



*transforming healthcare through IT*

architects of change

***Welcome to the RHIO Revolution!***

**EHRs , RHIOs, and the NHIN**

***Putting IT all Together***

**Jeff David, Director of Industry Development – HIMSS**

March 24, 2006: The Illinois EHR Task Force



# What's the Big Deal?

- IOM - 44k – 98k people die yearly from medical errors
- Study in JAMA found that missing information from 1,614 charts could, 44% of the time, adversely impact patient's well-being
- RAND - patients receive appropriate care 55% of the time
- Preventable healthcare-acquired infections cost \$4.5B/yr and contribute to over 88,000 deaths annually
- CDC found that 16.7M elderly patient visits to physicians result in prescription errors yearly
- All this while Healthcare is 15% of GDP and Growing!

Your medical records  
are locked away here.



The ER doctor has  
**2 minutes** to decide  
which one of these two  
injections won't cause a  
lethal allergic reaction.



**Congress should fully fund the President's  
request for health information technology funding.**

**We deserve better odds than 50/50.**

**Dell • eHealth Initiative • Emdeon Corporation  
Healthcare Information and Management Systems Society • IBM • Intel Corporation  
McKesson Corporation • National Alliance for Health Information Technology  
National Association of Chain Drug Stores • SNOMED International  
U.S. Chamber of Commerce**

AARP • Altarum Institute • American Academy of Family Physicians • American Academy of Pediatrics • American Clinical Laboratory Association  
American College of Physicians • American Health Information Management Association • American Health Quality Association • American Hospital Association  
American Medical Informatics Association • American Society of Health-System Pharmacists • America's Health Insurance Plans • Athena Health  
Catholic Health Initiatives • Center for Health Transformation • Cerner Corporation • CHRISTUS Health • Clearwave • College of American Pathologists  
CSC Consulting DocSite, LLC • Eastman Kodak Company Express Scripts • HealthGate • Health Hero Network • Healthwise • HR Policy Association • IDX Systems  
Information Technology Industry Council Interoperability Consortium • Joint Commission on Accreditation of Healthcare Organizations • MEDdecision MedSeek  
Microsoft • MOST, LLC • National Alliance for Primary Care Informatics • National Association of Manufacturers • National Business Group on Health  
National Electrical Manufacturers Association • National Rural Health Association • National Rural Hospital Association • New York-Presbyterian Hospital  
Northrop Grumman • Oracle • RxHub • Siemens • Sun Microsystems Technology CEO Council • SureScripts • Sutter Health • Thomson Medstat Trinity Health  
University of Pittsburgh Medical Center & UPMC Health Plan • Vocera Communications, Inc. • WellPoint, Inc.

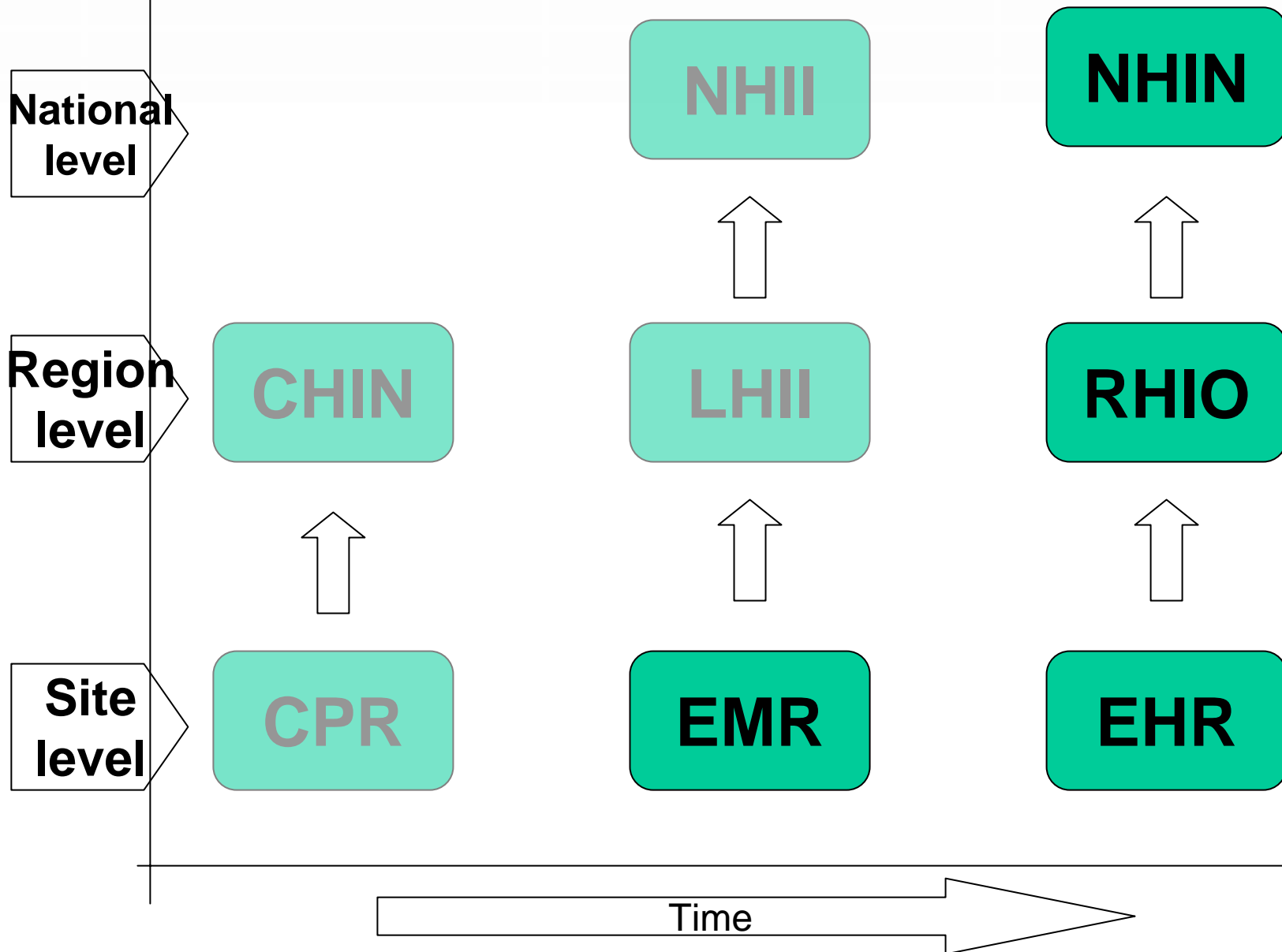
# Healthcare is Information

- Over 90% of the activities that go into the delivery of healthcare are centered around information and information exchange.
- The CONSUMER is the central object within this Information System.
- Therefore, clinically-derived “Consumer-Centric, Information-Rich” *Electronic Health Records* will become the common Nexus of Information for ALL players in the 21<sup>st</sup> century health system.

# HIEI National Net Cost-Benefit

	<u>Net Return over 10-year Implementation</u>	<u>Annual Net Return after Implementation</u>
<b>Level 2</b>	\$141B	\$22B
<b>Level 3</b>	-\$34B	\$24B
<b>Level 4</b>	\$337B	\$78B

*Value of HIE standards is the difference between Level 3 & 4*



Sources: Health Affairs W4-79, 2003; NAMCS Report, CDC, 2002

1 Billion

**Volume of Encounters (Annual, U.S.)**

\$50,000

8 Million

\$500

**Revenue per Encounter**

\$50

**Small Physician Offices**

**Large Group Practices**

**Hospital Outpatient Departments**

**Inpatient Med/Surg Units**

**Critical Care Units**

Payers

Purchasers

Consumers

Lab

Pharmacy

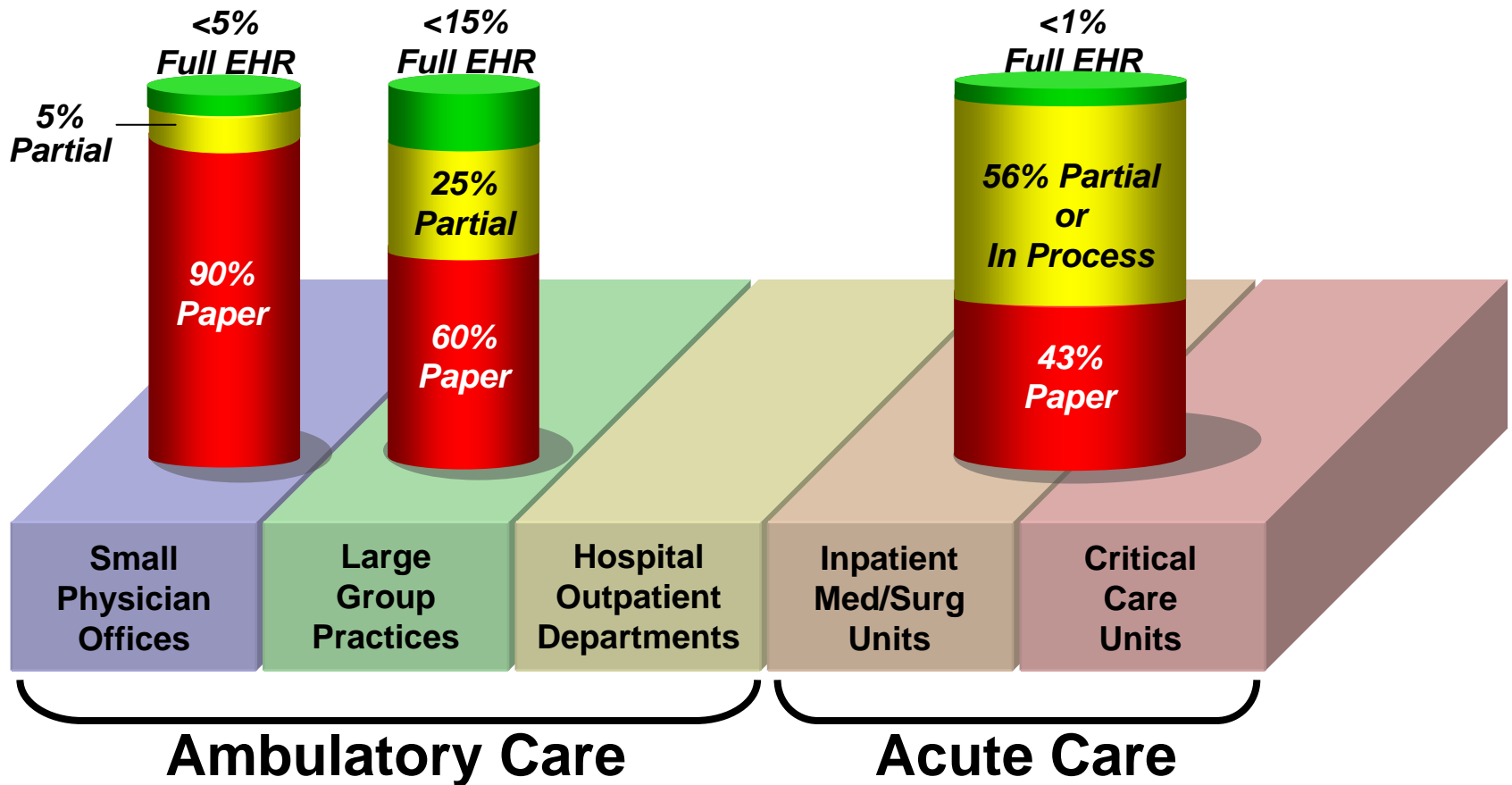


**Ambulatory Care**

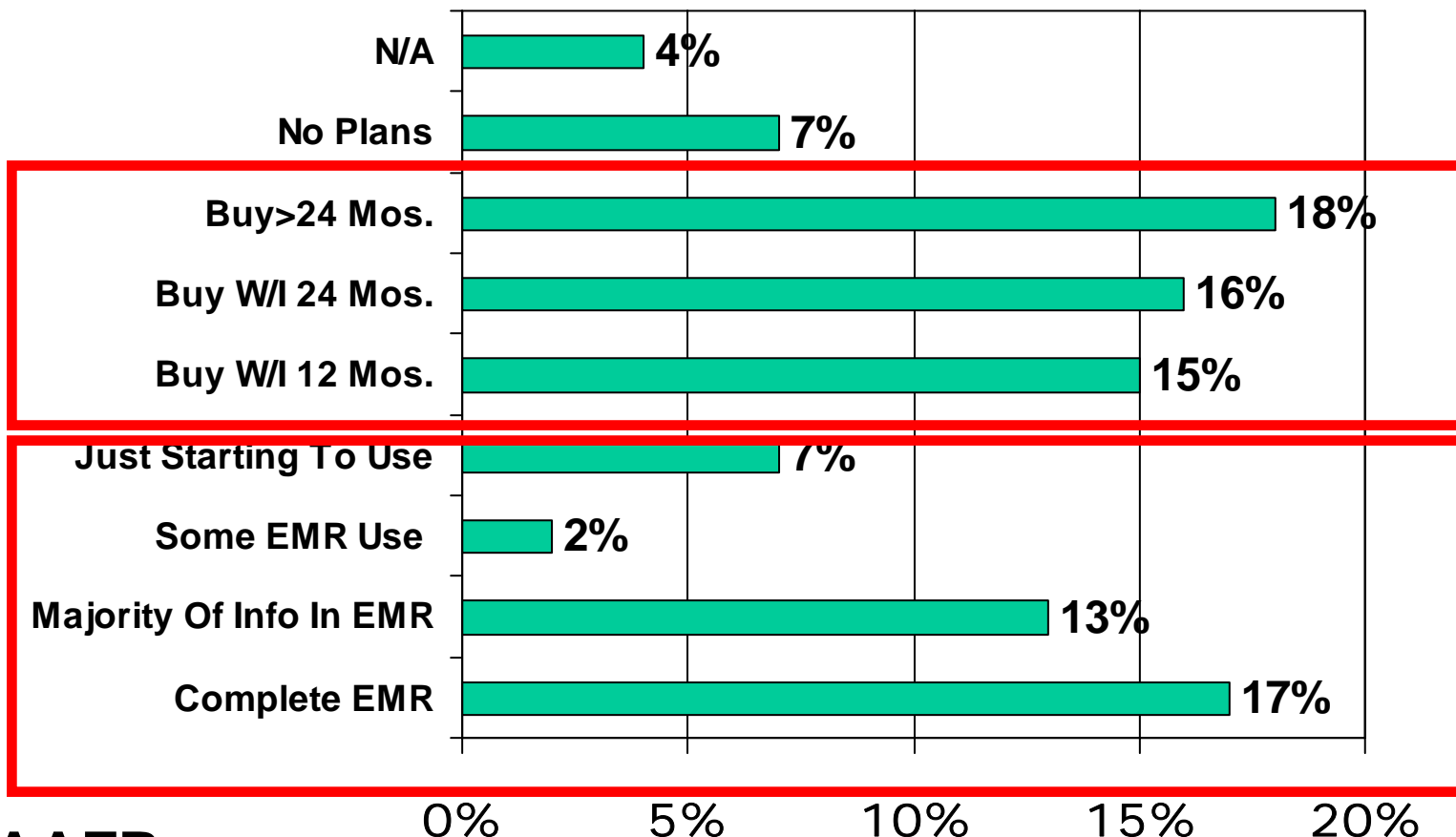
**Acute Care**



# State of EHR Adoption



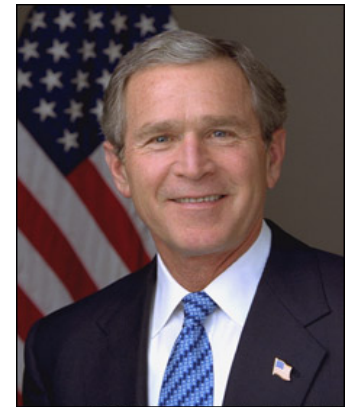
# Family Practice Physicians Rapidly Moving To EMRs



SOURCE: AAFP Survey 7/04

# President Bush Gets IT

*“Medicine ought to be using modern technologies in order to better share information, in order to reduce medical errors, in order to reduce cost to our health care system by billions of dollars... Within ten years, every American must have a personal electronic medical record. The federal government has got to take the lead in order to make this happen by developing what's called technical standards.”*



White House photo by Eric Draper

*April 26, 2004*



ugh IT

architects of change

# Secretary Leavitt Gets IT

- HHS - 60,000 personnel and a \$½ Trillion budget
- Visionary leader who is driven!
- Industry Involvement
- Funding
- Katrina

July 2005: Establishes and personally chairs:

**AHIC**

(American Health Information Community)

## Mark McClellan gets IT

“How do we get the most benefits to the most people for a particular treatment?... Through widespread adoption of Modern HIT... through EMRs with direct links to Federal Agencies, through e-prescribing, through interoperability and standards, through robust data sharing between systems in order to collect Information regarding a Drug’s use in clinical practice and to monitor patient safety”



Mark McClellan, as FDA Commissioner in 2003, Harvard Business School Healthcare Alumni Conference, Nov. '03

# Office of the National Coordinator for Health IT (ONCHIT)... David Brailer, of course, *gets* IT

## Dr. Brailer's Priorities

- Address Standards
- Achieve Interoperability
- Initiate Certification
- Close Adoption Gap
- Engage Incentives
- Coordinate Federal Initiatives
- Encourage Private Sector Leadership



## ONCHIT and the Four Goals

### **Goal 1:**

## **Inform Clinical Practice**

- Strategy 1: Incentivize EHR adoption
- Strategy 2: Reduce risk of EHR investment
- Strategy 3: Promote EHR diffusion in rural & underserved

# ONCHIT and the Four Goals

## Goal 2:

### Interconnect Clinicians

#### Strategies:

- Strategy 1: Foster Regional Collaborations (**RHIOs**).
- Strategy 2: Develop a National Health Information Network (**NHIN**)
- Strategy 3: Coordinate Federal Health Information Systems (**CHI**)

**The RHIO Revolution: Payers can either help to do it or they will have it *done to them***



# ONCHIT and the Four Goals

## Goal 3:

### Personalize Care

#### Strategies:

- Strategy 1: Encourage Use of Personal Health Records (PHRs)
- Strategy 2: Enhance Informed Consumer Choice
- Strategy 3: Promote use of Telehealth Systems

**Is this not a Consumer-Driven Strategy?**

**PHRs are to the CDHC Revolution as**

**EHRs are to the HIT Revolution**

## ONCHIT and the Four Goals

### **Goal 4:**

# **Improve Population Health**

## Strategies:

- Strategy 1: Unify Public Health Surveillance Architectures
- Strategy 2: Streamline Quality and Health Status Monitoring
- Strategy 3: Accelerate Research and Dissemination of Evidence.

-Improved surveillance = lower risk of catastrophic event

-Healthier populations = lower costs

-Evidence-Based Medicine = better outcomes

# ONCHIT 4 RFPs and Contracts:

- **ONCHIT I: “Standards Harmonization”** → **HITSP**  
(HIT Standards Panel) Harmonize industry-wide health IT standards’ development
- **ONCHIT II: Certification** → **CCHIT** (The Certification Commission for HIT)
- **ONCHIT III: NHIN Prototypes** -- Create six prototypes of a national health information network (NHIN)
- **ONCHIT IV: Privacy and Security** -- Assess and develop plans to assess business policy and state laws that affect privacy and security practices



*Out of the lab, into practice:*  
**Integrating the Healthcare  
Enterprise**

- A Proven, Real-world solution that creates frameworks for passing health information seamlessly from application to application, system to system, and setting to setting – all available in the public domain
- IT Infrastructure, Radiology, Cardiology, Lab, Care Summaries, Cross-Enterprise orders/results, Continuity of Care in both Ambulatory and Enterprise settings, ECG, Ophthalmology, patient care devices

# Congress too!

- Frist-Clinton (S. 1262)
- Murphy-Kennedy (H.R. 2234)
- McHugh-Gonzalez (HR 747)
- Stabenow-Snowe (S. 1227)
- Grassley-Baucus (S. 1356)
- Jeffords (S. 544)
- HELP Legislation (S.1356)
- 21<sup>st</sup> Century Health Caucus



# Legislation

- S. 1355 Better Healthcare through IT Act
- S. 1262 Health Technology to Enhance Quality Act of 2005
- S. 1227 The HIT Act of 2005
- S. 1223 IT for Health Quality Act
- S. 544 Patient Safety and Quality Improvement Act
- S. 16 Affordable Health Care Act
- S. 1356 Medicare Value Purchasing Act of 2005
- S.1418 The Wired for Healthcare Quality Act
- H.R. 2234 21<sup>st</sup> Century Health Information Act
- H.R. 747 National Health Information Incentive Act of 2005

**See Legislative Crosswalk at [HIMSS.ORG](http://HIMSS.ORG)**

# Frist / Clinton Joint Statement

“We have the most advanced medical system in the world, yet patient safety is compromised every day due to medical errors, duplication and other inefficiencies. Harnessing the potential of information technology will help reduce errors and improve quality by making it more effective and efficient.”

Source: Senators Bill Frist (R-TN) and Hillary Rodham Clinton (D-NY) in a joint statement on the growing consensus on health information technology, June 30, 2005

## **Newt Gingrich and Hillary Clinton Embrace!**

### **New York Times -- *A Good Idea From the Odd Couple***

Published: May 16, 2005, Editorial

“The last thing that's likely to get noticed, amid all this potential for dish, is that the cause this odd couple was promoting in the press conference heard round the world is actually a very good one - the need to drag the health care industry out of the dark ages of scribbled notes and into the modern world of electronic record keeping...

...Shifting to electronic records that can be viewed by doctors, patients and health insurers not only will make the health care system more efficient, but also should reduce medical errors caused by sloppy records or the failure to communicate effectively.”



# The States

- Currently Tracking 150 HIT Bills Across the Nation in State Legislatures
  - Wisconsin - \$10M for **HIT loans** and grants
  - Connecticut – SB 6557 – **Mandatory eRX** and EMRs
  - Indiana – SB 566 – Establish **Medical Informatics Commission**
  - Minnesota – HB 1162 – Establishes **HIT Advisory Committee**
  - New Mexico – HB 780 – **Electronic Health Data Study**
  - ARIZONA: HB 2701 (Feb): Medical Error Reporting
- Governor's are organizing state initiatives to support HIT adoption

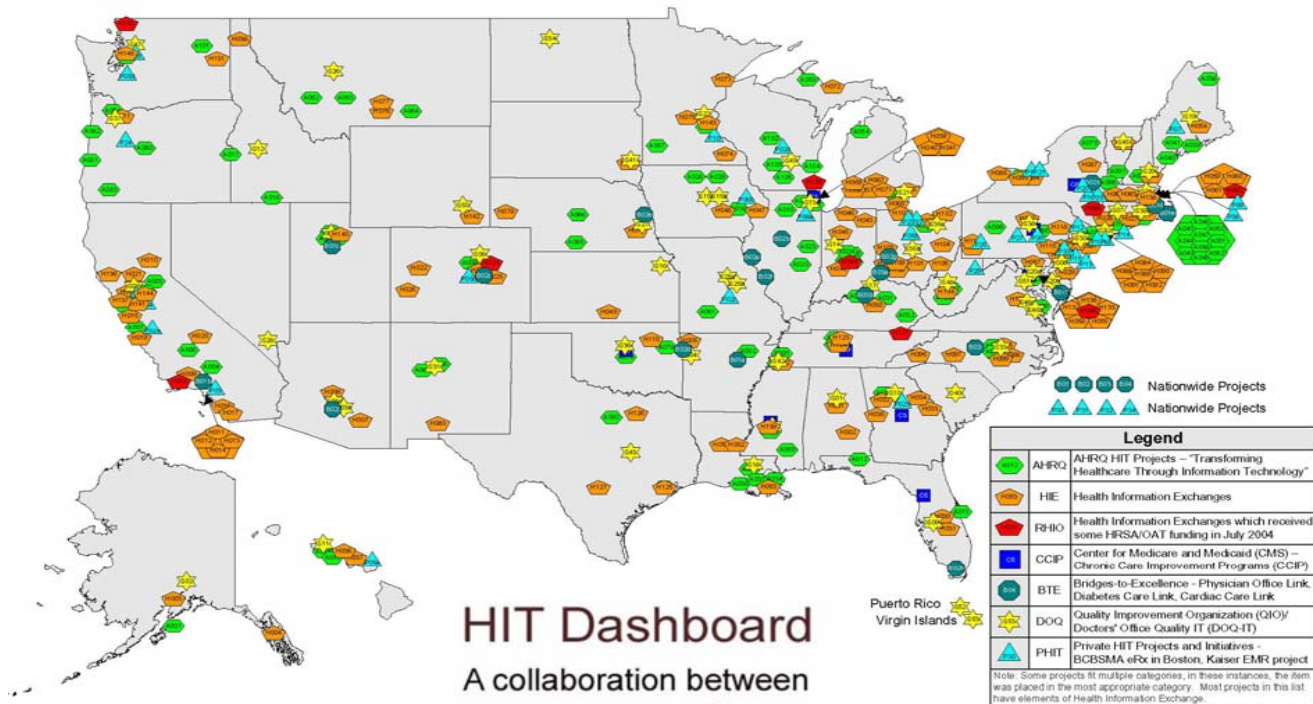
# The HIMSS RHIO Federation

Launched October 21, 2005

- Set realistic expectations for interoperable health information in the United States
- Create and disseminate tools to foster successful exchange of health information
- Conduct research that identifies best-of-breed, emerging themes and documents outcomes of RHIO execution
- Connect the people who are tasked with executing RHIOs, as well as connecting the RHIOs themselves with payers, life sciences, vendors, consultants, policy-makers, and clinicians – everyone has a stake in the game

# Current Interoperability Efforts

HIT Activity in the USA as of August 2005



**HIT Dashboard**  
A collaboration between

Legend	
	AHRO HIT Projects – "Transforming Healthcare Through Information Technology"
	HIE: Health Information Exchanges
	FHI: Health Information Exchanges which received some HRSA/OAT funding in July 2004
	CCIIP: Center for Medicare and Medicaid (CMS) – Chronic Care Improvement Programs (CCIIP)
	BTE: Bridges-to-Excellence - Physician Office Link, Diabetes Care Link, Cardiac Care Link
	DOQ: Quality Improvement Organization (QIO)/ Doctors' Office Quality IT (DOQ-IT)
	PHIT: Private HIT Projects and Initiatives - BCBSMA eRx in Boston, Karsner EMR project

Note: Some projects fit multiple categories, in these instances, the item was placed in the most appropriate category. Most projects in this list have elements of Health Information Exchange.

## It's About The Information, Not The Technology

*However, the disparity between Payer Data Sets and*

*Provider Data sets presents a systemic, underlying challenge:*

- **Payers (employers, MCOs, governments) rely upon claims data -- captures the units of care consumed and their costs, but little else (Medical Banking Too?)**
- **Providers rely upon clinical data -- helps determine why care was delivered and what were the results of that care**
- **These data sets are difficult to link, as a result, payers and providers “talk past each other”—payers look at costs, providers look at outcomes**

*“If a health improvement falls in the forest, and a payer can't see it, did it really happen?”*

## Healthcare's Data Disconnect:

*We know the Price of Everything  
and the Value of Nothing*

**One clinical example of the  
*Claims / Clinical* data disconnect...**

**(Warning: the following slide contains  
graphic imagery)**



**I'm sorry Mr. Jones, but your HMO does not pay for enemas. I'm going to have to have to slap the sh\*! outta you.**

# “I’m Not Bad, I’m Just Drawn that Way”



**Jessica Rabbit, *Who Framed Roger Rabbit*, Disney 1988**

# A Tale of Two Revolutions:

## The CDHC Revolution:

Consumer-Driven Healthcare

The Health Plan (or Bank) as

“Healthcare  
**INFOMEDIARY**”

## The E.H.R. Revolution

*“Delivering  
Consumer-Centric,  
Information-Rich  
Healthcare”*



# Evolution of Health Plans

(courtesy of Ken Yale, DDS, JD)

Administrative Services	➔	Consumer Advisor
Benefit Design	➔	Benefit Options
Risk Underwriting	➔	Risk Manager
Medical Management	➔	Well/Care Management
Claims Payment	➔	Financial Services
Provider Networking	➔	Provider Evaluator
Data Repository	➔	Data Driver

# Health Plan as “*Infomediary*”

- **Consumer choice**
- **Financial services, risk management**
- **Care coordination, collaboration**
- **Provider monitor/evaluate/reward for quality**
- **Health and disease management**
- **Evaluate health and financial outcomes**
- **Information management and transparency**
- **Consumer experience management**

# New Game / New Rules

- Can you survive as a next-generation healthcare infomediary using *Claims-based Data Alone*?
- Those players which are simultaneously able to participate in the *clinically-based E.H.R. revolution* will gain a competitive advantage.
- The worlds of Claims-based and Clinically-based information systems may be on separate tracks, but, like the transcontinental railway, those tracks can and should meet in the middle.

# PHR vs EHR

- **EHR:** “An electronic version of the patient medical record kept by doctors and hospitals. The data in the EHR are controlled by and intended for use by medical providers.”

Source: Connecting for Health (*Connecting Americans To Their Healthcare – Final Report, 7/04, chapter 2, p.13*)

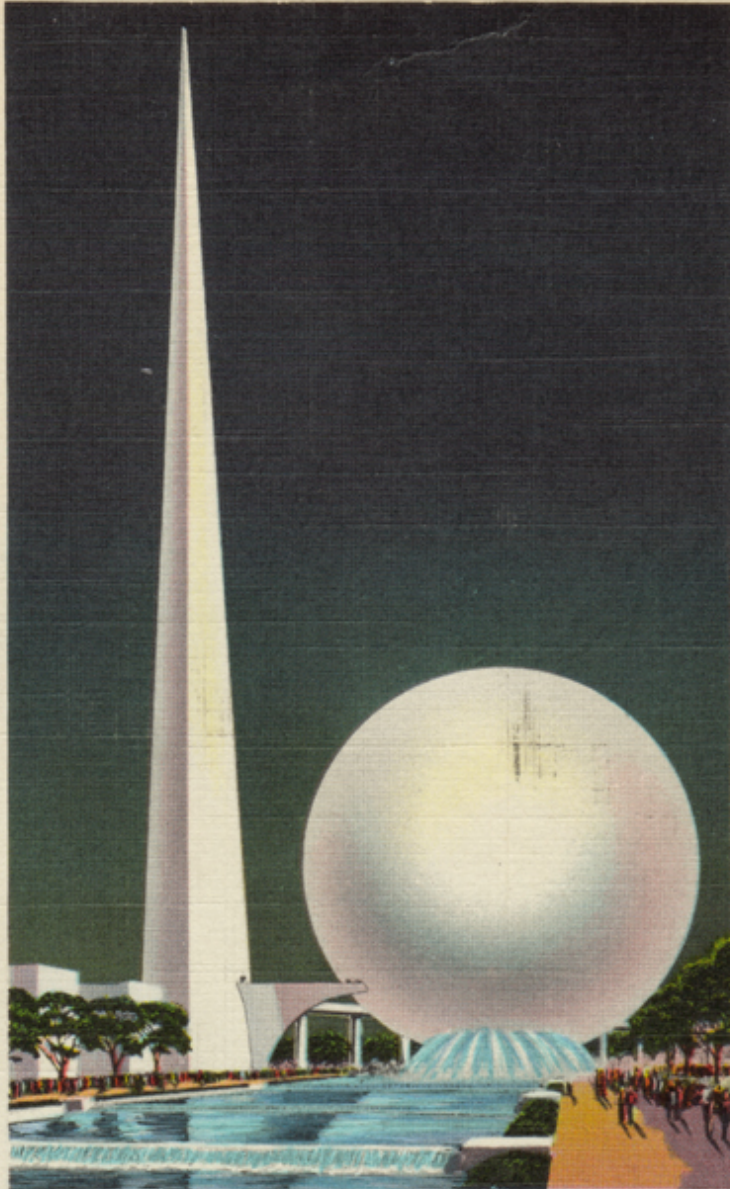
# PHR vs EHR

- **PHR:** “An electronic application through which individuals can access, manage and share their health information in a secure and confidential environment. It allows people to access and coordinate their lifelong health information and make appropriate parts of it available to those who need it.”

Source: Connecting for Health (*Connecting Americans To Their Healthcare* – Final Report, 7/04, chapter 2, p.13)

SSW

Trylon and Perisphere, New York World's Fair



# A lesson from the 1939 World's Fair:

*The city of tomorrow will be  
designed and flourish under  
the theme of...*

**“UNITY**

*not*

**UNIFORMITY”**

# *Thank You*

**Jeff David, MBA**

Director of Industry Development

HIMSS Payer and Life Sciences Initiative

[j david @himss.org](mailto:j david@himss.org) (734) 973-6116, ext.104