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Provider Connectivity Beyond Payers & Clearinghouse's: The Real Need

Lee Barrett

Lee.Barrett@claredi.com

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claredi

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Topics

- ◆ HC Market Background
- ◆ Strategic Framework
- ◆ Need for Standards
- ◆ The HIPAA Factor
- ◆ The Need for Interoperability
- ◆ Understanding the Building Blocks & Business Drivers
- ◆ The Provider Challenges
- ◆ Future Architectural Considerations
- ◆ Understanding Your Next Steps

Healthcare in America is a Behemoth

- ◆ Caregivers
- ◆ Organized care-delivery entities
- ◆ Local / State / National authorities
- ◆ Health Services (e.g. - freestanding labs)
- ◆ Public health surveillance
- ◆ Medical research
- ◆ Regional / socioeconomic care disparities
- ◆ Payers
- ◆ Employers
- ◆ Pharmaceutical industry
- ◆ HIT - vendors, infrastructure, integration, solutions, tools
- ◆ Electronic and paper-based information workflow
- ◆ LHIs
- ◆ Standards & Interoperability groups



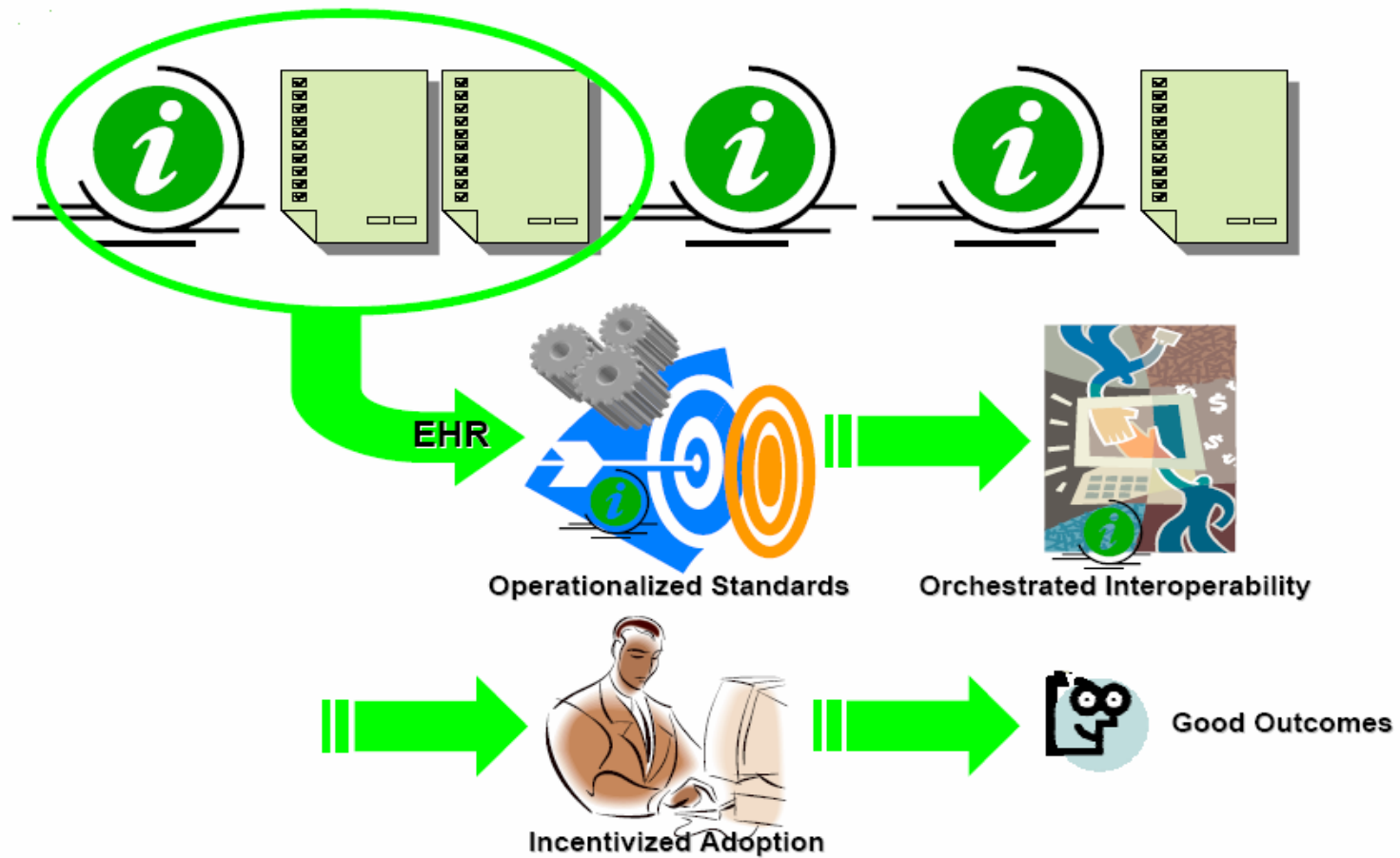
Market Failure Barriers and Challenges

- ◆ Payers (including Medicare) don't reward efficiency and quality
 - Negative business case for typical IT adopter
 - Significant HER adoption gap based on organization size
- ◆ Market failure from negative network externalities
 - First mover disadvantage for health IT buyers
 - Short-term losses from adoption of standards
- ◆ High failure risk for business reengineering
 - Failure rate for EHR implementation >30%
 - Variable availability of expertise
- ◆ Limited capacity for interoperability
 - Standards are not rigorous and lag behind commercialization
 - No viable health information exchange infrastructure

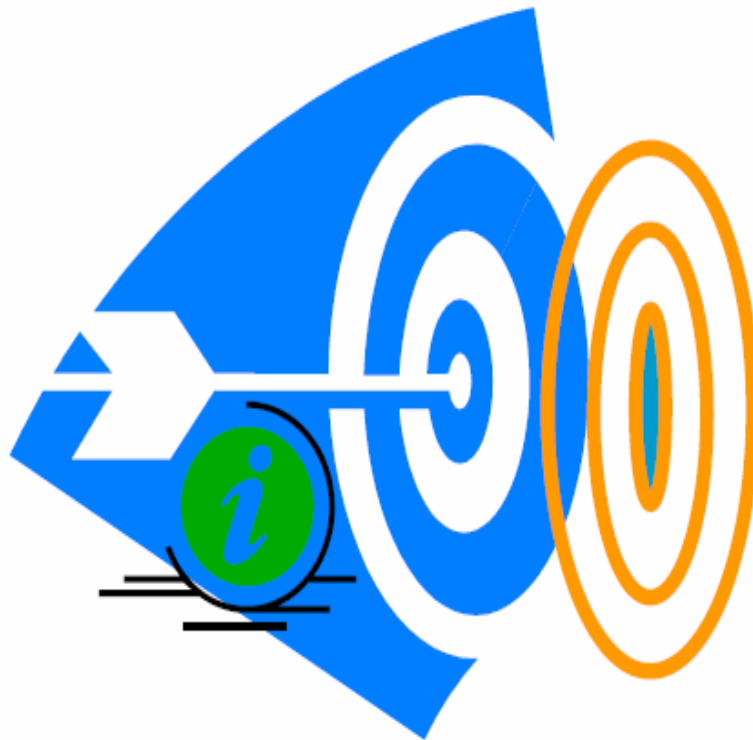
Strategic Framework

- ◆ Goal 1: Inform Clinical Practice
 - Incentivize EHR adoption
 - Reduce risk of EHR investment
 - Promote EHR diffusion in rural and underserved areas
- ◆ Goal 2: Interconnect Clinicians
 - Foster regional collaborations
 - Develop and national health information network
 - Coordinate federal health information systems
- ◆ Goal 3: Personalize Care
 - Encourage use of Personal Health Records (PHR)
 - Enhance informed consumer choice
 - Promote use of tele-health systems
- ◆ Goal 4: Improve Population Health
 - Unify public health surveillance architectures
 - Streamline quality and health status monitoring
 - Accelerate research and dissemination of evidence into practice

The Electronic Health Record



Standards



- Various standards authorities are publishing standards for different elements of healthcare
- Adoption is varied, with vendors pledging support, but often falling short of real utility
- Niche market has developed in systems integration due to inconsistent implementation of standards, or disregard of them
- The business case for incurring switching costs is often muddled at best: short-term narrow objectives are enemy of long-term, broad interoperability goals

Operationalized Standards



- ◆ Technical and data standards codified in the national health information network
- ◆ Business, legal, and privacy standard models codified in the regional health information organizations
- ◆ Implementation standards codified in product and implementation certifications

The HIPAA Factor

Transactions, Code Sets and Identifiers

Standard transaction sets are defined for the following:

- Health claims or equivalent encounter (X12N 837)
- Enrollment and disenrollment in a health plan (X12 834)
- Eligibility for health plan - inquiry/response (X12N 270-271)
- Healthcare payment and remittance advice (X12N 835)
- Health plan premium payments (X12 820)
- Health claim status - inquiry/response (X12N 276-277)
- Coordination of benefits (X12N 837)
- Referral certification (X12N 278)
- Referral authorization (X12N 278)
- NCPDP - pharmacy transaction set
- First report of injury (open)
- Health claims attachments (open)

Standard Transaction Record

Code Sets

ICD-9-CM (diagnosis and procedures)
 CPT-4 (physician procedures)
 HCPCS (ancillary services/procedures)
 CDT-2 (dental terminology)
 NDC (national drug codes)

Identifiers

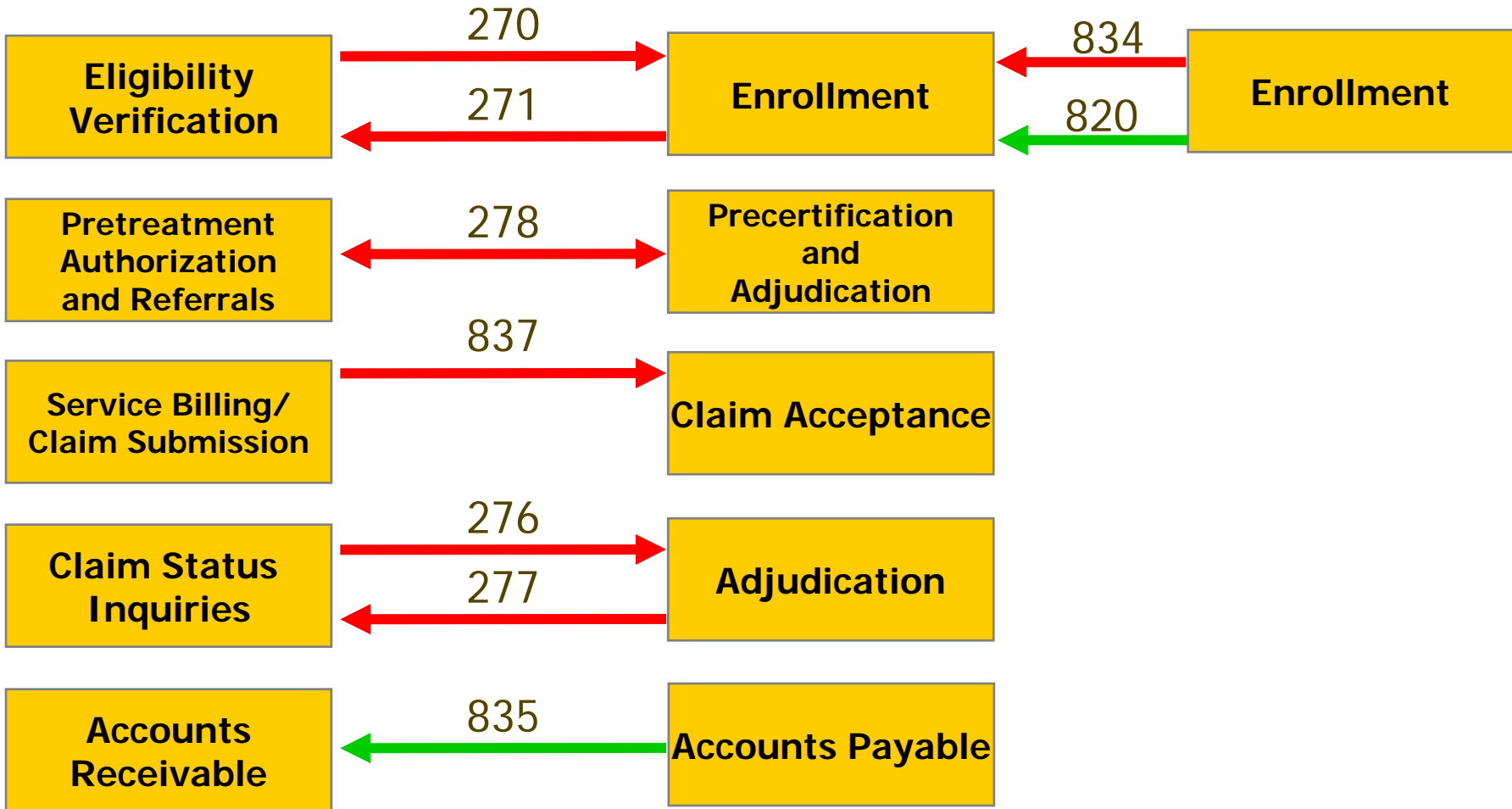
Providers
 Employers
 Health plans (open)
 Individuals (open)

ANSI X12 Electronic Transaction Standards

Providers

Plans/Payers

Employers

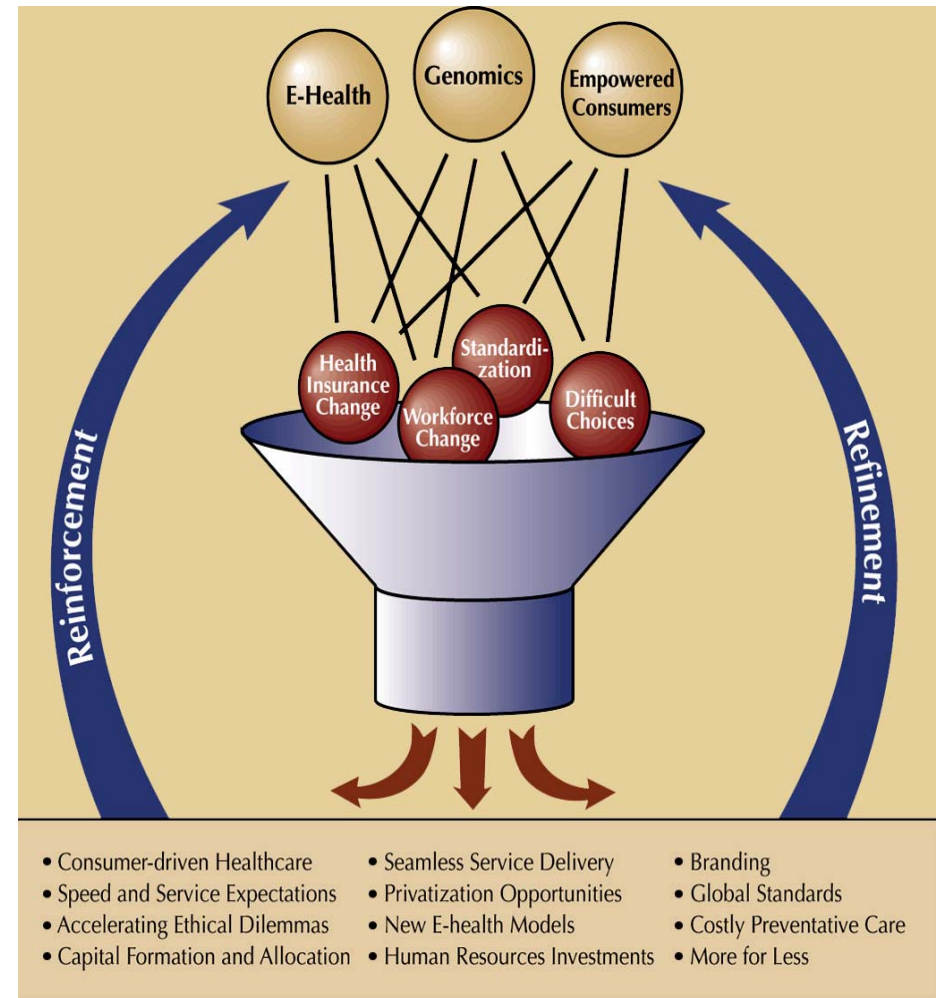


A Context for Change

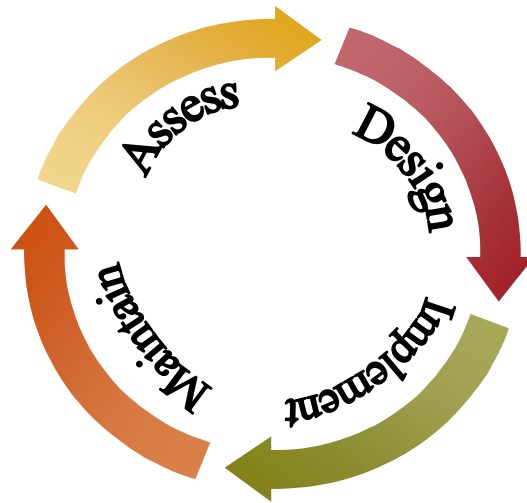
HIPAA intersects with three key industry drivers:

- **E-Health** - transformation in health care to private, personalized, interactive and secure use of Internet
- **Genomics** - breakthroughs will shift system from cure to prevention while placing an even higher premium on security and privacy
- **Consumerism** - empowered consumers create impatient patients demanding information and access

HIPAA endorses exchanges of PHI via the internet with appropriate privacy & security controls.



Security Standards



Security Life Cycle

◆ HIPAA Security Standard Concepts:

- Comprehensive
- Technology-neutral
- Scalable

◆ Four Categories of Security Requirements:

- Administrative procedures
- Physical safeguards
- Technical security services
- Technical security mechanisms

HIPAA Privacy Requirements



- ◆ Covers personal health information (pHI) stored or transmitted in any form or medium, electronic, paper, oral
- ◆ General Requirements:
 - Defines Protected Health Information (PHI)
 - Mandates Notice of Privacy policies
 - Requires minimum necessary disclosure
 - Requires patient consent for treatment, payment, routine operations
 - Requires authorization for non-routine use
 - Extends HIPAA protections through business associate contracts
 - Requires Designated Privacy Officer for each covered entity

Interoperability



- ◆ There is a recognition that standards are necessary but insufficient for interoperability
- ◆ There are few examples of working interoperability models, though interest is high
 - There is no dominant design
- ◆ Several in-house debates have arisen and slowed progress on a unifying strategy (e.g. - central data storage, universal identifiers)
- ◆ Attempts to date have been bottom-up LHI-like efforts to define interoperability locally, and stitch together nationally as needed

Interoperability Considerations

Interoperability



FSP GROUP INC.
FORTRON/SOURCE

FSP300601U (N) CB

MODEL NO: FSP300-601U

AC INPUT: 100-240V~, 6-3A, 60-50Hz
 MAX. OUTPUT POWER: 300W
 DC OUTPUT: +3.3V = 20.0A (ORG), +5V = 25.0A (RED), +12V = 2.0A (PURP), -5V = 0.5A (WHITE), -12V = 0.5A (BLACK)
 P.G. SIGNAL (GRAY), GROUND (BLACK)
 (+3.3V & +5V = 157W Max)

WARNING! HAZARDOUS AREA
 SAFETY INSTRUCTIONS:
 DO NOT REMOVE THE COVER.
 NO SERVICEABLE COMPONENTS INSIDE.
 REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

WARNUNG! GEFAHRENZONE
 SICHERHEITSHINWEISE:
 VOR DEM ÖFFNEN DES GERÄTES NETZSTECKER ZIEHEN.
 KEINE SERVICE RELEVANTEN BAUTEILE ENTHALTEN.
 SERVICEARBEITEN SOLLTEN NUR VON AUTORISIERTEM FACHPERSONAL DURCHFÜHRT WERDEN.

FC Tested With FC

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Orchestrated Interoperability

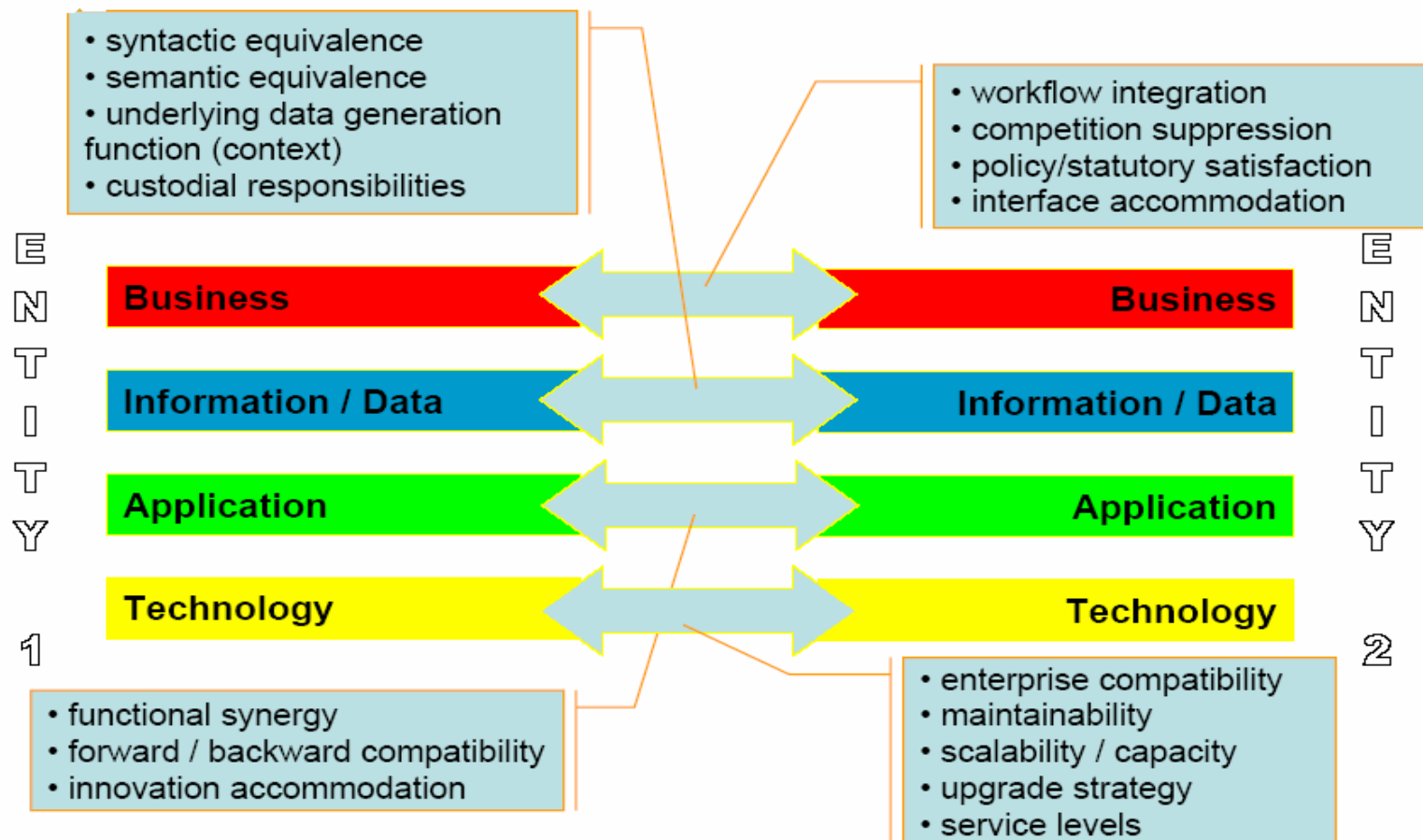


- ◆ Information flow via the national health information network
- ◆ Product certification that includes interoperability through the NHIN
- ◆ Implementation guidance and testing coordinated through regional health information organizations

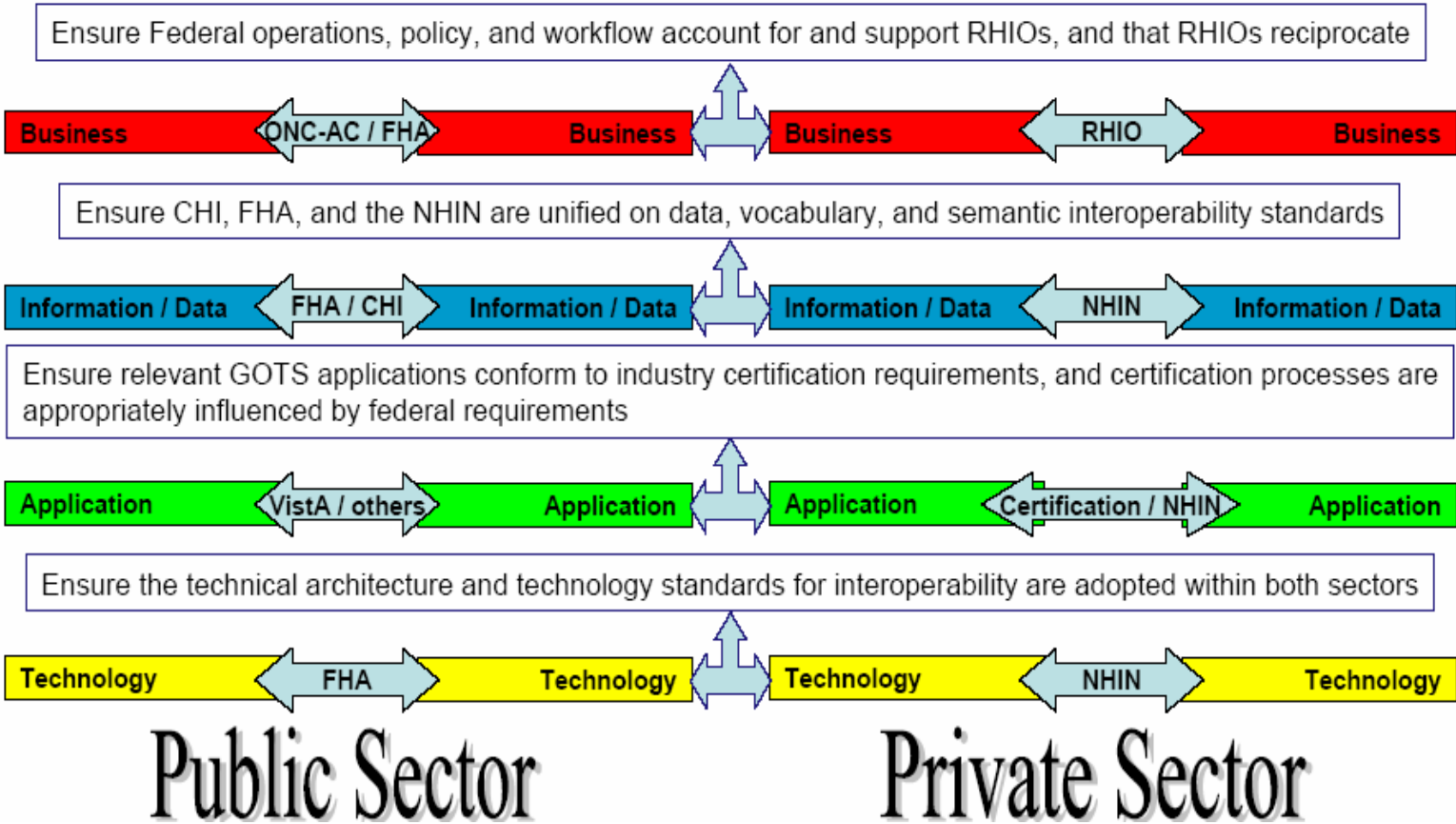
Interoperability Considerations

- ◆ Public
- ◆ Private
- ◆ Public/Private

Interoperability Considerations



Public/Private Interoperability Coordination



Incentivized Adoption

- ◆ Pay for use for clinicians who adopt approved EHR technology
- ◆ Incentives to join local RHIOs as conduit of funds, or other models
- ◆ Pay for performance for clinicians to improve care through use of HIT
- ◆ Low-rate loans for EHR adoption
- ◆ Safe harbors for anti-kickback and self-referral statutes
- ◆ Implementation guidance and support

Building Block Strategies



Regional Health Information Organizations

- State or local entities to oversee and support regional health information exchange
- Multi-stakeholder governance with public health and quality improvement role
- Support of local EHR implementation in addition to technical assessment for NHIN deployment



National Health Information Network

- A nation-wide utility that allows secure and seamless health information exchange
- Certification of EHR compliance with minimal standards set by the private sector
- Used by federal agencies to support data collection and internal health information exchange

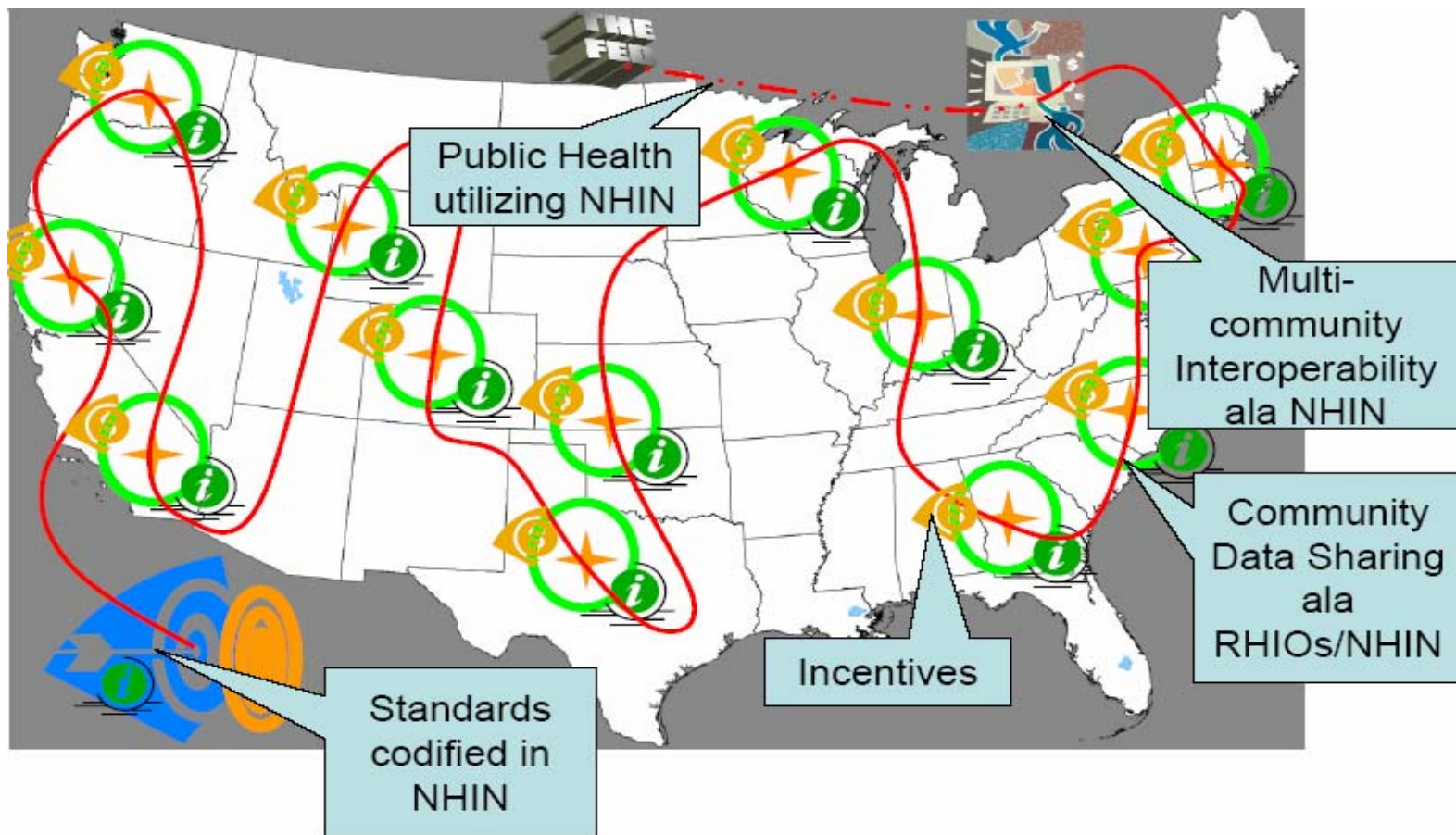


Electronic Health Record Adoption Strategy

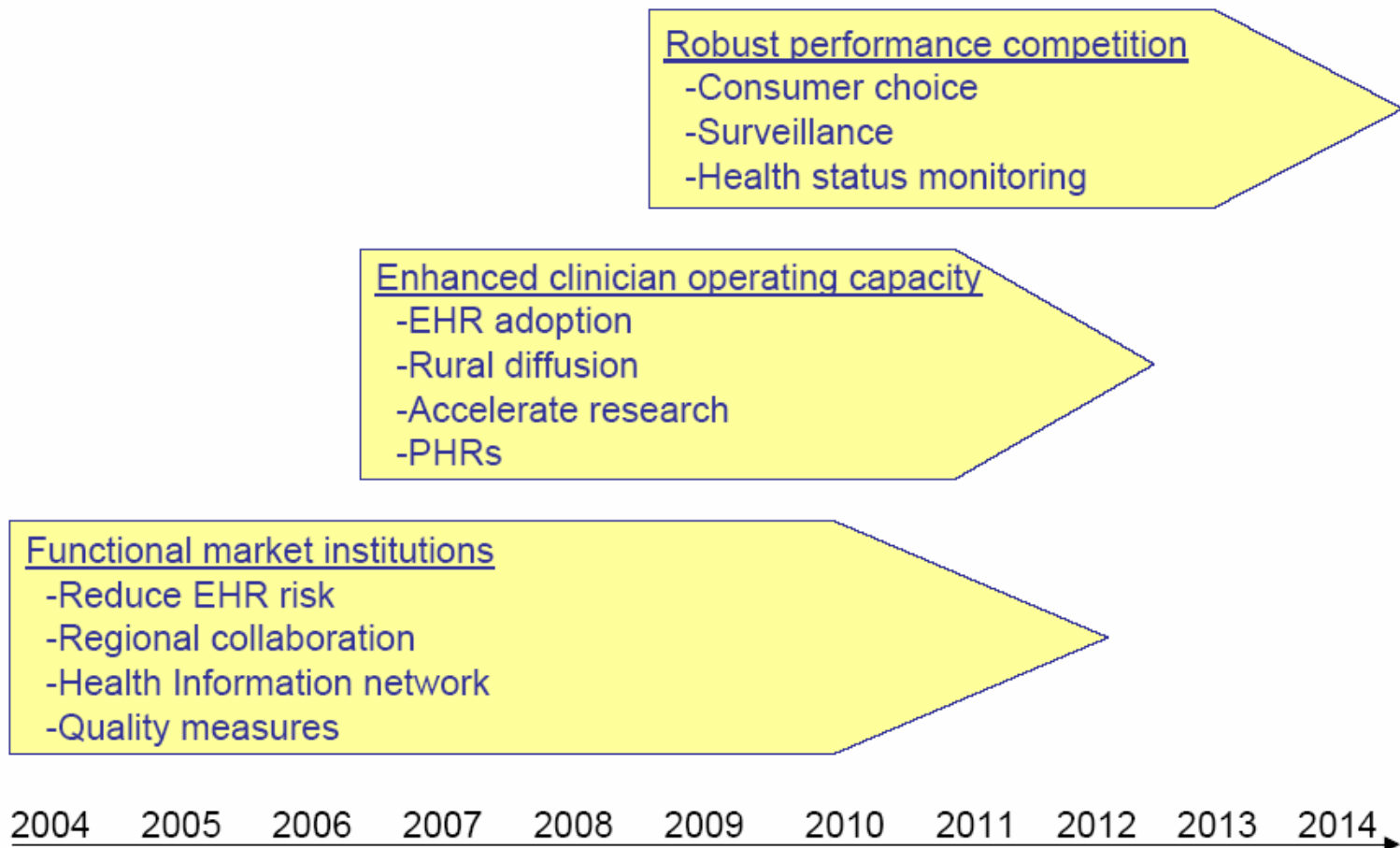
- Reduce loss and risk for physicians investing in EHRs
- Implementation support for primary care physicians that leverage specialist and hospital adoption
- Medicare incentives, Federal and private purchaser support and liberalization of hospital-physician affiliations

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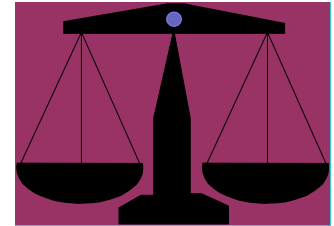
Envisioned National Landscape



Implementation (3 Phases)



Focus on business drivers



Addressing the critical needs ...

- ◆ Avoidance of medical errors
 - Up to 98000 avoidable annual deaths due to medical errors
- ◆ Improvement of resource vectoring
 - Up to \$300B spent annually on treatments with no health yield
- ◆ Acceleration of knowledge diffusion
 - 17 years for evidence to be integrated into practice
- ◆ Reduction of variability in healthcare delivery and access
 - Access to specialty care highly dependent on geography
- ◆ Empowerment of the consumer
 - Capitalize on growing consumer trend of active health management
- ◆ Strengthening of data privacy and protection
 - HIPAA becomes reality
- ◆ Promotion of public health and preparedness
 - Surveillance is fragmented, and importance to homeland security brings heightened awareness

Major Benefits Realized from HIT

Consumers and Industry

- When fully integrated into our health care system, could reduce health care costs by up to 20 percent per year
- Reduce deaths from medical errors, missed treatments and improper care
- Provide informed choice to consumers seeking treatment options and choosing caregivers
- Support consumer self-management and Health Savings Accounts

Federal Government

- Consolidate and coordinate billions in total annual Federal HIT spending
- Improve effectiveness and efficiency of Federal employee health benefits, Medicare and other health programs
- Streamline biosurveillance and public health reporting
- Accelerate clinical trials and enhance post-market surveillance of new therapies to treat diseases

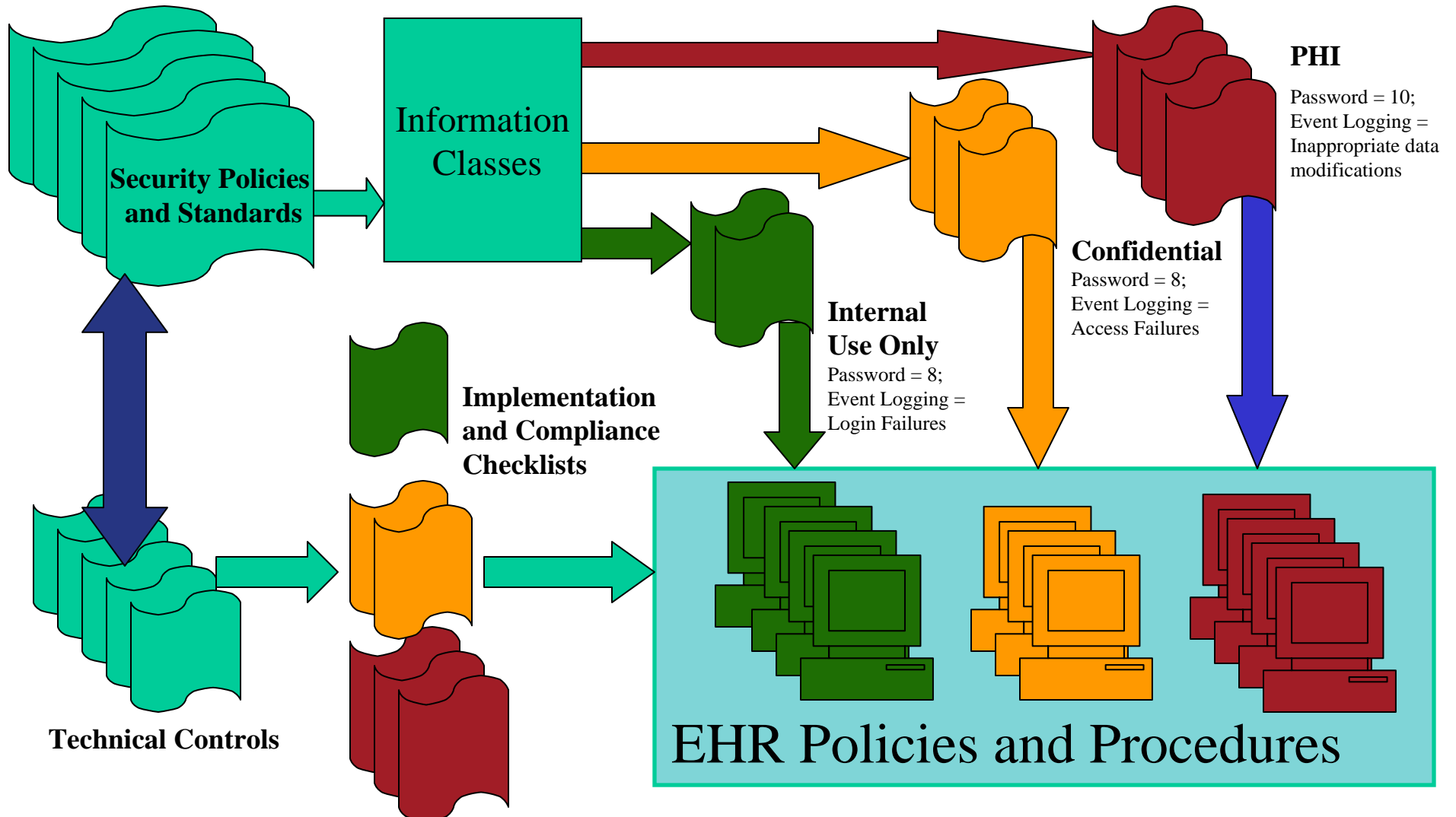
Key Actions Underway

- ◆ Establishing a Health Information technology Leadership Panel
- ◆ Facilitating private sector certification for health information technology products
- ◆ Funding community health information exchange demonstrations
- ◆ Planning the development of a national health information technology network
- ◆ Requiring standards to facilitate electronic prescribing as a part of the Medicare drug benefit of 2006
- ◆ Establishing a Medicare beneficiary portal as a step toward PHRs
- ◆ Developing a secure infrastructure for sharing of clinical research data (FDA, NIH, and the Clinical Data Interchange Standards Consortium)
- ◆ Strengthening the Federal Health Architecture and Consolidated Health Informatics initiative

Major Tenets

- ◆ Public / Private ownership of the problem and the solution
- ◆ Leverage federal buying power, employment power, and Medicare power to bring about change
- ◆ Take advantage of best practices and build upon existing foundations
- ◆ Focus on actions, decisions, and measurable forward progress

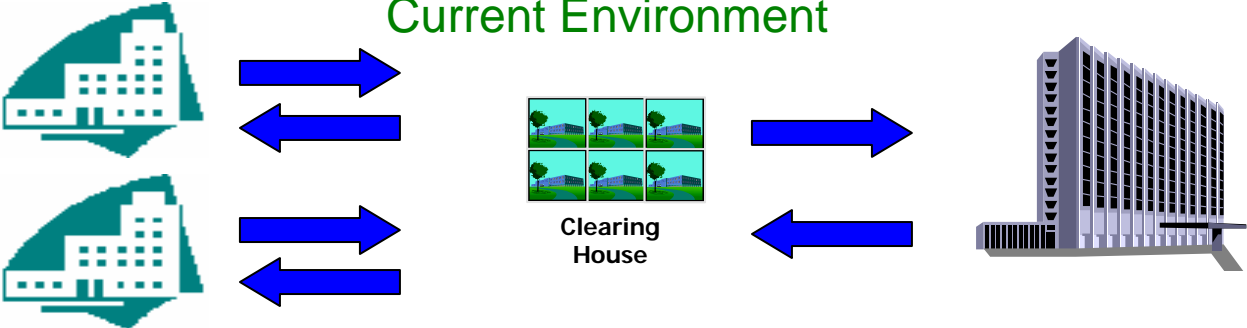
Develop Policies/Procedures



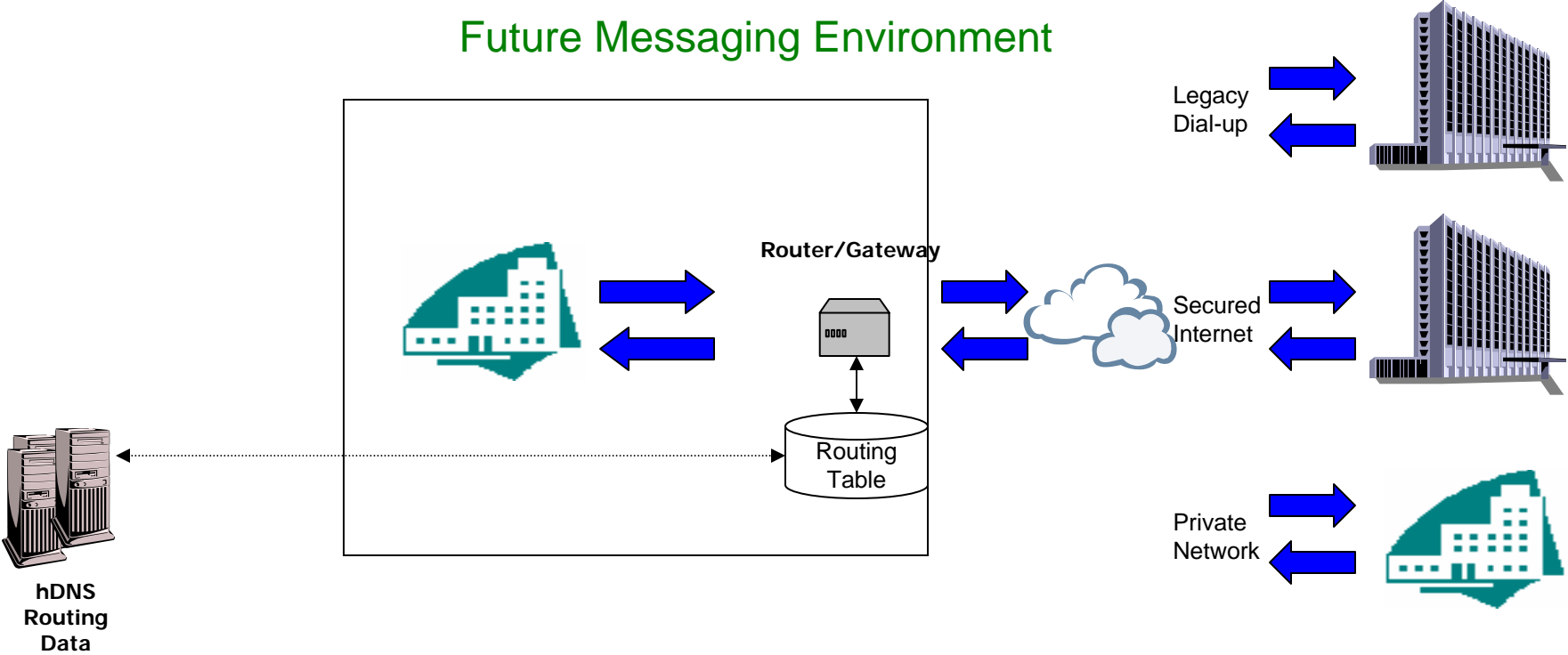
Challenges Facing the Providers

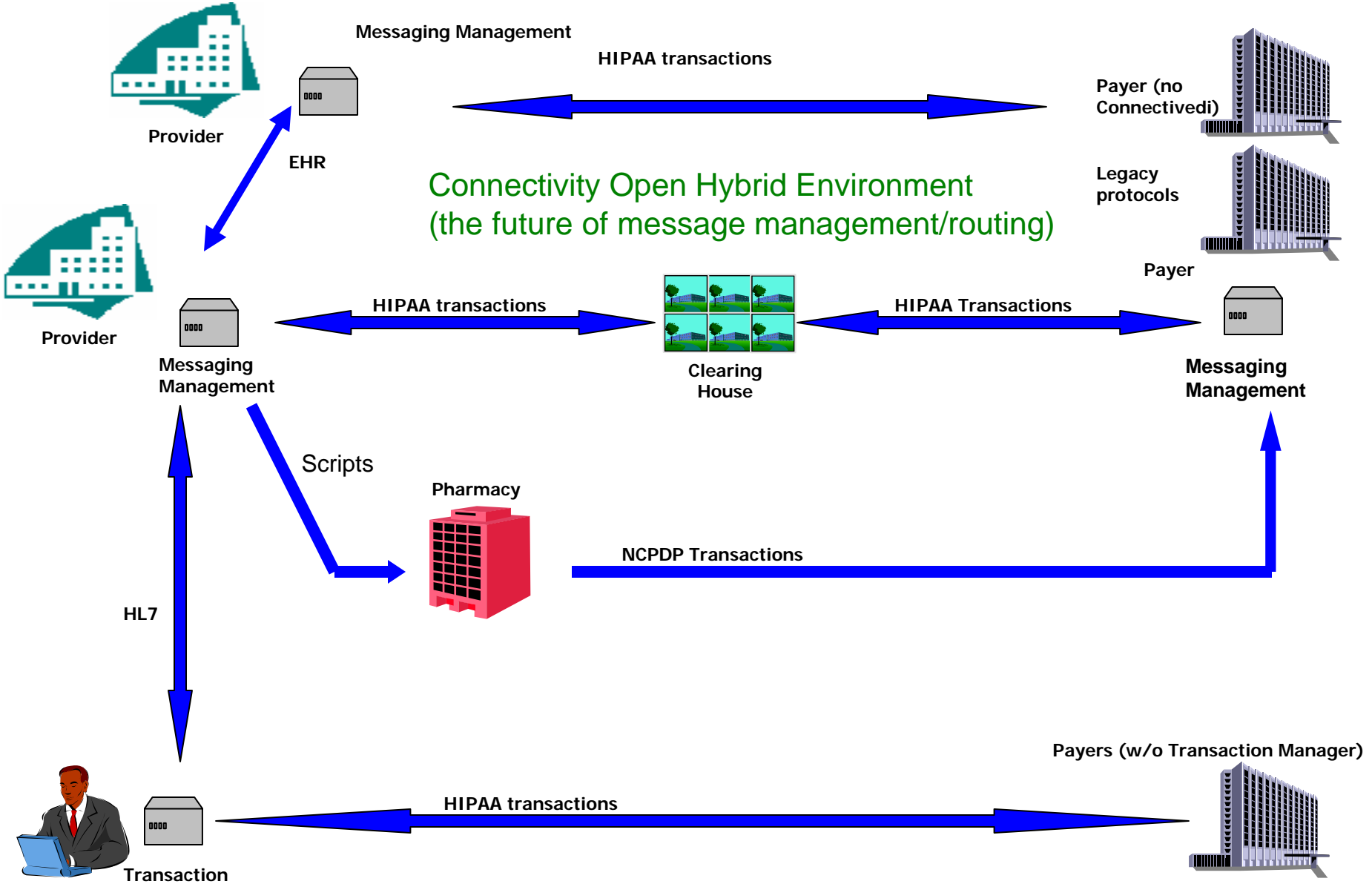
- ◆ Managing thousands of direct connects (How to test with them, how to help them get connected, dealing with customer/technical support issues)
- ◆ Reporting information back to the various trading partners
- ◆ Processing times are an issue to meet payer “batch windows”
- ◆ Sometimes slow, and unreliable mechanisms of communications exist at provider sites. Little trust or use of the internet for sending/receiving transactions

Current Environment



Future Messaging Environment





Connectivity Considerations/Requirements

- ◆ Multi-protocol gateway
 - Internet, VPN, dial-up
 - Both client and server
 - Real time and batch
- ◆ Data agnostic transfers
 - X12, NSF, UB92, HL7, XML, DICOM, NCPDP, etc.
- ◆ Intelligent data router
- ◆ Modular expandability
- ◆ Automated trading partner management
 - Registration into payer's EDI system
- ◆ File inventory management
 - Retries, alarms, reports, re-transmission, etc.
- ◆ Interoperability
- ◆ Easy integration

What do you need to do?

- ◆ Understand the initiatives/models that are currently underway or are being planned
- ◆ Understand the stakeholders and identify your own business/IT requirements
- ◆ Understand HIPAA/Clinical/Messaging Implications
- ◆ Commence development/research of the value proposition and ROI opportunities and considerations
- ◆ Determine which public/private sector initiatives/models to get involved with
- ◆ Understand/influence the standards development process



Hurry and Get
Involved!!

Questions & Discussion

We Can Only Succeed
By Pulling Together

