

Moving Forward the President's Vision of Interoperable EHRs – Relevance to Public Health

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The President's Overarching Goal is Far Reaching and Measurable

Nation-wide interoperable health information infrastructure and electronic health record (EHR) available for most Americans within ten years.

President George W. Bush, 2004



Outline

- The call to action
- The complex nature of health information
- Highlights of Federal activities
- Summary

Why Health IT? A Personal View



- Avoidance of medical errors
- Improve quality of care
- Accelerate bench to bedside
- Empower consumers
- Reduce costs

Healthcare Delivery More Complex

- The population is aging.
- Prevalence of multiple chronic conditions is increasing.
- Older Americans with severe disabilities will more than double by 2050.
- Health care encounters and costs are correlated with presence of chronic conditions and disabilities.



There Is a Clear Case for Health IT

“Our 21st century health care system uses a 19th century paperwork system”

*-- President George W. Bush
April 27, 2004*

Health IT – Part of the Solution

- “By computerizing health records, we can avoid dangerous medical mistakes, reduce costs, and improve care.”
--President George W. Bush, State of the Union Address, January 20, 2004
- “All these problems – high costs, uncertain value, medical errors, variable quality, administrative inefficiencies, and poor coordination – are closely connected to our failure to use health information technology as an integral part of medical care.” --President George W. Bush, April 27, 2004
- “And so the fundamental question is, how do we encourage information technology in a field like health care that will save lives, make patients more involved in decision-making, and save money for the American people.” --President George W. Bush, January 27, 2005



Health IT is Needed to Transform Our Health Care System

“Information technology is a pivotal part of transforming our health care system. We are at a critical juncture. Working in close collaboration, the federal government and private sector can drive changes that will lead to fewer medical errors, lower costs, less hassle and better care.”

-- Secretary Leavitt May 11, 2005

The Leadership Panel Identified Three Key Imperatives for Health IT

1. Widespread adoption of interoperable health IT should be a top priority for the U.S. health care system.
2. The federal government should use its leverage as the nation's largest health care payer and provider to drive adoption of health IT.
3. Private sector purchasers and health care organizations can and should collaborate alongside the federal government to drive adoption of health IT.

<http://www.hhs.gov/healthit/HITFinalReport.pdf>

May 11, 2005



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Health Information Intersects Many “Domains”



Health Information is Complex and Crosscutting

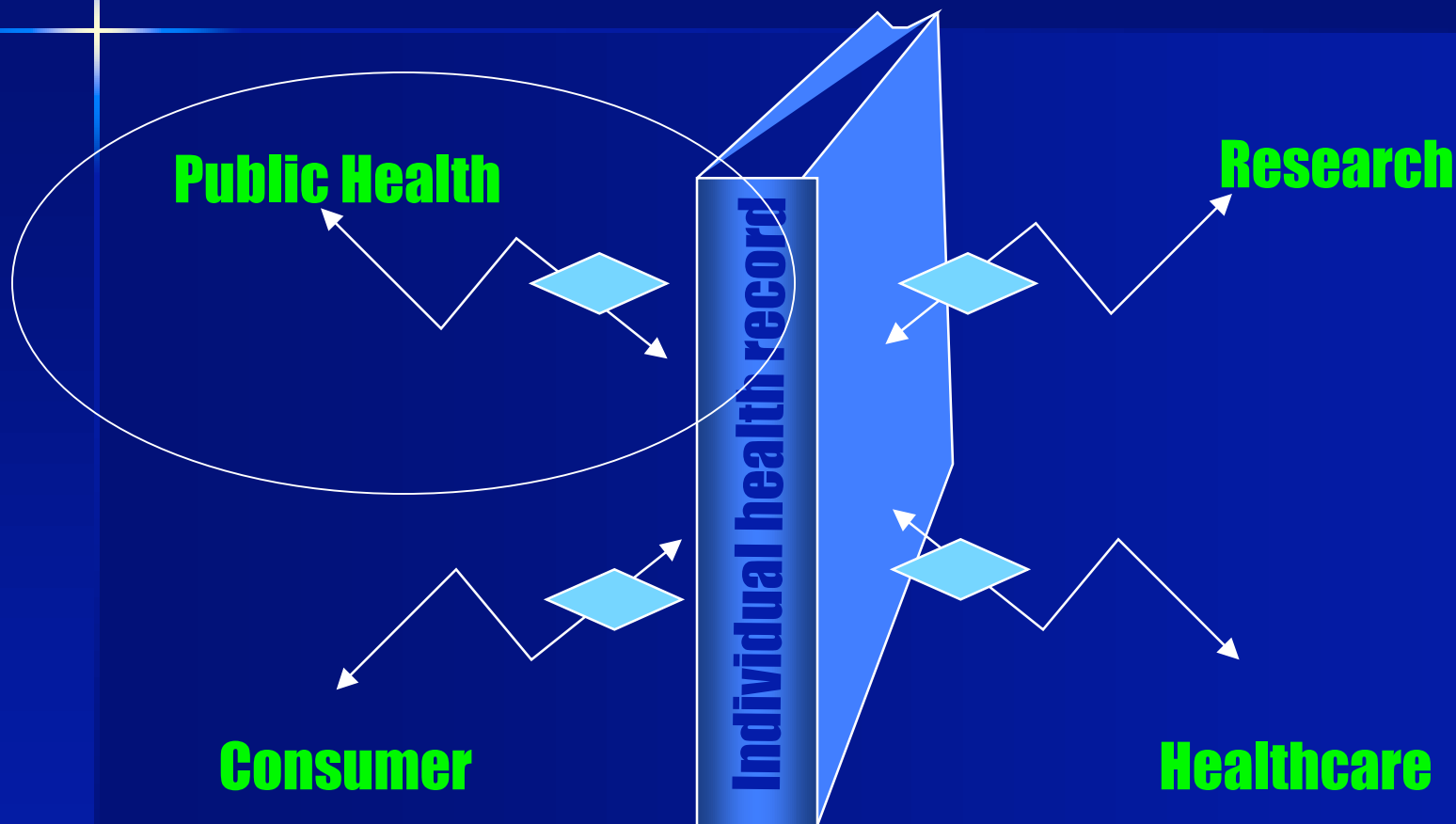
Public Health

Research

Individual health record



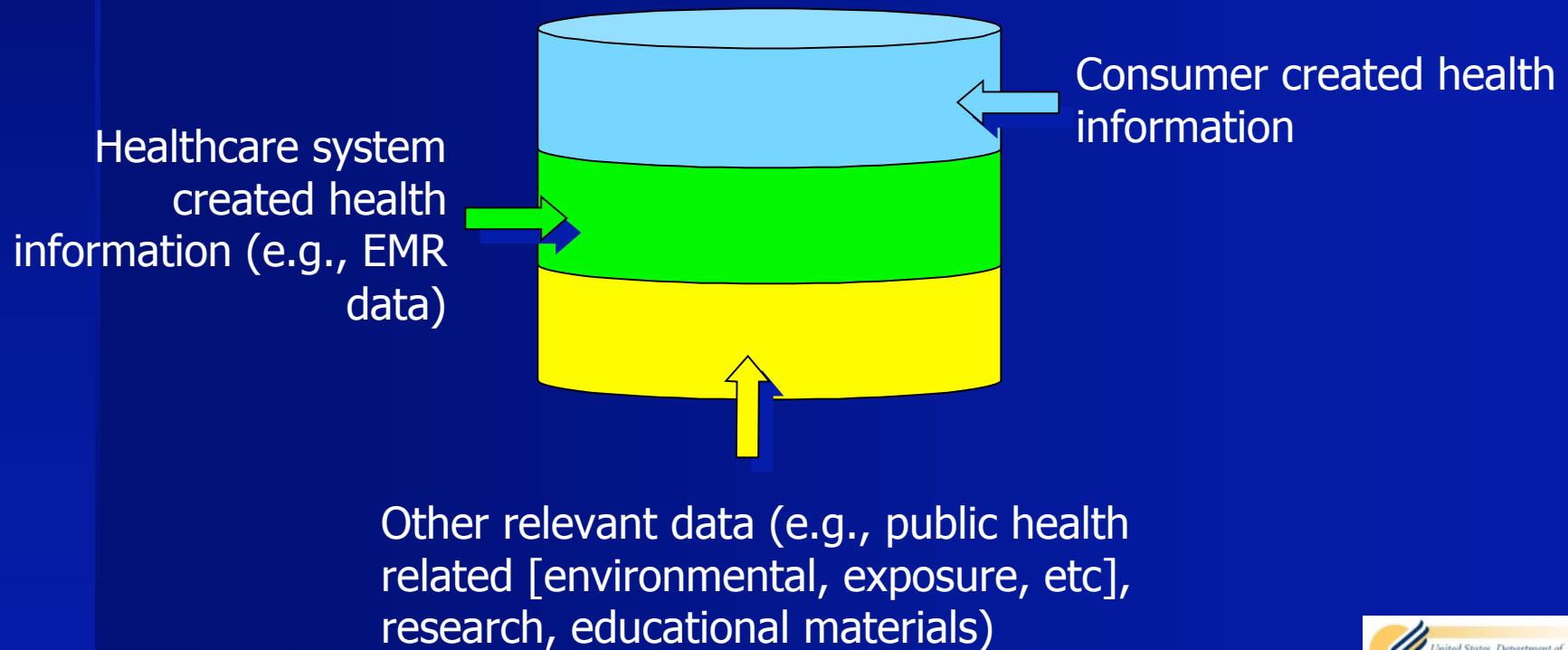
There are Many Potential Uses for Health Information



 Decision Support

One Concept of an EHR

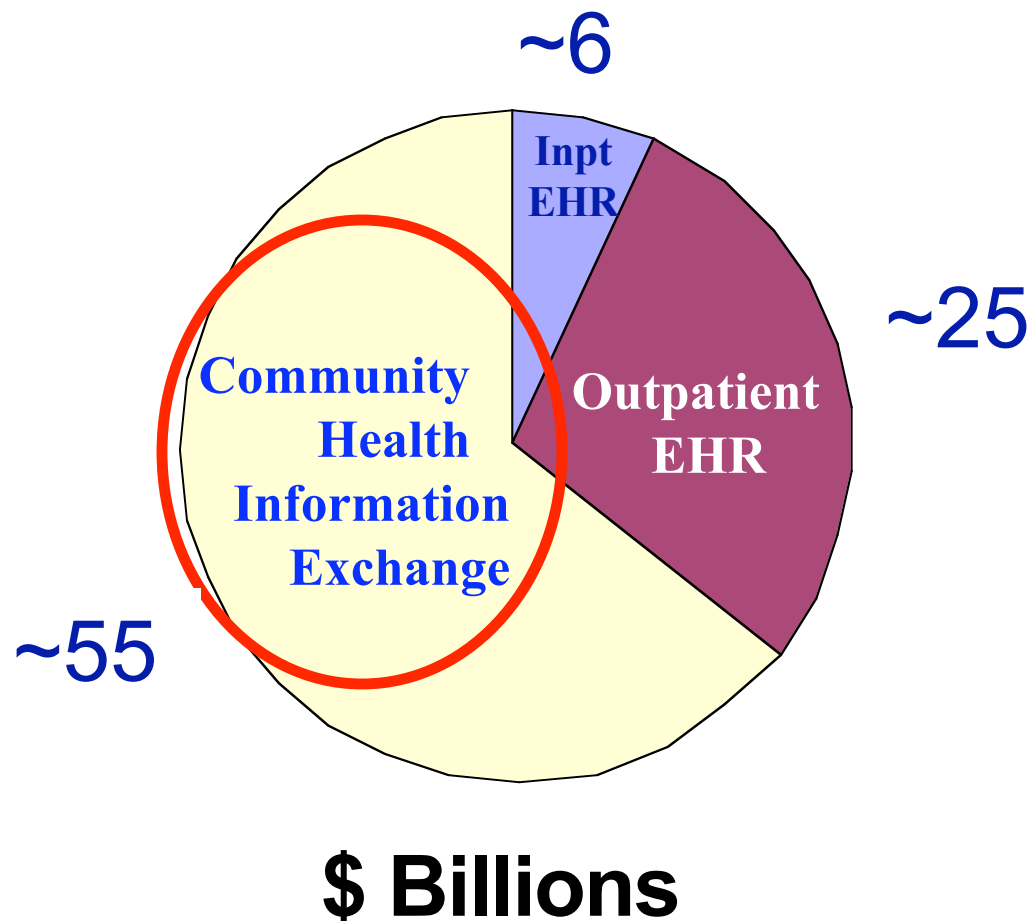
Components of an Electronic Health Record



There are Many Sources of Health Information

- Healthcare provider office
- Pharmacists and PBMs
- Laboratories
- Government (local, state and federal)
- Insurers/Payers
- Employers
- Consumers
- Researchers
- etc...

Benefits Are Most Significant for Interoperability



- Benefits for public health or research not included
- Benefits to consumer's of access to their information not included

There are Many Challenges to Interoperability

- Complexity of health information
- Some standards not implemented
- Many standards non-existent
- Paucity of data on economic benefit
- Wide variation in HIT products
- ...

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Highlights

- Executive Order
- Secretary Leavitt's 500 day plan
- ONCHIT's Strategic Framework
- Standards and other activities

Executive Order Articulates Vision, Goals and Position

- Vision of developing a nationwide interoperable infrastructure
- Incentives for the Use of Health Information Technology
- Establishing the Position of the National Health Information Technology Coordinator within the Department of Health and Human Services, Office of the Secretary
 - Dr. Brailer named in May at the Secretary's Health IT Summit

April 27, 2004

Executive Guidance

- Support the delivery of healthcare
- Reduce costs and support effective markets
- Support coordination while ensuring protection of information

April 27, 2004

Secretary Leavitt's 500 Day Plan are Setting the Course for the Future

- Transform Health Care System *
- Modernize Medicare and Medicaid *
- Advance Medical Research*
- Secure the Homeland*
- Protect Life, Family and Human Dignity
- Improve the Human Condition Around the World

* HIT as part of the plan



500 Day Plan to Transform the Health Care System

- Expressing a clear vision of health information technology that conveys the benefits to patients, providers and payers.
- Convening a national collaboration to further develop, set and certify health information technology standards and outcomes for interoperability, privacy and data exchange.
- Realizing the near-term benefits of health information technology in the focused areas of adverse drug-incident reporting, e-prescribing, lab and claims-sharing data, clinic registrations and insurance forms.

500 Day Plan to Modernize Medicare and Medicaid

- Creating workable methods of rewarding health providers for positive outcomes.
- Positioning HHS at the forefront of the health information technology interoperability movement.

500 Day Plan to Advance Medical Research

- Creating an integrated electronic network of privacy-protected population data, genetic information and medical records to accelerate discoveries that will define an individual's risk of disease, response to treatment and likelihood of a side effect.
- Improving the clinical research network to advance better prevention, early diagnosis and treatment of disease.

500 Day Plan to Secure the Homeland

- Providing early warnings of naturally occurring and manmade threats through improved domestic and international surveillance.

(5000 day vision – Surveillance of data in electronic health records provide early warnings of dangerous viruses or bio-terrorism activities)

ONCHIT's Framework for Strategic Action Focuses on Four Goals

- Inform clinical practice
- Interconnect clinicians
- Personalize care
- Improve population health

Strategies to Inform Clinical Practice

- Incentivize EHR adoption
- Reduce risk of EHR investment
- Promote EHR diffusion in rural and underserved areas

Strategies to Interconnect Clinicians

- Foster regional collaborations
- Develop a national health information network
- Coordinate federal health information systems

Strategies to Personalize Care

- Encourage use of personal health records
- Enhance informed consumer choice
- Promote use of telehealth systems

Strategies to Improve Population Health

- Unify public health surveillance architectures
- Streamline quality and health status monitoring
- Accelerate research and dissemination of evidence

Specific Activities

- Exploration
- Health IT standards
- Reducing barriers
- Regulation

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Summary

- The Federal Government is committed to moving forward HIT
- Active collaboration between private and public sectors is critical.
- Communities are actively organizing and moving forward
- Public health is a critical component

Questions?

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References

- Executive Order:
<http://www.whitehouse.gov/news/releases/2003/01/20030124.html>
- ONCHIT web site
<http://www.hhs.gov/healthit/>
- HL7 EHR Functional Model and Standards
<http://www.hl7.org/ehr/downloads/index.asp>

Request for Information to Explore Approaches for NHIN

- Request for Information (RFI) solicited comments on the components of the National Health Information Network (NHIN) and how to achieve widespread interoperability of HIT and information exchange. (11/15/04)
- Explores the role of the federal government in a NHIN, how it could be coordinated with the Federal Health Architecture (FHA), and how it could be supported and coordinated by Regional Health Information Organizations (RHIOs).

Project Activities to Explore Approaches for Moving Forward

- AHRQ
 - \$139 million in grants and contracts to promote the use of HIT, 100 grants awarded in 38 States
- CDC – PHIN
- NIH – Nectar and CaBIG
- CMS – DoQ-IT

Leading by Example – Adoption of CHI Standards

CHI Initiative adopted standards across 20 clinical domains including:

Demographics (HL7®)

Standards,
RT)

Immunizations (HL7®)

Nursing (SNOMED CT®)

Diagnosis/Problem Lists
(SNOMED CT®)

Medications (Federal Drug
Terminologies, FDA
RxNorm, VA's NDF-

Anatomy (SNOMED CT® and NCI
Thesaurus)

Lab Result Contents (SNOMED CT®)

Clinical Encounters (HL7®)
Units (HL7®)

CHI adopted standards (cont'd)

Messaging standards

- scheduling, medical record/image management, patient administration, observation reporting, financial management, patient care (HL7®)
- Retail pharmacy transactions (NCPDP SCRIPT®)
- Connectivity (IEEE™ 1073)
- Image Information to Workstations (DICOM®)

Supporting the Development of Standards

HL7 EHR Functional Model and Standards DSTU is divided into three sections:

- Direct Care
- Supportive
- Information Infrastructure

The EHR Model and Standards specify 125 functions that may be present in an EHR.

HL7 balloted, as an informative document (i.e., not a standard), Minimum Function Sets (MFS) for certain care settings (e.g., ambulatory care, LTC, etc.)

Supporting the Availability of Health IT Standards

Federal Government entered into a license with the College of American Pathologists (CAP) to make SNOMED-CT freely available to U.S. health care entities

Addressing Barriers Through Stark Phase II

- Stark Phase II (IFR 3/26/04) included an exception for the provision of IT items or services by a designated health services entity to a physician used as part of a community-wide health information system.

Mandated Regulation of E-Rx NPRM

Proposed E-Rx standards include:

- Standards to support messaging between prescribers, dispensers, and Part D sponsors.
- Standards support the exchange of information for all prescribing transactions (except the prescription fill Status notification transaction) including prescription requests and responses related to: new, refills, change, and cancellation prescription request and response transactions.