Healthcare Information Technology (HIT)

Transforming US Healthcare and Pharmaceutical Business

HIT Summit, 10/21/2004

Craig Richardson, Vice President

Johnson & Johnson Health Care Systems



Drivers For Change

External/Environmental Pressure

- Rising healthcare cost
- Re-importation
- Uninsured
- Medical errors

Pharma Internal Pressure

- Pricing
- Diminishing rate of return on marketing and sales
- R&D: high cost & long cycle time

New Healthcare

Outcomes/

Evidence-based

Medicine

Electronic Health

Information/Data

Pressure Is On...

"The 21st century health care system is using a 19th century paperwork system.... These old methods of keeping records are real threats to patients and their safety and are incredibly costly.... Within 10 years, every American must have a personal electronic medical record."

--- President George W. Bush, American Association of Community Colleges Annual Convention, 4/26/2004

"In healthcare, if we adopt a technology that's 20 years old, we call it 'forward thinking'... If we were serious, in 3 years, we should have a completely information technology-based medical system... You can't have a free market without information"

--- Newt Gingrich, former Speaker of the House

Developing the New Approach Incentives, Standards, Interoperability



Developing the New Approach: *Incentives*

External/Environmental Pressure

- Rising healthcare cost
- Re-importation
- Uninsured
- Medical errors

Pharma Internal Pressure

- Pricing
- Diminishing rate of return on marketing and sales
- R&D: high cost & long cycle time

1. Incentives

- Funding for public infrastructure
- Align stakeholder interests

New Healthcare

Outcomes/

Evidence-based

Medicine

Electronic Health

Information/Data

2014?

Incentives: Unprecedented Progress

July 2004:

The Foundation for eHealth Initiative announces the selection of 9 community awards totaling \$2 million to improve connectivity, reduce medical errors, an create more efficient healthcare for patients

April 2004:

Tommy Thompson announces that Medicare disease management fees wil be contingent on outcomes and cost savings measurements November 2003:

January 2004:

WellPoint unveils \$40M plan to furnish 19,000 doctors with free computers and handheld PDAs to do electronic prescribing and claims submission

November 2003:

American Academy of Family Physicians (AAFP) forms alliances with major Electronic Medical Record (EMR) vendors to make EMR affordable to their members

AHRQ announced a \$41 million grant program, "Transforming Healthcare Through Information Technology"

NAHIT joins HealthTech in urging feds to finance health IT infrastructure via revolving loan fund program

November 2002:

Integrated Healthcare Association of California launches a statewide pay-forperformance initiative that rewards physicians based on clinical quality, patient satisfaction and investment in IT

Developing the New Approach: *Standards*

External/Environmental Pressure

- Rising healthcare cost
- Re-importation
- Uninsured
- Medical errors

Pharma Internal Pressure

- Pricing
- Diminishing rate of return on marketing and sales
- R&D: high cost & long cycle time

1. Incentives

- Fund public infrastructure
- Align stakeholder interests



2. Standards

- Building block for common infrastructure
- Facilitate adoption

New Healthcare

Outcomes/

Evidence-based

Medicine

Electronic Health

Information/Data

2014?

1-3 Years

Standards: Unprecedented Progress

April 2004:

Electronic Health Record **Functional Model passes** HL7 second ballot only nine months after HHS commissioned IOM and HL7 to develop the standard December 2003:

AHRQ 2004 budget includes \$12 million for data standards development and adoption

IOM publishes its third report November 2003: that calls for data standards & national health information infrastructure; recommends federal leadership and funding

National Library of Medicine (NLM) licensed SNOMED CT (\$32.4 million) for free distribution in the US

July 2004:

Tommy Thompson and CMS commit to accelerating eprescribing standard (EOY '04 vs. Sept. '05 in MMA)

December 2003:

President Bush signs into law the Medicare Modernization Act, which establishes eprescribing and chronic care improvement programs, requires the development of a uniform e-prescribing standard and provides grants to physicians to implement related technology

March 2003:

HHS, DoD and VA announces first set of health care standards to be adopted across the federal government

Developing the New Approach: Interoperability

External/Environmental Pressure

- Rising healthcare cost
- Re-importation
- Uninsured
- Medical errors

Pharma Internal Pressure

- Pricing
- Diminishing rate of return on marketing and sales
- R&D: high cost & long cycle time

1. Incentives

- Fund public infrastructure
- Align stakeholder interests



2. Standards

- Building block for common infrastructure
- Facilitate adoption



3. Interoperability

 Data sharing and comparability builds evidence and tracks outcomes **New Healthcare**

Outcomes/

Evidence-based

Medicine

Electronic Health

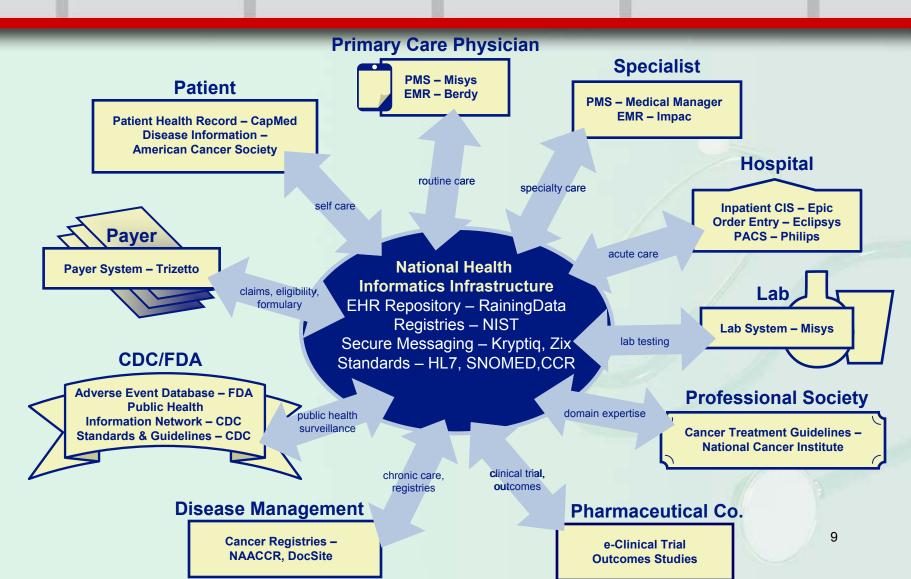
Information/Data

2014?

1-3 Years

1-5 Years

Interoperability: Data Sharing



Developing the New Approach

External/Environmental Pressure

- Rising healthcare cost
- Re-importation
- Uninsured
- Medical errors

Pharma Internal Pressure

- Pricing
- Diminishing rate of return on marketing and sales
- R&D: high cost & long cycle time

1. Incentives

- Fund public infrastructure
- Align stakeholder interests



2. Standards

- Building block for common infrastructure
- Facilitate adoption

2

3. Interoperability

 Data sharing and comparability builds evidence and tracks outcomes

☑ 3

5-10 Years

New Healthcare

Outcomes/

Evidence-based

Medicine

Electronic Health

Information/Data

2014?

2004

1-3 Years

1-5 Years



R&D and Outcomes Studies

Study Design

Improve study design, site identification and investigator targeting

Recruitment

 Decision support systems at point of care check patient eligibility for trials and facilitate recruitment

Documentation

 Better integration with physicians' regular work flow means no separate processes and reduces double entry and errors

Data

 Access to rich, real-time, standardized, HIPAA-compliant electronic patient data



Improve quality of trials/studies; reduce cost and cycle time

Sales & Marketing

- Access to rich clinical and outcomes data allow pharma to
 - Support the transition to "value" selling
 - Become more strategic about pricing and more accurate in forecasting
 - Offer new services (product co. → service co.)
- Evidence, outcomes data and guidelines rapidly disseminated to point of care
 - Reduce dependency on large sales force
 - But require more collaborative approach in developing evidence, guidelines, etc.
- Electronic connectivity to physicians creates a channel that supplements traditional sales & marketing approaches



Improve efficiency of sales & marketing





Reaching the Tipping Point: Big Names! Large Investments!

- GAO reports that HHS has about 19 major health information technology initiatives, totaling about \$228 million
- Kaiser Permanente invests \$1.8 billion over next 3 years to implement electronic medical records (EMR)
- Sutter Health Network, a CA health system with 26 hospitals and 9 physician groups, plans to spend \$1.2 billion in the next 10 years to create a patient database, an EMR system, electronic systems for prescription and lab information, as well as an electronic archive for digital pictures such as X-rays and CT scans
- IBM infuses an estimated \$250 million of investments into its healthcare business over next 3 years
- WellPoint, partnering with Microsoft and CGEY, unveils a \$40 million plan to furnish 19,000 doctors with free computers and handheld PDAs to do electronic prescribing and claims submission

Reaching the Tipping Point: Escalating Legislative Interest

- Medicare Modernization Act (MMA)
 - Establishes e-prescribing and requires the establishment of a uniform e-prescribing standard by 2008 and provides grants to physicians to implement related technology
 - Update: CMS will propose a regulation that requires the first set of eprescribing standards in the implementation of the Medicare drug benefit in 2006; Plan sponsors (MCOs, PBMs) will be required to offer e-prescribing
- The Quality, Efficiency, Standards, Technology for Healthcare Transformation Act
 - Developed by Patrick Kennedy (D-RI) and former House Speaker Newt Gingrich (R-GA)
- The Health Information for Quality Improvement Act
 - Proposed by Hillary Rodham Clinton (D-NY)

Reaching the Tipping Point: Unprecedented Government Leadership

President's Support

- Every American has a personal EMR in 10 years
- Creates a new, sub-Cabinet level post at the HHS
- Doubles demo project funding to \$100 mil in his FY-'05 budget

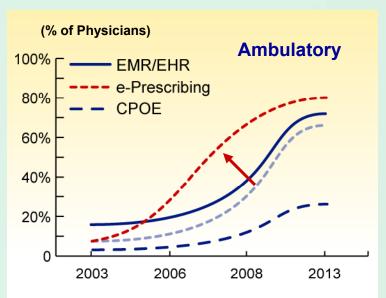
■ John Kerry's Health Plan

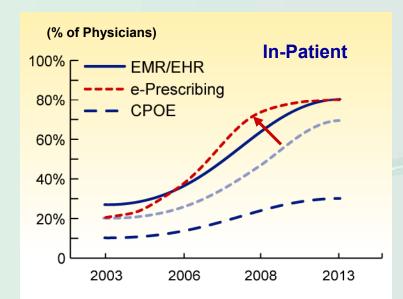
- All Americans have secure, private EMR by 2008
- Rewards healthcare providers' investment in HIT
- Provide economic incentives for e-prescribing

Government Agencies

 David Brailer, NHII Coordinator, developed HIT Strategic Framework in record 76 days and obtained support for the Framework from officials from government agencies (CMS, CDC, VA, DoD) and executives of key stakeholders (Cisco, GE, Leapfrog, BCBS, AMA, AAFP, AARP)

Reaching the Tipping Point: Accelerating Adoption





7/21/04: CMS announced its intention to accelerate eRx standard and mandate payors to offer eRx

Reaching the Tipping Point

External/Environmental Pressure

- Rising healthcare cost
- Re-importation
- Uninsured
- Medical errors

Pharma Internal Pressure

- Pricing
- Diminishing rate of return on marketing and sales
- R&D: high cost & long cycle time

1. Incentives

- Fund public infrastructure
- Align stakeholder interests



2. Standards

- Building block for common infrastructure
- Facilitate adoption

2

3. Interoperability

 Data sharing and comparability builds evidence and tracks outcomes

☑ 3

New Healthcare

Outcomes/

Evidence-based

Medicine

Electronic Health

Information/Data

Tipping Point