

**HIMSS**

*transforming healthcare through IT*

architects of change

# Why Is Universal EHR Adoption Taking So Long?

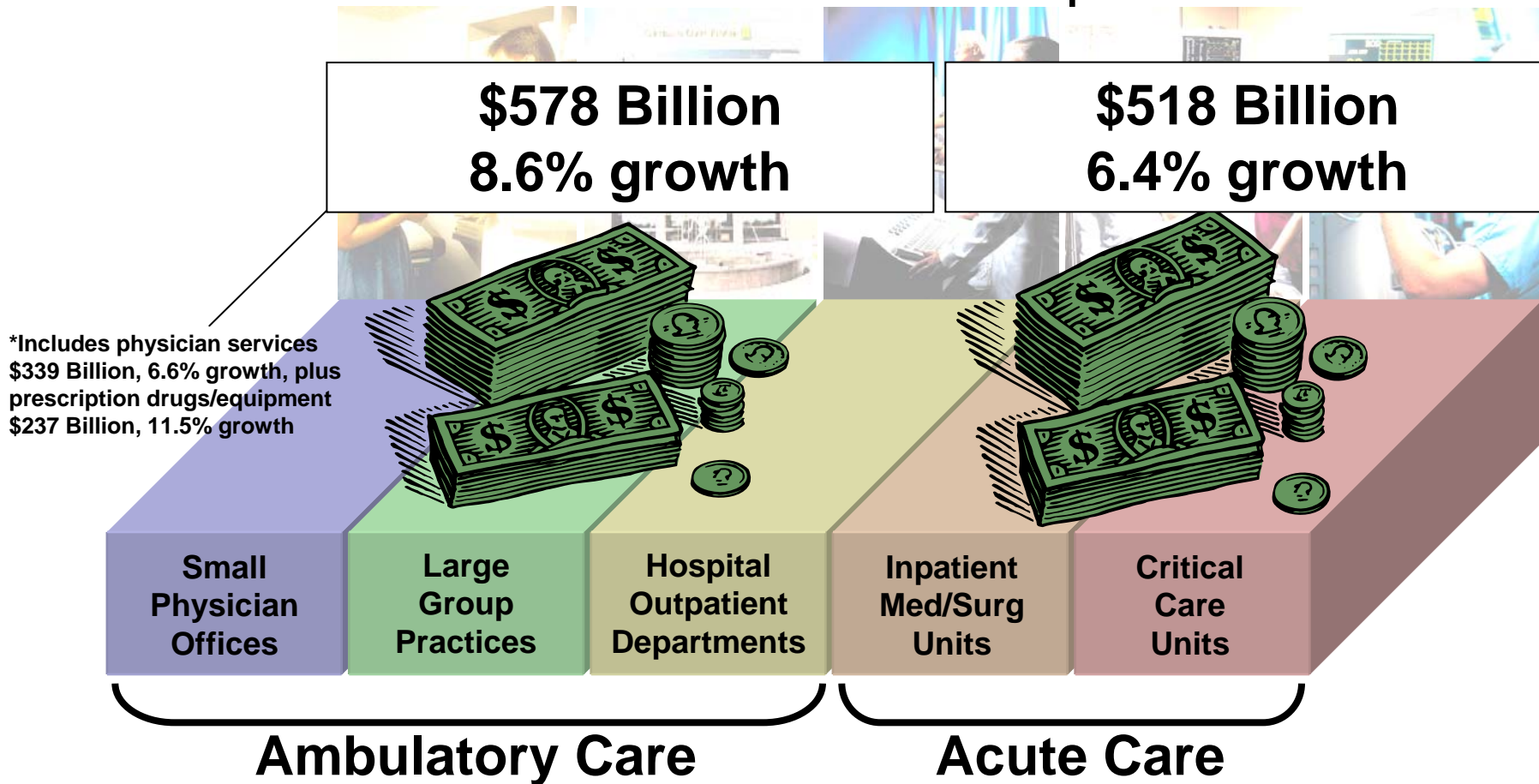
**May 22, 2006**

***Carla Smith, FHIMSS, CNM  
Executive Vice President  
HIMSS***

# US By the Numbers

- US Gross Domestic Product is \$11.7 trillion and growing by 3% annually
- Healthcare is 16% of US GDP
- Federal budget = \$1.86 trillion, of which \$642 billion is devoted to the Dept of Health & Human Services and \$40.7 billion for DOD healthcare

# Macro-economic View: Total U.S. Healthcare Expenditures



# Comparing EHRs to ATMs

- 500,000 ATMs across the United States
- 24/7 access to checking, savings, and credit accounts
- All financial institutions linked
- Information is numerically-based

# A Revolution 56 Years Long

Bank Employees handling checks - 1950



# The First Banking Computer - 1959



# Necessity: The Mother of Invention

- MICR
- OCR
- Robotic Document Sorting



# Fast Forward to 1970s

- 1973 - First ATM Launches at Chemical Bank in New York City
- 1977 – Citibank “blankets New York City with ATMs”
- 1978 – A blizzard stops the City: New Yorkers discover the ease of ATMs

## And . . .The Years Go By

- 1994 – 100,000 ATMS; nearly all within a bank's brick walls
- 1996 – Cirrus and PLUS lift ban on surcharges
- 2006 – 500,000 ATMs in every conceivable location

# The ATM's Job

1. Keep record of deposits and withdrawals for each client
2. Make current-balance info available at an instant's notice
3. Watch for overdrafts, stop payments, and held funds
4. Provide, on a strict schedule, periodic statements of the account along with the accumulated checks
5. Handle all necessary arithmetic
6. Handle the paper documents in whatever physical condition they exist after passage through many hands
7. All machine operations must be as exact as banking accounting
8. Be in constant step with hourly, daily, and monthly routines of the banking system

# How the ATM Does its Job

- ATM Card
- Personal ID Number (PIN)
- Bank Code
- Country Code
- Branch Code
- Location Code
- Account Code

# You Think 56 Years is Long?

- Care delivery is language-specific
- Though consuming much expense, health facilities are not well-financed
- No single patient identifier
- ROI still emerging for Healthcare IT
- Privacy issues stricter than for banking

# Hairball #1: Vocabulary

- 143 listings in the “Unified” Medical Language System
- 13 nursing terminologies alone
- Plus, patients speak a different language than clinicians

## Hairball #2: A Cottage Industry

- 567,000 practicing physicians in the US
- ~ 82,000 (14.5%) are solo practitioners
- 50% of practicing physicians are in practices of four or less
- That means thousands and thousands of file cabinets with paper records

# Hairball #3: Finding the Right Records

- Congress stopped HHS work on the Unique Patient Identifier
- Will a “Record Locator Service” work?
- Would a “Voluntary” Identifier work?

# Hairball #4: Authentication

- Banking allows for 6% fraud – healthcare doesn't have that luxury
- 5,000 Maria Gonzalez's in Los Angeles – how does a clinician know s/he found the right records?
- Authentication has three options:
  - Something a person knows (password)
  - Something a person has (ATM card)
  - Something a person is (fingerprint)

# Hairball #5: The Economics

- The majority of care is delivered in ambulatory settings
- Those are small business owners
- Limited capital available for investing in technology
- ROI not widely disseminated; little understood

## Influencers Know There's a Problem

- JAMA study found that missing information from 1,614 charts could, 44% of the time, adversely impact patient's well-being
- Institute for Safe Medication Practices found that pharmacists make over 150M calls to physicians for clarification of illegible prescriptions/year and e-prescribing can reduce follow-up calls between pharmacists and doctors by over 50%

## Influencers Know There's A Problem

- RAND found that patients receive appropriate care only 55% of the time
- Preventable healthcare-acquired infections cost \$4.5B/year and contribute to over 88,000 deaths
- CDC reports that U.S. patients are prescribed improper medications in about 1 out of every 12 physician visits and that 16.7M elderly patient visits to physicians result in Rx errors yearly

# The Patient Safety Reality

“Though substantial proportions of the public and practicing physicians report they have had personal experience with medical errors, neither group has a sense of urgency.”

## How Can IT Impact These Stats?

- CITL – savings of \$77.8B yearly if health information exchange existed in the U.S.
- CITL – savings of \$44B yearly with existence of widespread CPOE
- RAND – estimates savings 3-5% above CITL study
- Thru e-prescribing, pharmacists could cut their calls to physicians by 50%
- Patients would have access to their records and informed input into their care
- Evidence-based medicine or care guidelines could improve the quality of care

# Glimmers of Hope

Evanston Northwestern Healthcare,  
Evanston, IL

- Med administration delays down by 70%
- Omitted administration of drugs down 20%
- Mammogram test results take one day, down from as long as three weeks
- Cardiographics reports in one day, down from as many as 10 days
- Spent \$7.5M on training and \$35M capital on hardware, software, and implementation

# Glimmers of Hope

Maimonides Medical Center  
Brooklyn, New York

- Improved compliance with problem lists from 67% to 97%
- Improved allergy documentation from 88% to 100%
- 95% pain assessment documentation
- Improved medication list documentation from 67% to 100%

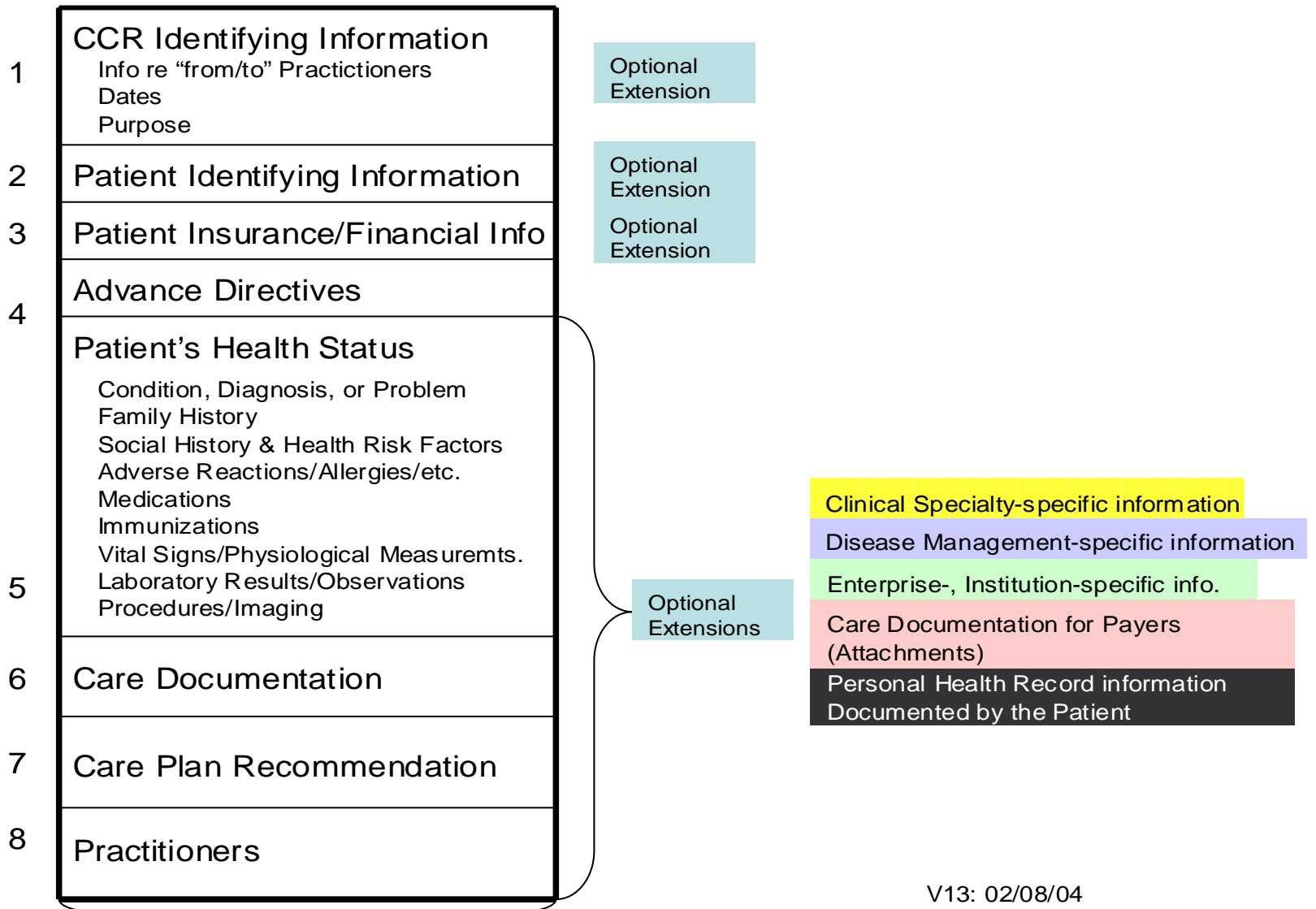
# Maimonides- Medical Malpractice

- 8% of malpractice law suites are obstetrics; represent 36.5% of payouts averaging \$919,254 per payout
- Insufficient, lack of documentation – eliminated
- Missing medical records, documentation – eliminated
- Failure to note clinical information (e.g., lab values, diagnostic tests) – eliminated
- Failure / delay in ordering tests – eliminated
- Results: Malpractice premiums reduced
  - 2002 - \$1.15 million , 2003 - \$1.44 million , and 2004 - \$1.75 million

# Safety and Quality Opportunities

- Healthy States
- Pre & Perinatal
- Acutely Ill
- Chronic Conditions
- Stable Disability
- Near Death
- End Organ Failure
- Frail Demise

# Glimmers of Hope: The CCR



Mandated Core Elements of the CCR

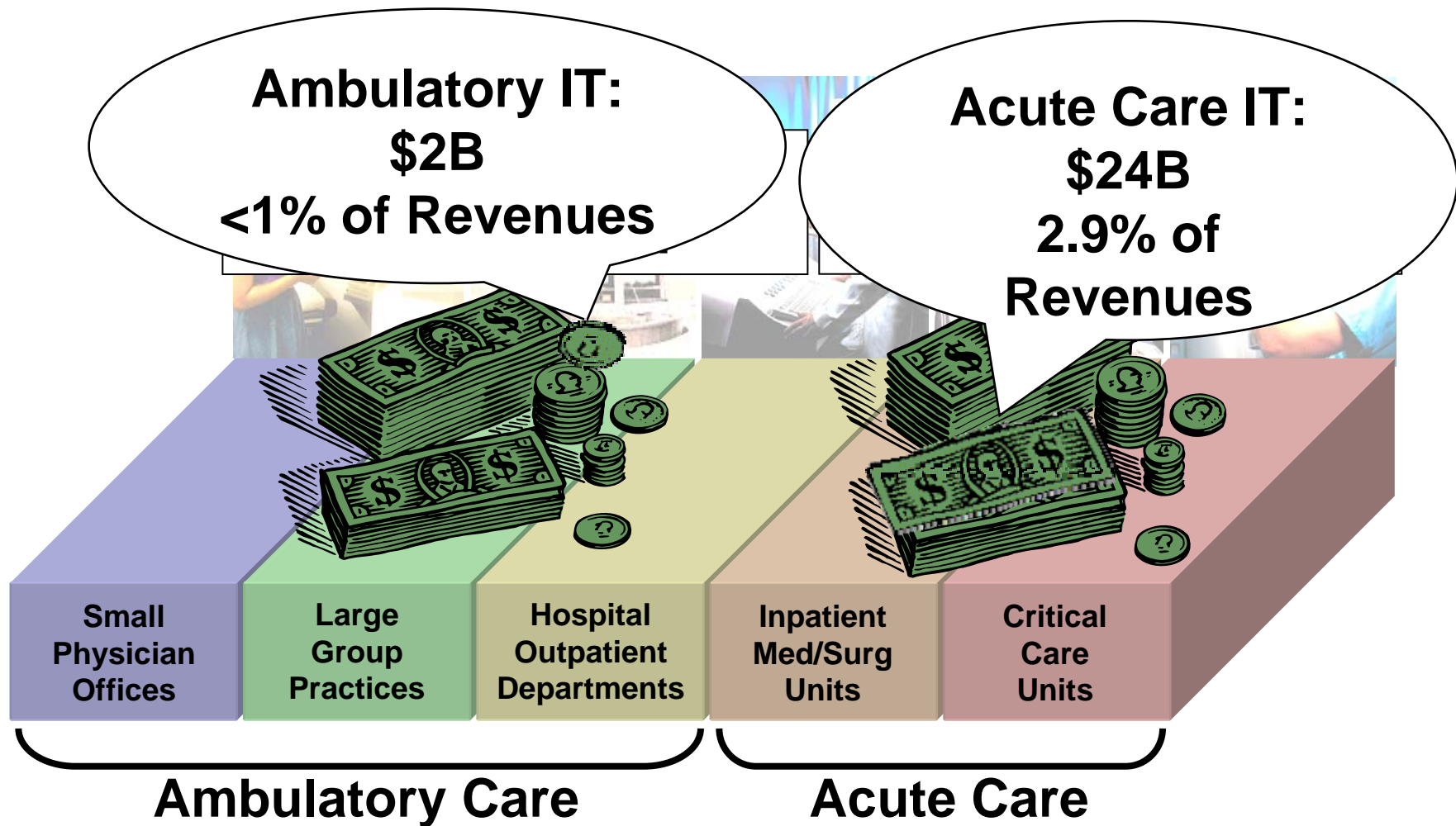
# Problem & Solution = Complexity

“You’re writing a contract for a product that’s impossible to describe, that will change over time, will need to be renegotiated, that will make you dependent upon the provider and for which termination is not an option.”

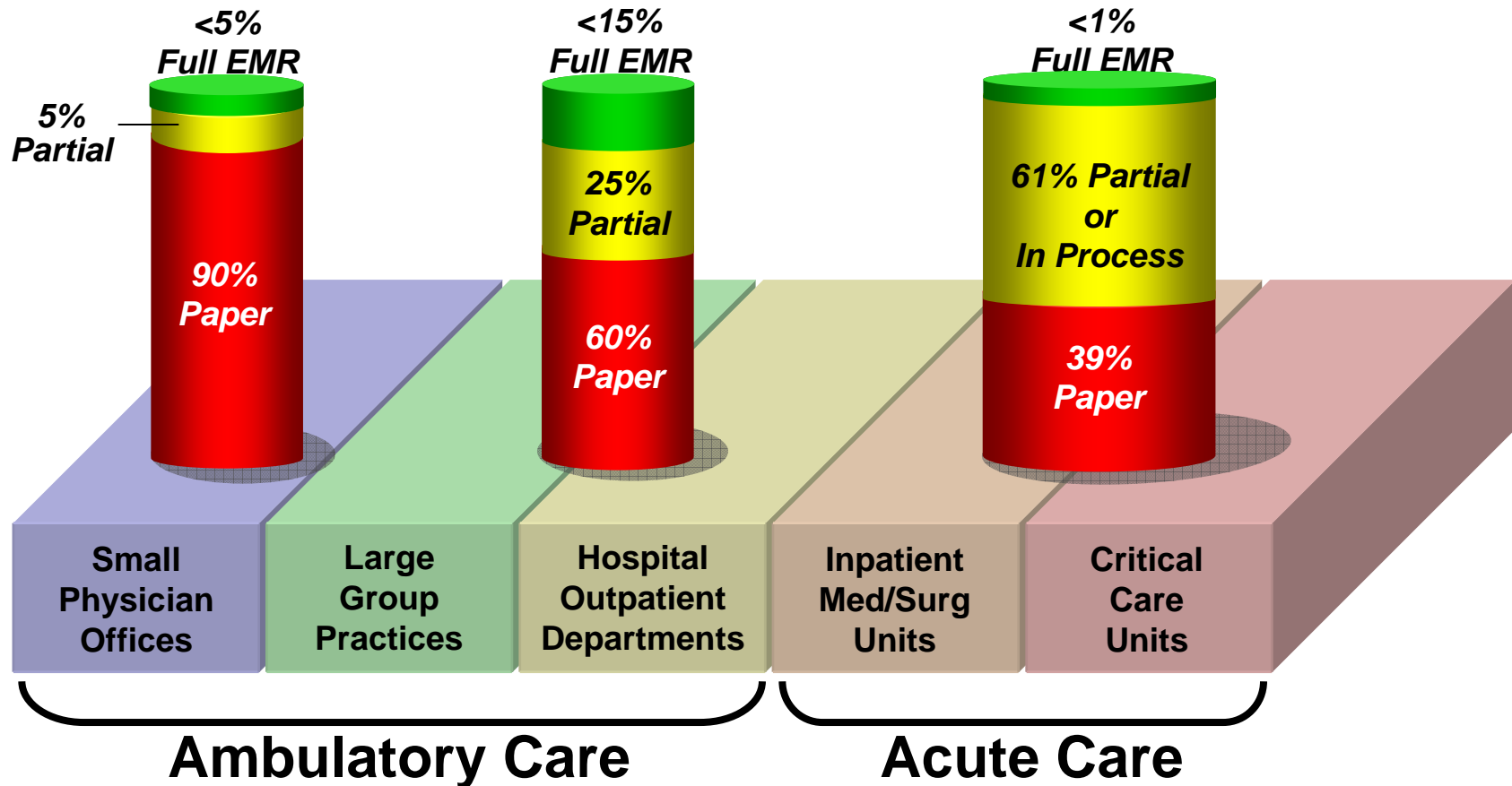
Paul Roy, Partner

Mayer, Brown, Rowe, & Maw LLP

# U.S. Healthcare IT Investment



# State of EMR Adoption



## President Bush's Goal

“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.”

*April 26, 2004*

## Goal Reaffirmed in 2005

“ . . .most Americans to have electronic health records within ten years. The President’s vision would create a personal health record that patients, doctors and other health care providers could securely access through the Internet no matter where a patient is seeking medical care.”

June 6, 2005 HHS Press Release

## And, again in 2006

“We will make wider use of electronic records and other health information technology, to help control costs and reduce dangerous medical errors.”

Source: President Bush’s State of the Union Address,  
January 31, 2006

## HHS Secretary Mike Leavitt:

“When I wake up each morning, I think three things: HIT, HIT, HIT.”

# What's Driving Legislation & Administration Activity?

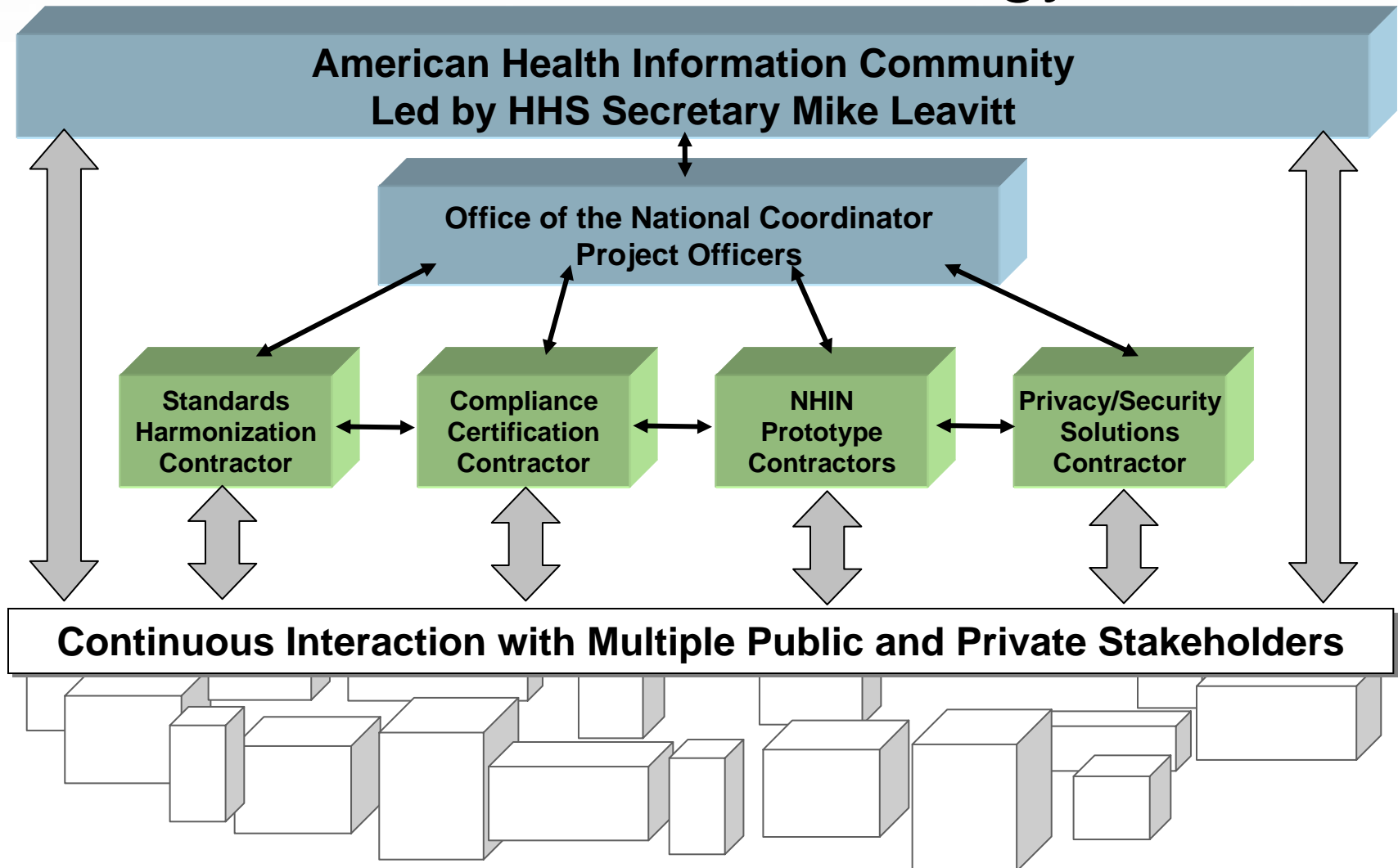
Quality

Safety

Costs

Bio-preparedness

# HHS Health IT Strategy



## Proposed Rule Changes

- Proposed Changes to Physician Self Referral and Anti Kickback Act Regulations:
  - CMS Changes to Physician Self Referral (Stark)
  - OIG Changes to Anti Kickback Act Safe Harbors
  - Many common provisions; seeking industry on donation caps, fraud avoidance measures, and best practices for ensuring interoperability.

It's 2 a.m. You're here.



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 • MFDDecision MedSeek

# Health-related Bills Incorporating HIT Introduced and/or Signed into Law between 1776 - 1996

One: HIPAA

# Health-related Bills Incorporating HIT Signed into Law between 1997 - 2005

## Two: Medicare Modernization Act & Patient Safety Act

# Current Federal Legislation - HOUSE

- National Health Information Incentive Act of 2005 (H.R. 747)
- Murphy/Kennedy: 21st Century Health Information Act of 2005 (H.R. 2234)
- Preserving Patient Access to Physicians Act of 2005 (H.R. 2356)
- Medicare Value-Based Purchasing for Physicians' Act of 2005 (H.R. 3617)
- Murphy: Medicaid Transaction Grant Act of 2005 (H.R. 4142)
- Johnson: Health Information Technology Promotion Act of 2005 (H.R. 4157)
- Gingrey: Assisting Doctors to Obtain Proficient and Transmissible Health Information Technology (ADOPT HIT) Act (H.R. 4641)
- Wired for Health Care Quality Act (H.R. 4642)
- Porter: Federal Family HIT Act (H.R. 4859)

# Current Federal Legislation - SENATE

- Affordable Health Care Act (S.16)
- Jeffords: Patient Safety and Quality Improvement Act of 2005 (S. 544) - PASSED
- Preserving Patient Access to Physicians Act of 2005 (S. 1081)
- Information Technology for Health Care Quality Act (S. 1223)
- Stabenow/Snowe: The Health IT Act (S. 1227)
- Health Technology to Enhance Quality Act of 2005 (S. 1262)
- Medicare Value Purchasing Act of 2005 (S. 1356)
- Enzi/Kennedy/Frist/Clinton: Wired for Healthcare Quality Act (S. 1418)
- Healthy America Act of 2005 (S. 1503)
- National Medical Error Disclosure and Compensation (MEDiC) Act of 2005 (S. 1784)
- Critical Access to Health Information Technology Act of 2005 (S. 1952)

# What's on the Horizon?

- Changes in Federal Regulations
- Significant State level activities
- Privacy issues could derail it all
- 2006 National Health IT Week in Washington, D.C.

# How can you learn more?

[www.himss.org](http://www.himss.org)

- Legislative Action Center
- State Legislative Tracker
- Davies Award program
- Integrating the Healthcare Enterprise

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# Thank You!

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