



# How Health Information Exchange Works and Why Privacy and Security Are Important

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# Overview of Presentation

- Overview of the state of health information exchange
- Programs that will have impact
- Importance of addressing privacy
- What health information exchange initiatives are doing about privacy
- Key imperatives for the future

# Overview of the State of Health Information Exchange

# Number of Health Information Exchange Initiatives Continues to Rise With 193 Reporting in eHI 2009 Survey

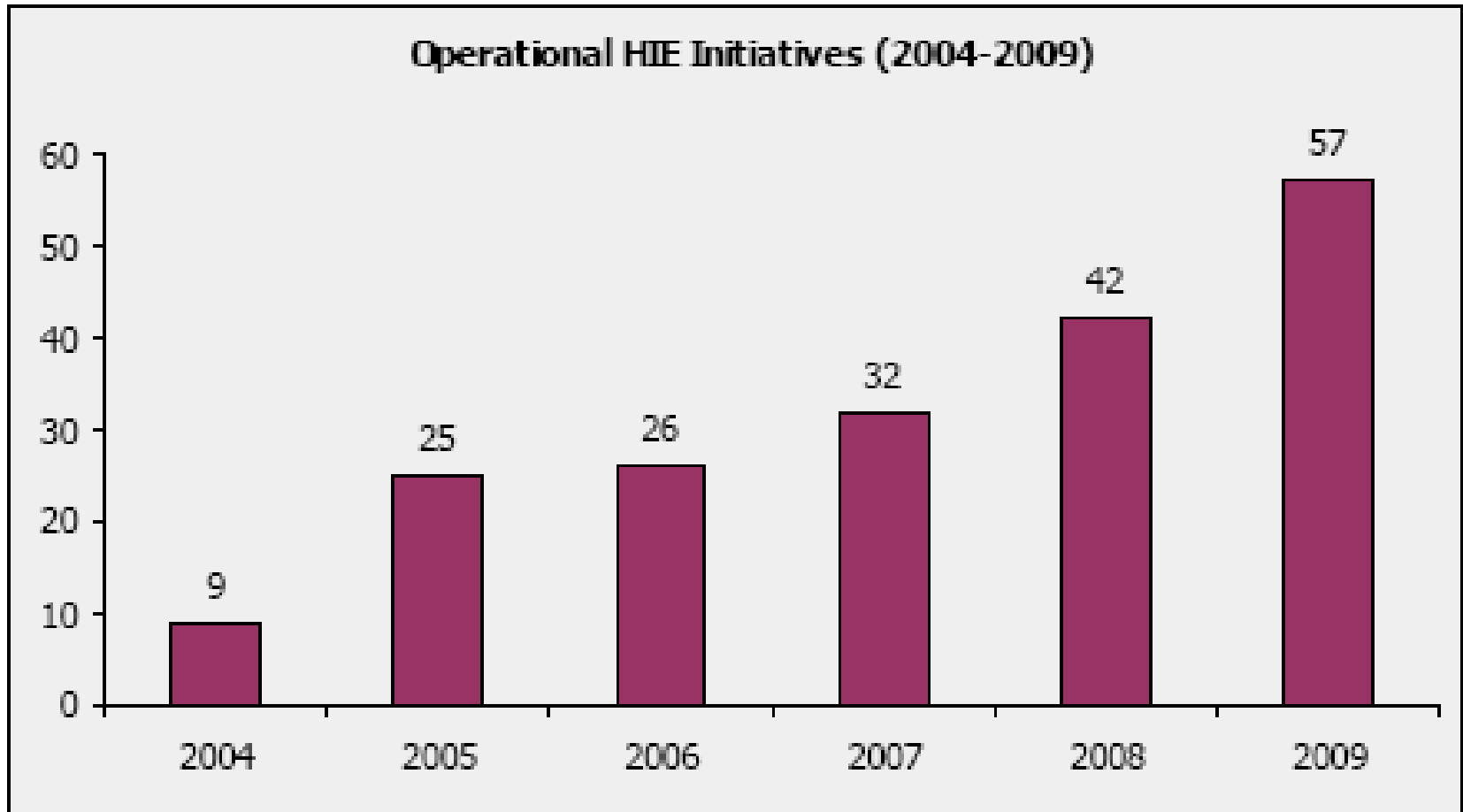
## Health Information Exchange Initiatives Across the United States



\*Source: eHealth Initiative 2009 HIE Survey

Figure 1: Health Information Exchange Initiatives Across the United States

## The Number of Operational Initiatives Has Increased From 42 in 2008 to 57 in 2009



*Figure 3: Operational HIE Initiatives*

Source: eHealth Initiative 2009 Survey of Health Information Exchange

# The Capabilities and Functionalities of Health Information Exchange Continue to Grow

Current Functionalities for Data Exchange			
	2008	2009	Change (+/-)
Results delivery (e.g. laboratory or diagnostic study results)	31	44	+13
Connectivity to electronic health records	n/a	38	n/a
Clinical documentation	38	34	-4
Alerts to providers	26	31	+5
Electronic prescribing	n/a	26	n/a
Enrollment or eligibility checking	29	25	-4
Electronic referral processing	17	21	+4
Consultation/referral	23	20	-3
Clinical decision support	n/a	19	n/a
Disease or chronic care management	19	19	0
Quality improvement reporting for clinicians	14	19	+5
Ambulatory order entry	n/a	16	n/a
Disease registries	11	16	+5
Reminders	14	16	+2
CCR/CCD summary record exchange	n/a	15	n/a
Public health: case management	7	13	+6
Public health: surveillance	9	13	+4
Quality performance reporting for purchasers or payers	9	12	+3
Connectivity to personal health records	n/a	10	n/a

Figure 8: Current Functionalities for Data Exchange

Source: eHealth Initiative 2009 Survey of Health Information Exchange

## The Level of Health Information Exchange Continues to Grow

Data Currently Exchanged			
	2008	2009	Change (+/-)
Laboratory	26	49	+23
Medication data (including outpatient prescriptions)	n/a	48	n/a
Outpatient laboratory results	25	45	+20
Outpatient episodes	23	43	+20
Radiology results	23	39	+16
Emergency Department episodes	27	36	+9
Inpatient diagnoses & procedures	27	35	+8
Care summaries	n/a	34	n/a
Inpatient discharge summaries	n/a	32	n/a
Pathology	18	32	+14
Dictation / transcription	20	31	+11
Cardiology	15	27	+12
Claims: pharmacy, medical, and/or hospital	n/a	27	n/a
Enrollment / eligibility	17	25	+8
Pulmonary	13	23	+10

Figure 9: Types of Data Currently Exchanged

Source: eHealth Initiative 2009 Survey of Health Information Exchange

## And Has Had Positive Impact...

- Impact on Operational Health Information Exchange Initiatives Reporting:
  - 28 report that physician practices have “improved access to test results”
  - 21 report return on investment for hospitals and 19 report ROI for physician practices
  - 26 report reduced staff time spent on handling laboratory and radiology results
  - 24 report reduced staff time spent on clerical administration and filing
  - 17 report reduction in costs related to redundant tests
  - 11 report reduction in costs related to chronic care patients



## But We Still Have a Long Way to Go....

- “The current state of health information exchange today is spotty and piecemeal
  - The vast majority occurs in a narrow set of transaction silos, such as labs and medication prescriptions, and even here, penetration is very low (4% of eligible prescriptions and 12% of office-based prescribers, for example)
  - Direct exchange of data between EHRs and exchange through organized state/regional health information exchange entities also occurs, but penetration is extremely low and highly variable across implementations
  - Electronic reporting for public and population health measurement and improvement is almost non-existent in the market today”

*“Health information exchange occurs in the market today, but penetration is very low and non-uniform”*

Source: Recommendations HHS Health IT Policy Committee Health Information Exchange Workgroup Presentation, August 16, 2009



# How Health Information Exchange Will Likely Roll Out

- Health Information Exchange Will Take a Number of Forms
  - Point to Point
  - Transaction-specific hubs
  - Vendor-specific hubs
  - National or Sub-national networks
- According to HHS Health IT Policy Committee
  - There will be core requirements for health information exchange
  - Core requirements should be focused on the capability to achieve meaningful use and include interoperability, privacy, and security
  - Federal government should certify EHR and health information exchange components on these core requirements to ease burden on eligible professionals and hospitals
  - Federal and state-government approaches should be complementary

**Source: Recommendations HHS Health IT Policy Committee Health Information Exchange Workgroup Presentation, August 16, 2009**

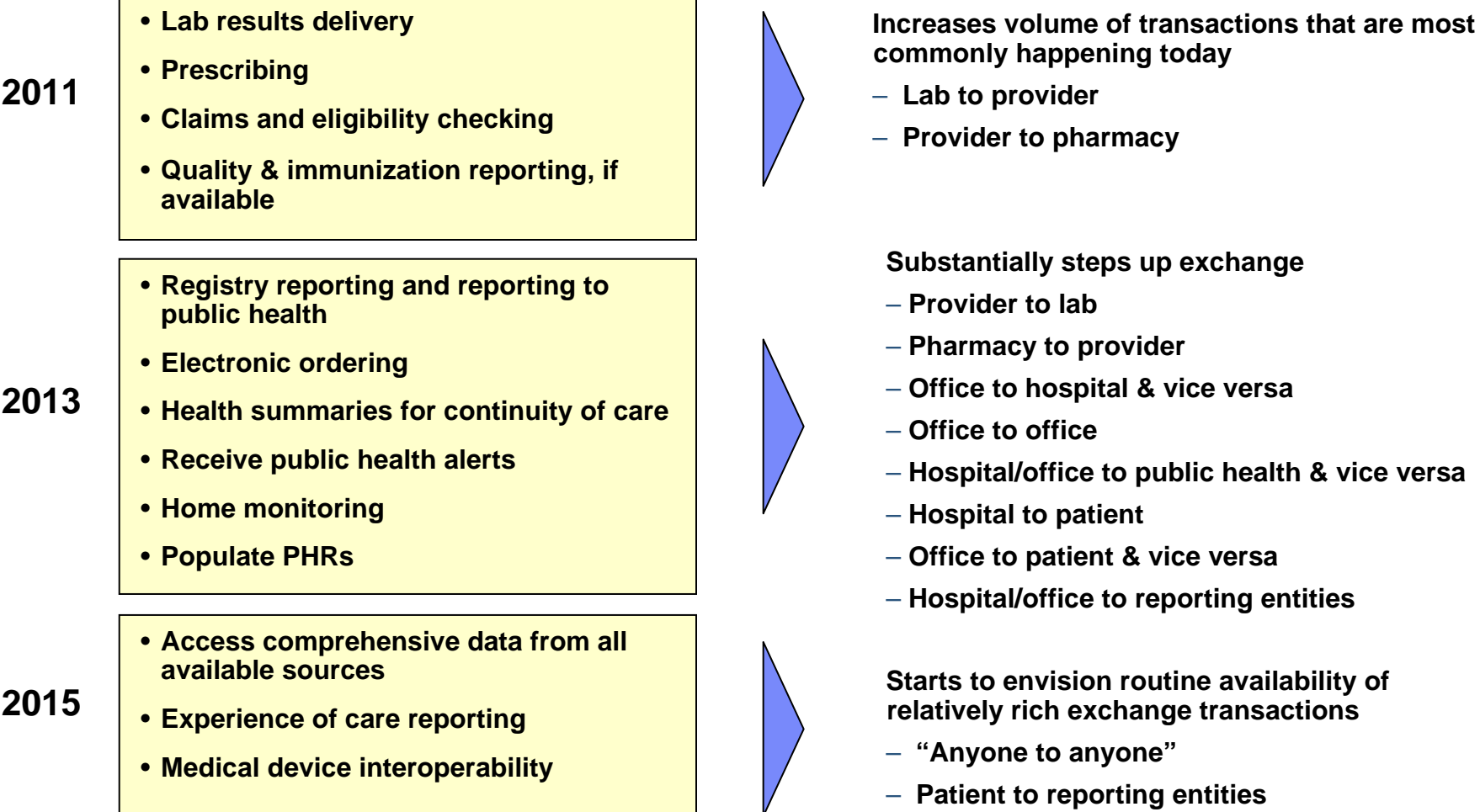
**New Policies Having Impact on Health Information  
Exchange:  
The American Recovery and Reinvestment Act**

## American Recovery and Reinvestment Act Provides a Boost for Health Information Exchange: *Incentives*

- Recovery Act provides \$45 billion in incentives for hospitals and healthcare professionals who demonstrate “meaningful use” of health IT
- Health IT Policy Federal Advisory Committee’s recommendations on meaningful use requirements will help drive health information exchange capacity
- For example, 2011 requirements include:
  - “% reportable lab results submitted electronically”
  - “Implemented ability to exchange health information with external clinical entity (labs, care summaries, medication lists)”
  - “% of transitions in care for which summary care record is shared”
  - Several performance measures which will require clinical information, which is best accessed electronically

# Current HIT Policy Committee Meaningful Use Recommendations Contain Drivers for Health Information Exchange

## Meaningful Use objectives requiring health exchange



Source: Recommendations HHS Health IT Policy Committee Health Information Exchange Workgroup production, August 16, 2009

# American Recovery and Reinvestment Act Provides a Boost for Health Information Exchange: *Grant Funding*

- HHS recently announced the **State Health Information Exchange Cooperative Agreement Program**
- \$564 million to be distributed to 50 state governments or non-profit “state-designated entities”
- Awards anticipated to be between \$4M and \$40M, based on a formula
- Award announcements expected in Dec 2009 with start dates in January 2010
- Stated purpose is to “continuously improve and expand health information exchange services over time to reach all health care providers in an effort to improve the quality and efficiency of health care”.
- Covers governance, finance, technical Infrastructure, business and technical operations, and legal/policy aspects

# American Reinvestment and Recovery Act Adds Requirements

- Direct application of certain HIPAA Security Rule, Privacy Rule and enforcement provisions to business associates
- Clarification that health information exchange initiatives and RHIOs are business associates
- Notification of affected individuals in the event their protected health information is breached
- New restrictions on the use of protected health information
- Revised patient rights related to EHRs, including requirements that covered entities maintaining EHRs give individuals copies of their records in electronic form and provide an accounting of disclosures of individual's PHI during prior three years
- Heightened HIPAA enforcement mechanisms



# Why Privacy is Important

# Consumer Attitudes About Privacy

- 20 focus groups conducted by Agency for Healthcare Research and Quality-funded study and released in July 2009
- Participants were optimistic that health IT would benefit health care quality, and add efficiency to health care
- Privacy and security were the main concerns of a large majority of the participants
- Participants did tend to support the idea that health care consumers should be asked for their consent before their medical data are stored electronically
- Results suggest that public education about health IT is needed

Consumer Engagement in Developing Electronic Health Record Systems, AHRQ Publication  
Developed by Westat, July 2009

## **Massachusetts Community Focus Group Results Indicate Willingness to Provide Consent for Information to be Shared Electronically**

- Patients in one Massachusetts community in northeastern U.S. were recruited to participate in focus group discussions, reacting to draft educational materials and a consent form
- Three key themes emerged:
  - Concerns about privacy and security
  - Potential benefit to a person's health
  - Desire for more information about the consent process
- 55 of 62 participants (88%) indicated they would provide consent for their information to be shared electronically with their healthcare providers, given materials they reviewed

Simon, Steven et. al, "Patients' Attitudes Toward Electronic Health Information Exchange: Qualitative Study, Journal of Medical Internet Research, March 2009

## Addressing Privacy and Security Rose to the Top as the Most Difficult Challenge in eHI's 2009 Survey, Surpassing Financing

- 93 initiatives cited addressing privacy and confidentiality issues as “very difficult” or “moderately difficult”
- At the same time, financing remained a key challenge
  - 92 reported “defining the value that accrues to users”
  - 90 reported “developing a sustainable business model”
- 86 reported “addressing technical aspects” (also up from last year)

# What Health Information Exchange Initiatives are Doing About Privacy

# Policies Used by Health Information Exchange Initiatives....Results of eHI 2009 Survey

- Patient consent required to share clinical information with another provider for treatment purposes – 32
- Patient consent required to share clinical data deemed sensitive with another provider for treatment purposes – 28
- Agreeing to and honoring certain patient requests to restrict uses or disclosures to carry out treatment, payment or health care operations – 20
- More stringent restrictions for use and disclosure for research – 19
- Patient consent required to share information for payment purposes – 15
- Patient consent required to share aggregated or de-identified information for purposes other than treatment, payment or healthcare operations - 13

## **Types of Information-Sharing Agreements Used Results from eHI 2009 Survey**

- Authorizations of users for data access – 74
- Permitted purposes for information access – 72
- Authentication of users – 63
- Enforcement procedures for enforcing compliance with agreements – 61
- Indemnification – 58
- Security breach reporting requirements – 58
- Conflict resolution among HIE participants – 49

## Some Guidance for States

- Necessary to identify and resolve threshold issues to put in place high-level guiding principles that serve as the foundation for subsequent development of more detailed privacy policies and procedures
- Stakeholders need to be engaged to collaborate and build consensus around policies and procedures
- Interoperability is required both at the technical and policy level
- Policies must foster not only exchange within a state, but also across states given the mobility of the American population
- Accountability and enforcement mechanisms are critical
- Need to develop capability to address ongoing privacy and security considerations

Source: Advancing Effective State-level Approaches to Interoperability in the New Federal Context, State Level HIE Consensus Project, AHIMA FORE, May 2009



# There is Some Good Guidance for Addressing Privacy and Confidentiality Out There

- Department of Health and Human Services Nationwide Privacy and Security Framework and Toolkit
- Markle Foundation's Connecting for Health Common Framework
- DHHS Health Information Privacy and Security Solutions Project supported by ONC and AHRQ
- Other reports within the Agency for Healthcare Research and Quality National Resource Center

## Some Closing Thoughts

- Addressing privacy and confidentiality is critical for health information exchange initiatives—national, regional, state-level and local
- There is guidance available to support leaders engaged in developing health information exchange capacity
- More work is needed, both nationally and locally to support implementation of strong policies related to privacy and confidentiality
  - Build upon and more effectively disseminate common principles
  - Develop practical solutions
  - Support their implementation in health information exchange efforts



**Thank You!**

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