

Bringing Health Information to Life: the HITECH Agenda

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Today's Agenda

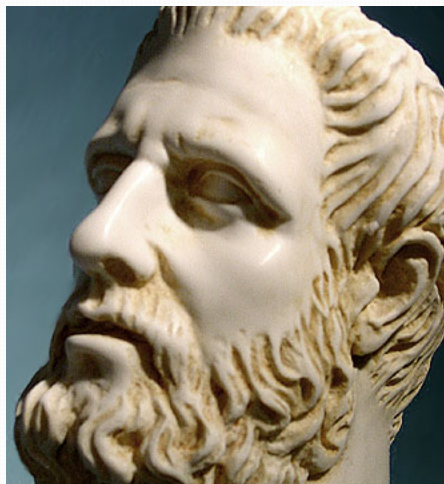
- The Role of Health Information Technology
- The Current State.
- Obstacles.
- The Federal Response.
- The Role of Professionalism.
- Your Role.



The Role of Health Information Technology

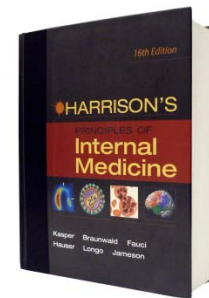


HIT: The circulatory system of medicine.

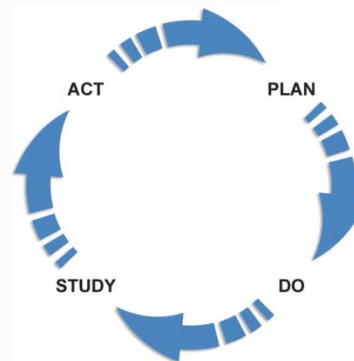


- Information: medicine's lifeblood.
- We store and manage information as Hippocrates did in 400 B.C.
- HIT: the most effective way to nourish 21st century practice.

How I learned to practice medicine:



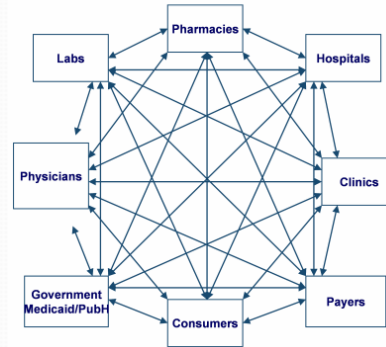
How my daughter will practice medicine:



She will benefit from:



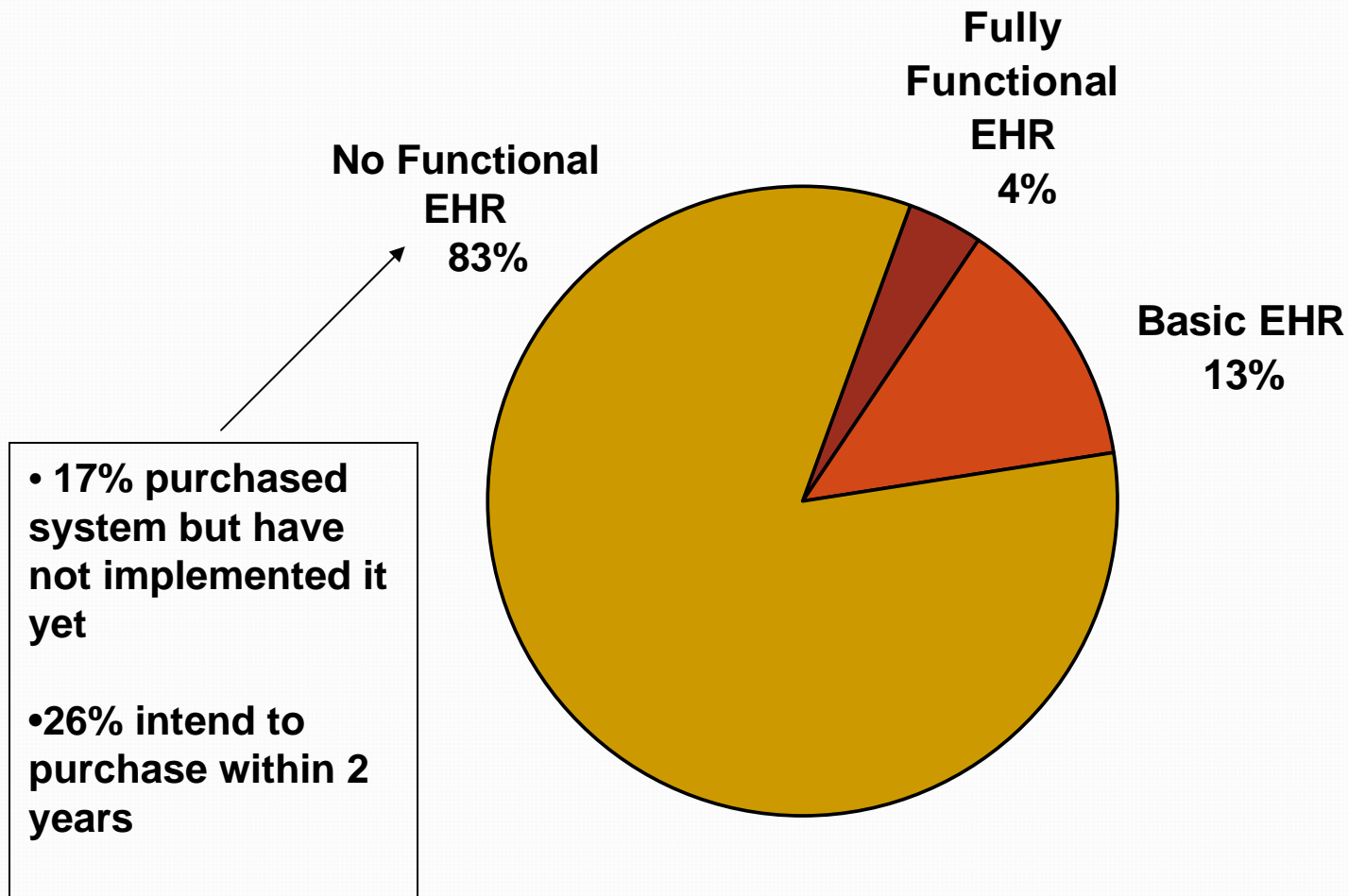
Current Landscape



- **EHR:**
Electronically capturing and processing information about patients
- **HIE:**
Exchanging health information
- **CDS:**
Improved care decisions & coordination

The road there is challenging...

Current Levels of Adoption by Ambulatory Physicians

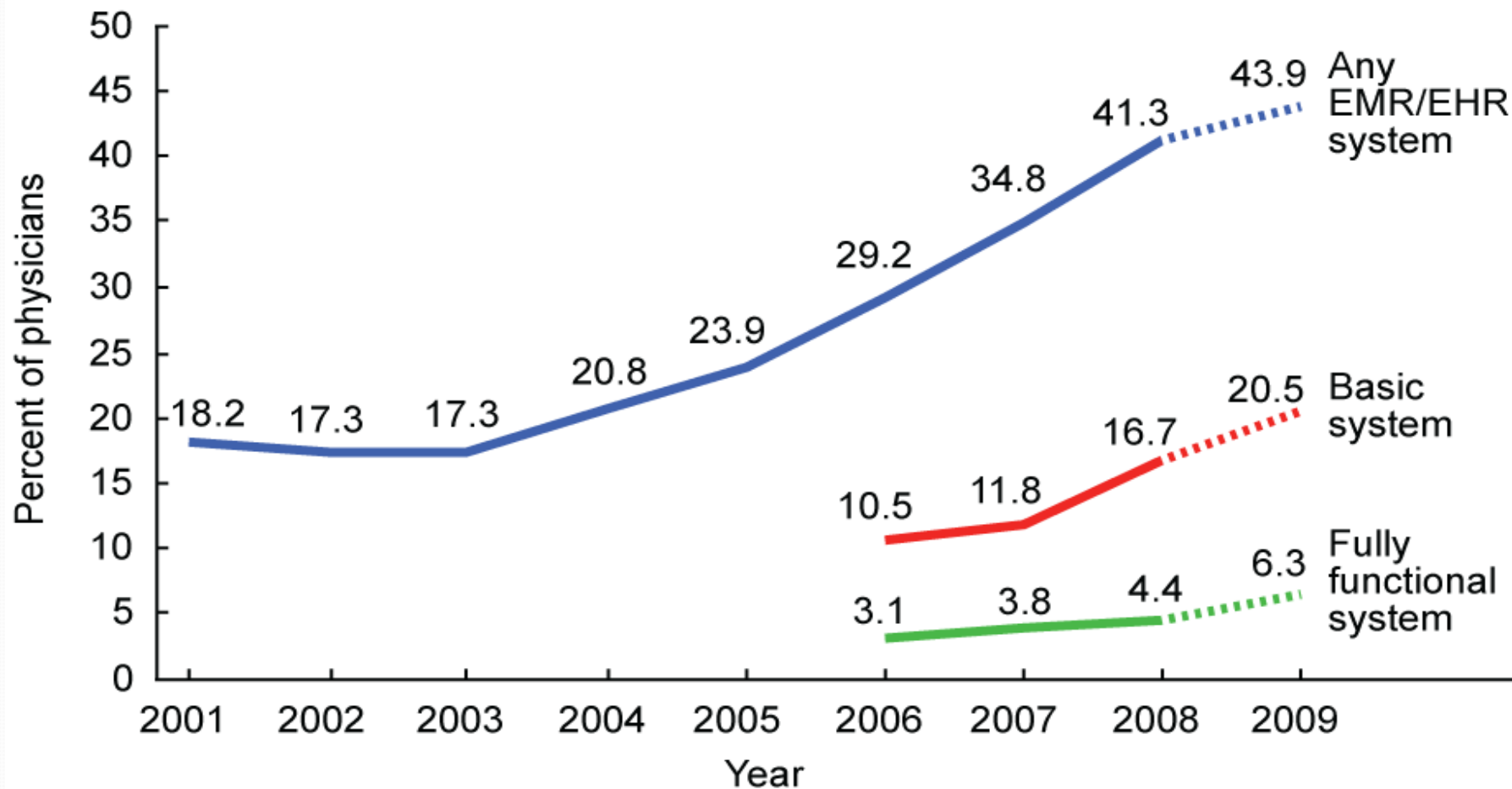


Source:

DesRoches CM et al. Electronic health records in ambulatory care—a national survey of physicians. *N Engl J Med.* 359(1):50-60, 2008 Jul 3.



Figure. Percentage of office-based physicians using electronic medical records/electronic health records (EMRs/EHRs): United States, 2001–2008 and preliminary 2009



NOTES: Any EMR/EHR is a medical or health record system that is either all or partially electronic (excluding systems solely for billing). The 2009 data are preliminary estimates (as shown on dashed lines), based only on the mail survey. Estimates of basic and fully functional systems prior to 2006 could not be computed because some items were not collected in the survey. Starting in 2007, the skip pattern after the all or partial EMR/EHR systems question was removed. Includes nonfederal, office-based physicians. Excludes radiologists, anesthesiologists, and pathologists.

SOURCE: CDC/NCHS, National Ambulatory Medical Care Survey.

Hospital adoption lags as well.

Hospitals (2008):

- 10 percent basic.
- 1.5 percent comprehensive.
- Large percentages with pieces of EHR.

Source:

DesRoches CM et al. Electronic health records in ambulatory care—a national survey of physicians. *N Engl J Med.* 359(1):50-60, 2008 Jul 3.



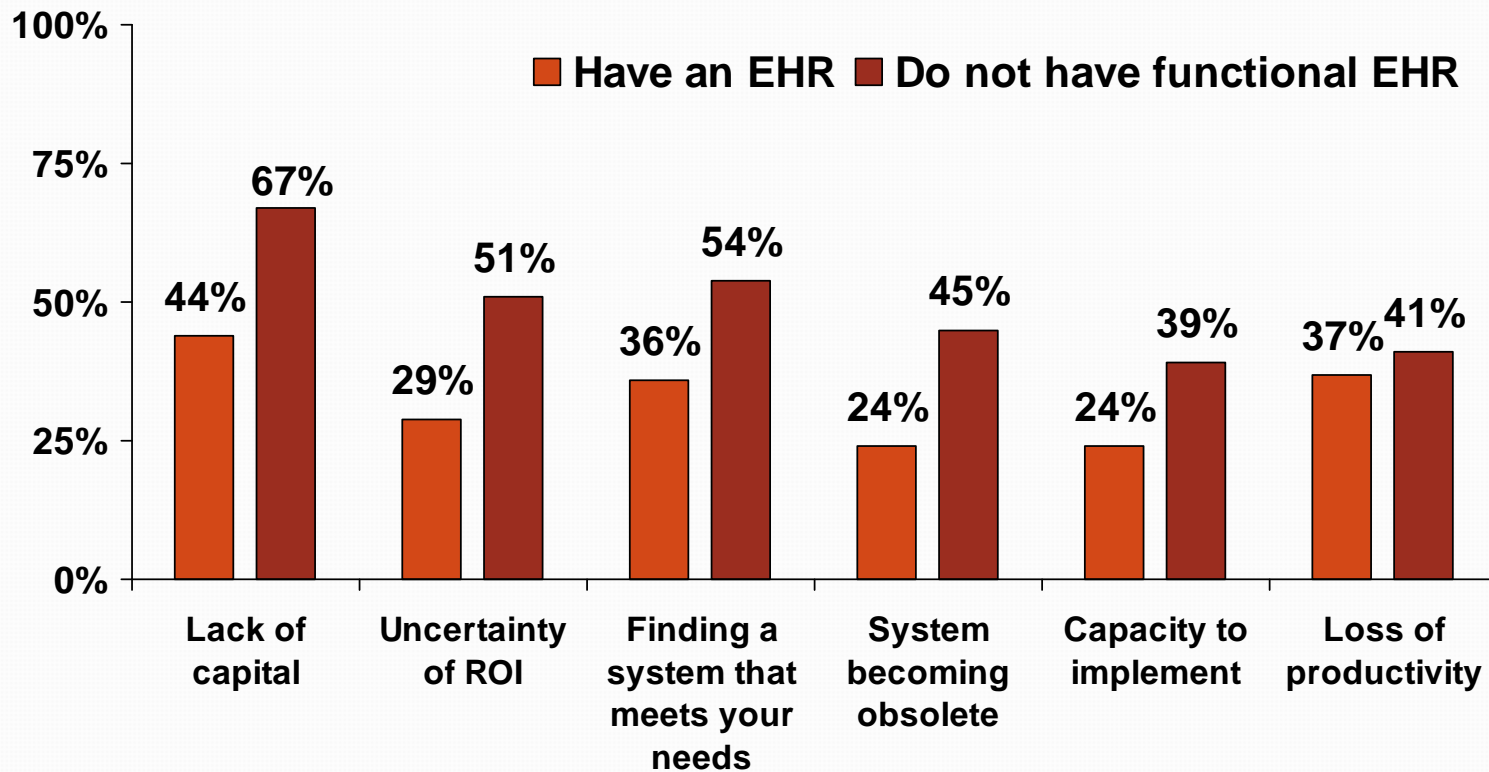
Barriers to Health Information Technology Adoption and Effective Use

- Market Failures
- Technology and Logistics
- Absent Platform for Exchange – public good
- Privacy and Security Concerns



Major Barriers to EHR Adoption

Percent of physicians reporting a “major barrier”



Source:
DesRoches CM et al. Electronic health records in ambulatory care—a national survey of physicians. *N Engl J Med.* 359(1):50-60, 2008 Jul 3.



The Federal Government's Response: HITECH ACT



- Part of American Recovery and Reinvestment Act of 2009 (ARRA)
- Establishes the revolutionary goal of **Meaningful Use**.
- Systematically addresses major barriers to adoption and Meaningful Use.
 - Money/market reform.
 - Technical assistance, support and better information.
 - Health information exchange
 - Privacy and security.



Conceptual Considerations

- Change management, not technology installation.
 - Hearts and minds of nation's providers.
 - The escalator concept.
- Payoff is in effective use – MEANINGFUL USE.
 - Must support practice redesign, changes in practitioner decision-making and workflow.
- The goal is health and health system improvement.
- Strategy must be multifactorial and properly timed and address these known barriers.
- Must be flexible and constantly reassessed.



Pillars of Meaningful Use

Patient &
Family
Engagement

Coordinated
Care

Quality
Safety
Efficiency

Privacy &
Security

Improved
Public &
Population
Health

EHR

CPOE

CDS

HIE



Meaningful Use in Practice

Stage 1 - 2011	Stage 2 - 2013	Stage 3 -2015
<ul style="list-style-type: none">•electronically capturing health information in a coded format•using that information to track key clinical conditions•communicating that information for care coordination purposes•initiating the reporting of clinical quality measures and public health information.	<ul style="list-style-type: none">•disease management•clinical decision support•medication management•support for patient access to their health information•quality measurement and research•bi-directional communication with public health agencies.	<ul style="list-style-type: none">•improvements in quality, safety and efficiency•decision support for national high priority conditions•access to self management tools•access to comprehensive patient data, and improving population health outcomes.



Stages of Meaningful Use Timeline

First Payment Year	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015 and later**
2011	Stage 1	Stage 1	Stage 2	Stage 2	Stage 3
2012		Stage 1	Stage 1	Stage 2	Stage 3
2013			Stage 1	Stage 2	Stage 3
2014				Stage 1	Stage 3
2015 and later*					Stage 3

*Avoids payment adjustments only for EPs in Medicare EHR Incentive Program

**Stage 3 criteria of meaningful use or a subsequent update to criteria if one is established



Meaningful Use Objectives for Eligible Health Professionals and Eligible Hospitals - 2011

EXAMPLES

- Use CPOE
- Implement drug-drug, drug-allergy, drug-formulary checks
- Maintain an up-to-date problem list
- Maintain active medication list
- Maintain medication allergy list
- Record demographics
- Record and chart changes in vital signs
- 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
 - Report ambulatory quality measures to CMS



Core Quality Measures for Eligible Professionals - 2011

- Preventive care and screening: Inquiry regarding tobacco use
- Blood pressure management
- Drugs to be avoided by the elderly:
 - Patients who receive at least one drug to be avoided
 - Patients who receive at least two different drugs to be avoided



Specialty Quality Measures for Professionals

Will need to select one of the following specialties

Cardiology	Obstetrics and Gynecology
Pulmonology	Neurology
Endocrinology	Psychiatry
Oncology	Ophthalmology
Proceduralist/Surgery	Podiatry
Primary Care	Radiology
Pediatrics	Gastroenterology
Nephrology	

Obstacle: Market Failure

HITECH Response: Financial Provisions

- Medicare/Medicaid incentives: \$14-27 billion from 2011 on.
 - Strategy rewarding adoption, not
 - Reward the **“MEANINGFUL USE” OF EHRs**
 - Physicians: \$44,000/\$63,750 over 5-10 years.
 - Penalties starting in 2015.
 - Hospitals: \$2M bonus plus extra DRG payments.
- Support for adoption:
 - \$2 billion to Office of National Coordinator for Health Information Technology (ONC).



HITECH Response to Gaps in Technical Assistance, Technology, Human Resources

- **\$693 million**
 - 70 Regional Extension Centers.
 - Health Information Technology Research Center.
- **\$564 million**
 - Promote HIE through State leadership.
- **\$118 million**
 - Training over 40,000 new personnel



The Federal Government has Adopted a Solutions-Based Strategy

Obstacle	Intervention	Funds Allocated
Financial Resources	 Medicare and Medicaid Incentive Program for “Meaningful Use.”	\$27 B*
Technical Assistance	 Regional Extension Centers	\$643 M
Human Resources	 Workforce Training Programs	\$118 M
Information Sharing	 National Health Information Network & Standards and Certification	\$64.3 M
Exchange	 Health Information Exchange	\$564 M
Technology	 Strategic Health Information Technology Advanced Research Projects	\$60 M
Breakthrough Examples	 Beacon Communities Program	\$235 M



Privacy and Security as a Foundation.

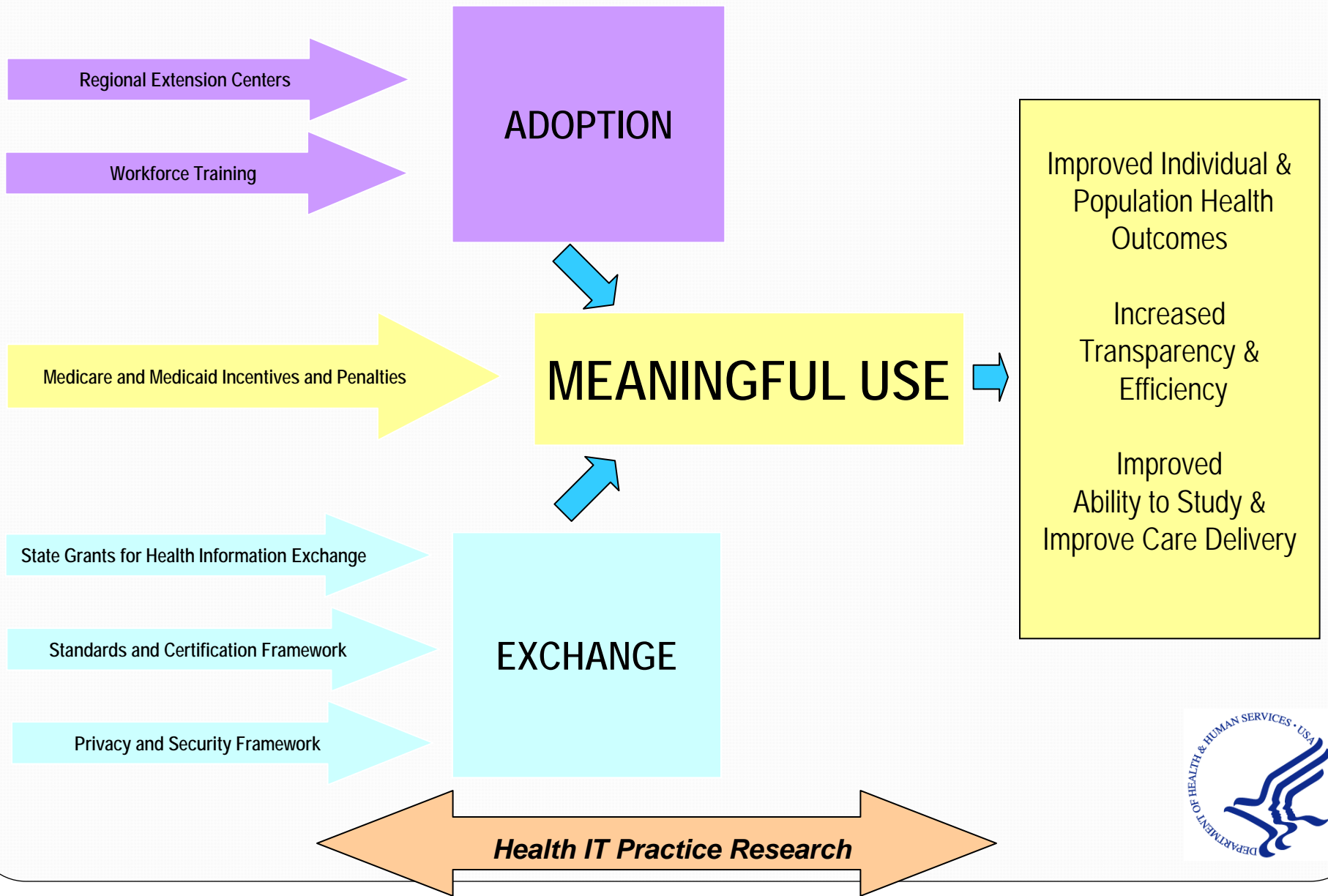


HITECH Response to Gaps in Privacy and Security



- Banned sale of health information
- Ongoing audit trail requirements
- Federal activity in enforcement
- Expanded patient rights to access their information
- Innovative encryption technology to prevent breaches

HITECH FRAMEWORK: MEANINGFUL USE AT CORE



Remaining challenges

- HITECH a great start, but many challenges to implementation.
 - Getting definition of meaningful use right:
 - *Stretch*, but don't break.
 - Getting regional centers up and running.
 - Assuring infrastructure for exchange.
 - Training necessary workforce.
 - Promote innovation in health information technology.



Technology Adoption



WILL THE STETHOSCOPE EVER COME INTO GENERAL USE IN CLINICAL MEDICINE? A STRONGLY NEGATIVE VIEW EXPRESSED IN 1821

Sir John Forbes (1787-1861) in the preface to the first edition of his translation of Laënnec's *De l'auscultation médiate*, published in 1821, was guilty of one of the most famous false prophecies in medicine.¹ He wrote of the newly invented stethoscope:

That it [the stethoscope] will ever come into general use, notwithstanding its value, I am extremely doubtful; because its beneficial application requires much time, and gives a good deal of trouble both to the patient and the practitioner; and because its whole hue and character is

That it [the stethoscope] will ever come into general use, notwithstanding it extremely doubtful; because its beneficial application requires much time, and gives of trouble both to the patient and the practitioner; and because its whole hue and foreign, and opposed to all our habits and associations. It must be confessed something even ludicrous in the picture of a grave physician formally listening to tube applied to the patient's thorax, as if the disease within were a living being.

Noted by T. E. C., Jr., M.D.

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Office of the National Coordinator for Health Information Technology



Professionalism and HIT.

- Key components of professionalism.
 - Unique competence, based in science and demonstrated capability.
 - Self-governance.
 - Moral/ethical commitments.
- Within 10 years, use of EHRs will be a core technical competency.



Professionalism will drive HIT

- Primary care specialty societies have all endorsed use of HIT as an element of maintenance of certification.
- I predict:
 - ACGME.
 - Licensing Boards.
 - AMA/AAMC medical school accreditation will follow suit.



Your Role

*Contribute to this inevitable revolution
in modern medicine.*

- The American public expect nothing less.



QUESTION & ANSWER

