future where:

- Hospitals, clinicians and patients are meaningful users of health IT, and
- Communities achieve measurable & sustainable improvements in health care quality, safety, efficiency, and population health

Workforce Program

- Objective: **Focuses on several key resources needed to rapidly expand the availability of skilled health IT professionals who will support broad adoption and use of health IT in the provider community. These resources include:**
 - A **community college training program** to create a workforce that can facilitate the implementation and support of an electronic healthcare system
 - **High-quality educational materials** that institutions of higher education can use to construct core instructional programs
 - A **competency examination program** to evaluate trainee knowledge and skills acquired through non-degree training programs
 - Additional university programs to **support certificate and advanced degree training**

State Health Information Exchange

- 4-year program to support state programs to ensure the development of HIE within and across their jurisdictions
- 56 states and territories awarded \$548M in total funding for HIE planning and implementation
- States need an ONC-approved State Plan before federal funding can be used for implementation
- Exchange must meet national standards
- **Goal:** Give every provider options for meeting health information exchange (HIE) meaningful use requirements

Types of Private Sector MU Alignment

- **Nationwide P4P MU incentives**
 - Including identical reporting requirements
- **Provider directory star designations**
- **Zero-interest loan programs until CMS incentives kick in**
- **Training & support**
- **Providers requiring for network participation**
- **Proxies for medical licensure requirements**
 - Improving patient outcomes
 - Assessing ongoing clinical competence

Where Does “Health Care Reform” Fit In?

- **HIT-enabled quality improvement**
 - Expectations regarding data collection
 - E-specifications for quality measures
- **Center for Medicare & Medicaid Innovation**
 - Success of value-based purchasing demos & pilots measured by HIT-generated data
- **Re-admissions reimbursement/Transitions of care**
- **PQRI and RHQDAPU**
- **Health-Associated Infections**
- **The Patient-centered Medical Home demo.**

Resources

- <http://healthit.hhs.gov>