

Regional Health Information Organizations: Current Activities and Future Implications

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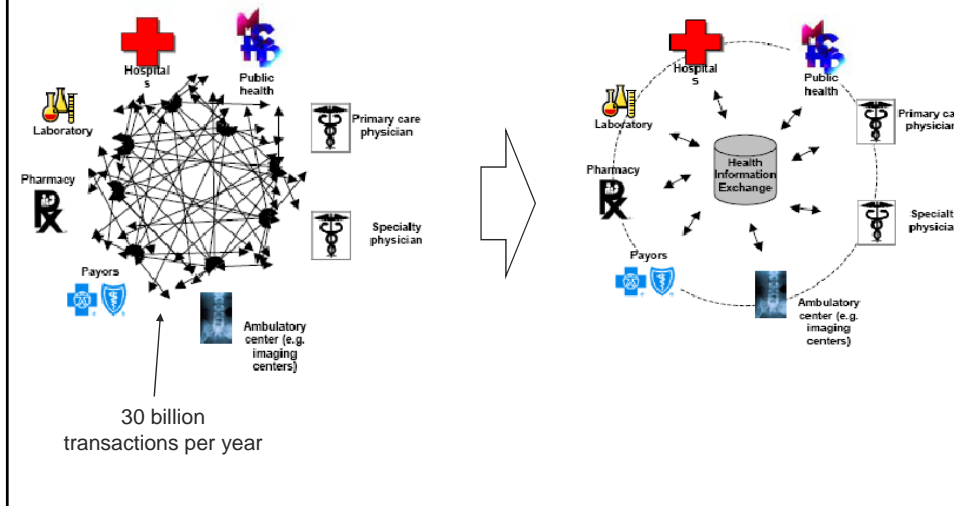
Overview

- Research Question
 - Will Regional Health Information Organizations (RHIOs) serve as the building blocks for nationwide electronic health information exchange (HIE)?

- Today's Presentation
 - Context
 - Methods
 - Results
 - Discussion and Implications

- Acknowledgements
 - Dr. Ashish Jha
 - Dr. David Bates
 - Andrew McAfee

Context



Context

- If RHIOs are to serve as the foundation for nationwide health information exchange, it is critical to understand:
 - progress to date
 - successful models
 - obstacles and challenges

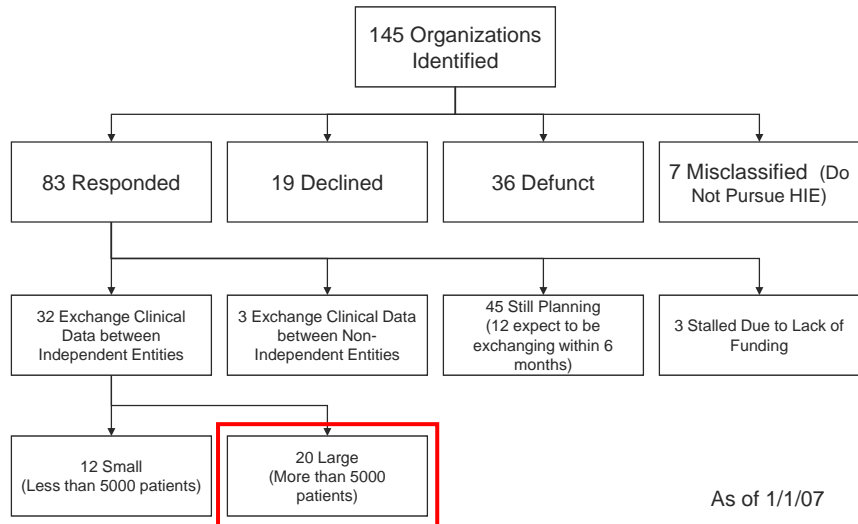
Methods

- Definition of a RHIO: organization that facilitates electronic HIE between independent entities
- Identification of RHIOs
 - 130 from eHealth Initiative
 - 15 from HIE experts
- Survey Development
 - Based on phone interviews with HIE/RHIO experts
 - Cognitive testing with small subset of RHIOs
- Survey Administration
 - January-March 2007
 - Web-based

Methods

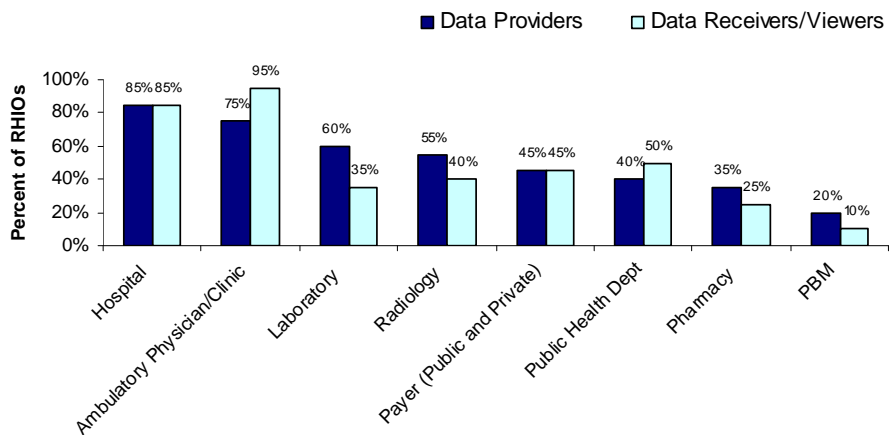
- Survey Instrument
 - All respondents
 - Confirm HIE focus
 - Development Phase
 - Independent vs. Non-Independent Participants
 - RHIOs supporting HIE between independent entities
 - Categories of entities providing and receiving/viewing data
 - Type of data exchanged
 - Data exchange functionalities supported
 - Number and type of patients
 - Sources of funding by development stage

Results



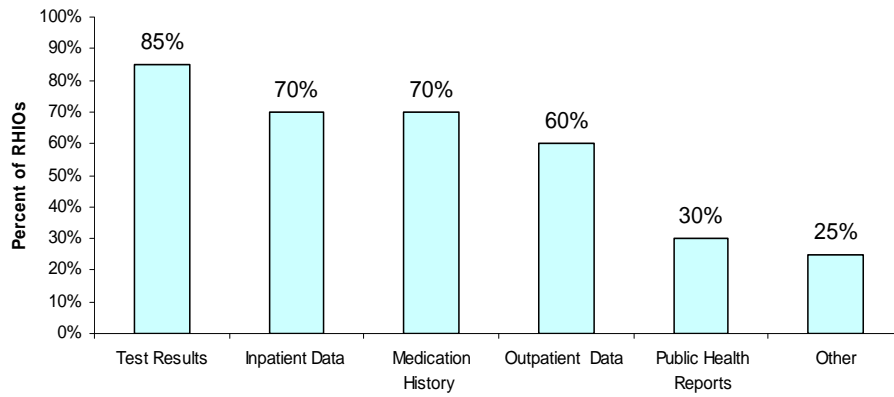
Results

Types of Entities Providing and Receiving/Viewing Data (n=20)



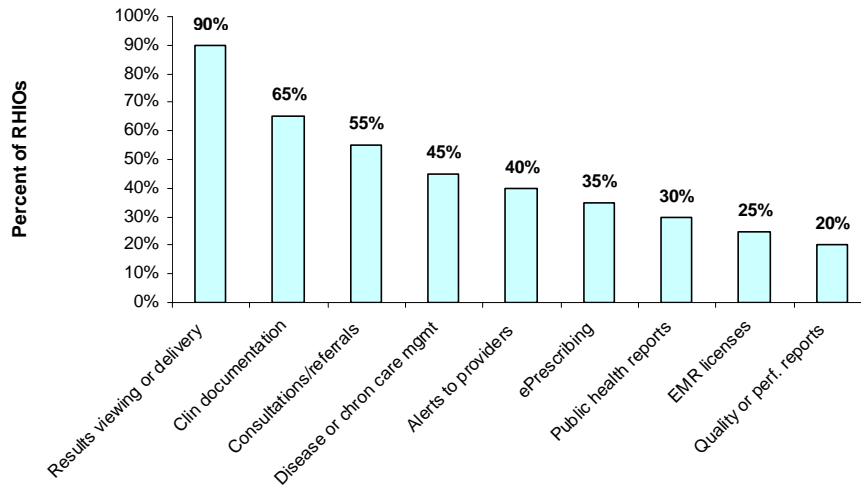
Results

Types of Clinical Data Exchanged (n=20)



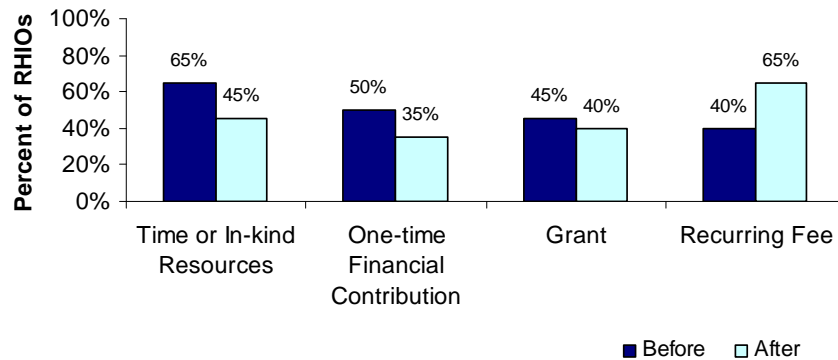
Results

Clinical Data Exchange Functionalities (n=20)



Results

Forms of Support Before and After Initiation of Clinical Data Exchange (n=20)



Discussion

- Nearly one in four RHIOs in existence in July 2006 was defunct by early 2007
- Only 20 RHIOs are operating at a modest scale and eight continue to receive moderate or substantial grant funding
- But, nine RHIOs did not receive any grant funding during their development and are able to support themselves via user fees

Discussion

- Grant funding is a mixed blessing
 - Advantages
 - Ability to implement quickly and more flexibility without establishing a revenue model upfront
 - Demonstrate value to spur future investment
 - Disadvantages
 - Allows RHIOs to bypass the challenge of creating buy-in from stakeholders
 - Effort may be driven by the availability of funds instead of a perceived community need, cultural readiness, or the providers' wish to share data

Discussion

- Predominant business model built on results viewing and delivery
 - Significant transaction costs typically incurred when laboratory and radiology results are printed and mailed
 - Provider efficiencies are created with electronic reporting
 - Implications
 - Providers, labs, and imaging centers are most common participants
 - Narrow scope of data exchanged
 - Little end-to-end integration

Limitations

- Incomplete set of RHIOs
- RHIOs classified as defunct may still be operating
- Limited data on business models and profitability
- Premature assessment of viability

Implications

- Young RHIOs face substantial challenges, and it is not yet clear whether mature RHIOs have a solid business model
- Early success stories are instructive but they do not guarantee the success of the next generation of RHIOs
- Whether RHIOs will be able to fulfill the vision of electronic health information exchange across U.S. communities remains to be seen



Thank You!

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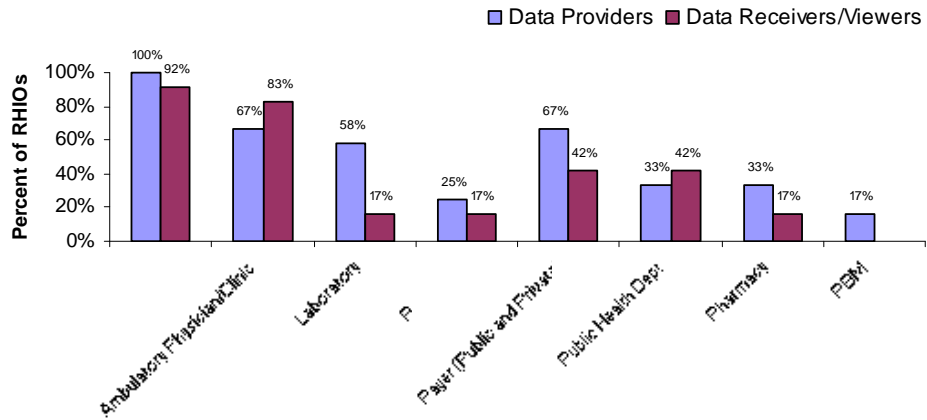


Barriers

- Funding and Participation
 - Clinical system adoption
 - Up front capital for technical architecture
 - Market dynamics
- Legal and Regulatory
 - Access
 - Security
 - Lack of legal precedent
- Technical
 - Standards
 - Choice of Architecture
- Organizational
 - Human factors
 - Workflow

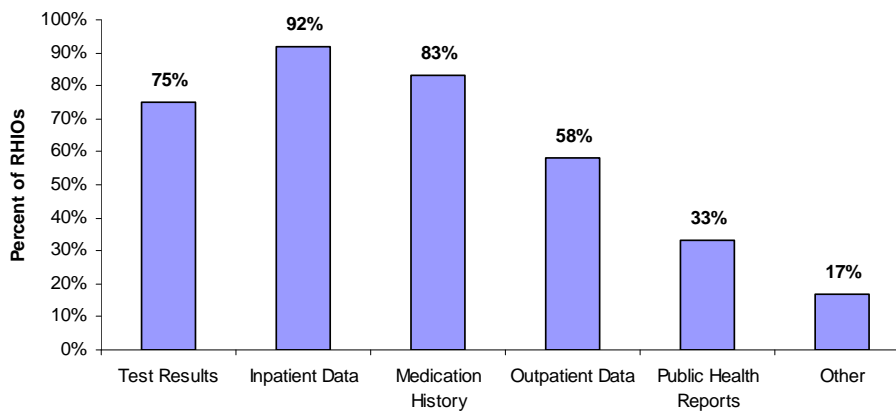
Results – Small

Types of Entities Providing and Receiving/Viewing Data (n=12)



Results – Small

Types of Clinical Data Exchanged (n=12)



Results – Small

Forms of Support Before and After Initiation of Clinical Data Exchange (n=12)

