

Achieving Interoperability

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How do we achieve interoperable healthcare information systems?

Enable stakeholders to come up with simple, shared solutions to common information exchange challenges



Curate a portfolio of standards, services, and policies that accelerate information exchange

Enforce compliance with validated information exchange standards, services and policies to assure interoperability between validated systems

We're going to talk primarily today about enabling stakeholders...through the Nationwide Health Information Network Exchange.

Transport is necessary, but not *sufficient*

Vocabulary & Code Sets

How should well-defined values be coded so that they are universally understood?

Content Structure

How should the message be formatted so that it is computable?

Transport

How does the message move from A to B?

Security

How do we ensure that messages are secure and private?

Services

How do health information exchange participants find each other?

Direct and
NwHIN
Exchange
focus at these
levels

An Example Patient Scenario

- A primary care doctor orders a lab test and gets the test back from the lab. She schedules the patient to be seen in the office to discuss the results.
- Based on the results of the test, the primary care doctor decides to send the patient to a subspecialist. She sends a summary of care record to the subspecialist electronically with a summary of the most recent visit.
- When the patient sees the subspecialist, it becomes apparent that there is a missing test that was done at a different hospital that would be helpful in taking care of the patient. Rather than repeating the test, the doctor queries the outside hospital for the lab test that she needs.



What will this transaction require?

The physician ordered an outpatient lab test on a patient, and the lab sends the information to your office. The patient is here to discuss the results.

Vocabulary & Code Sets

How should well-defined values be coded so that they are universally understood?

LOINC: to code lab results & observations

Content Structure

How should the message be formatted so that it is computable?

HL7 2.5.1: to format the lab result so EHRs can incorporate it

Transport

How does the message move from A to B?

Direct: to securely send the lab result from the lab to the EHR

Security

How do we ensure that messages are secure and private?

X.509: to ensure it is safely transmitted to the intended recipient

Services

How do health information exchange participants find each other?

DNS+LDAP: to find the recipient's X.509 certificate

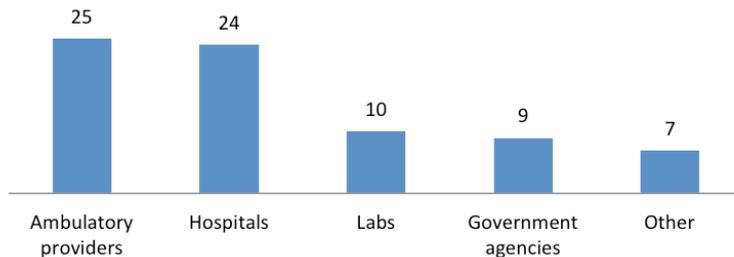
- The Direct Project began as an independent, open government project to specify a standard for secure, directed health information exchange. Based on its success, OSI modeled the S&I Framework after Direct, and Direct has now become one of the S&I Initiatives.
- More than 35 vendors implemented Direct by Fall of 2011, with several more (10 at last count, but the count is old) publicly announcing that Direct specifications are included in their product roadmap .
- Direct is part of the core strategy of 40+ State HIE Grantees, 4 of whom already started implementing it in late 2011

Direct Project Metrics – Ecosystem

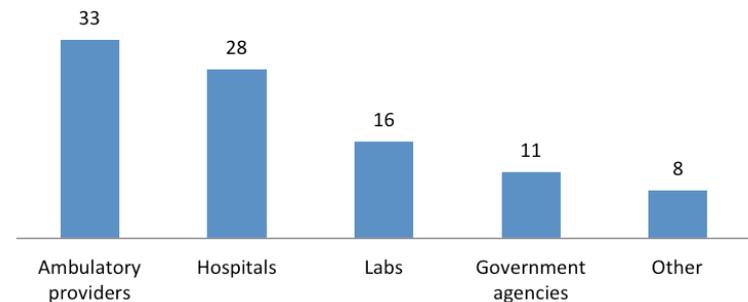
Direct Project Ecosystem Survey

Types of users served with Direct in production or pilots

(Sep 2011)

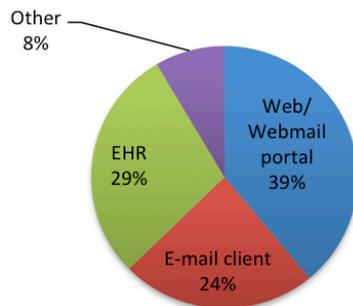


Types of users served with Direct in production or pilots by EOY 2011

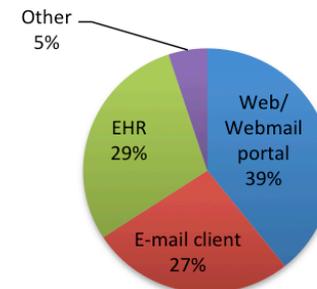


How users access Direct

(Sep 2011)



How users will access Direct EOY 2011

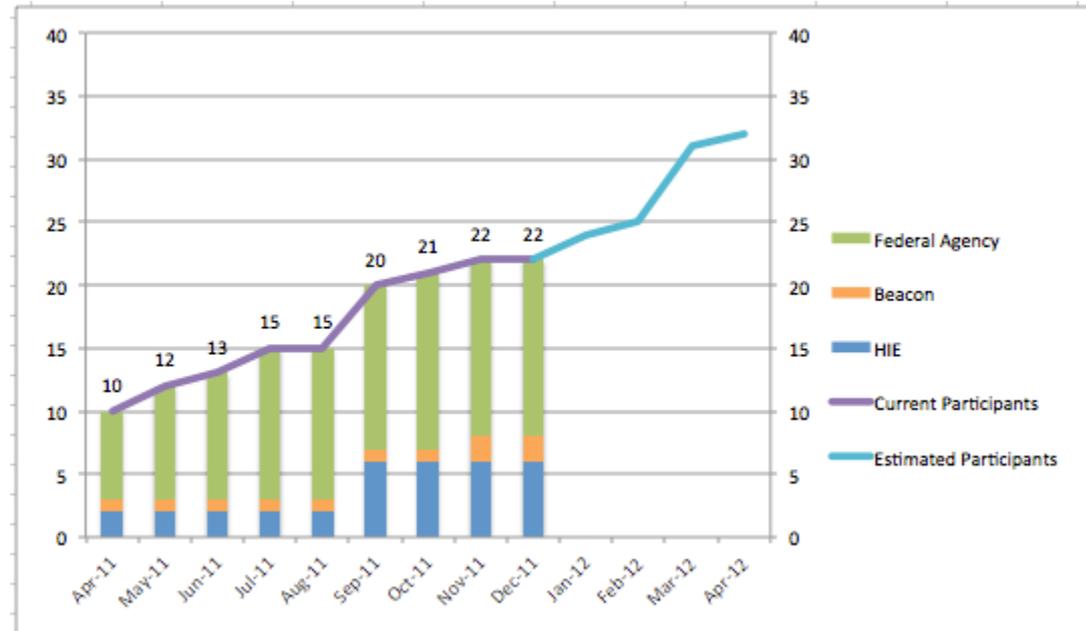


- Exchange is currently operational and demonstrating value to participants, including:
 - Federal agency benefit determination is expedited (shortened turnaround time by 45%)
 - Expedited benefit payments to disabled
 - Improved benefits in clinical decision making, including avoiding prescribing multiple narcotics based on information shared
- As of January 2012, 22 organizations are exchanging data in production, representing:
 - 500 hospitals
 - 4,000+ provider organizations
 - 30,000 users
 - 1 million shared patients
 - Population coverage~65 million people
 - 90,000 transaction as of Sept 2011, and growing dramatically each month
- Exchange CC is developing business and transitional plan to guide the Exchange to a sustainable, scalable and efficient public-private model
- Exchange can serve as basis for HIE innovation and critical element in nationwide health information infrastructure

Exchange Organizations in Production

Current Exchange Activities

- Alaska HIE and Medical University of South Carolina (MUSC) in conformance testing phase
- Quality Health Network (QHN) has completed Conformance testing and currently in the Interoperability testing phase
- Health Information Partnership for Tennessee (HIP-TN) and Redwood MedNet are preparing for conformance testing
- NRAA is currently working on setting up their production environment (partner with CMS)



Number of Organizations in Production	Number of Organizations currently On Boarding	Estimated Number of Organizations in Production for Q1-2012
22 (14 Federal, 6 HIEs, 2 Beacons)	33	32

Federal: An organization that is a Federal Agency or has a contract or other agreement with a Federal Agency.

HIE: An organization that is part of a State HIE or has a cooperative agreement with a State HIE

Beacon: An organization that received grant money for the program

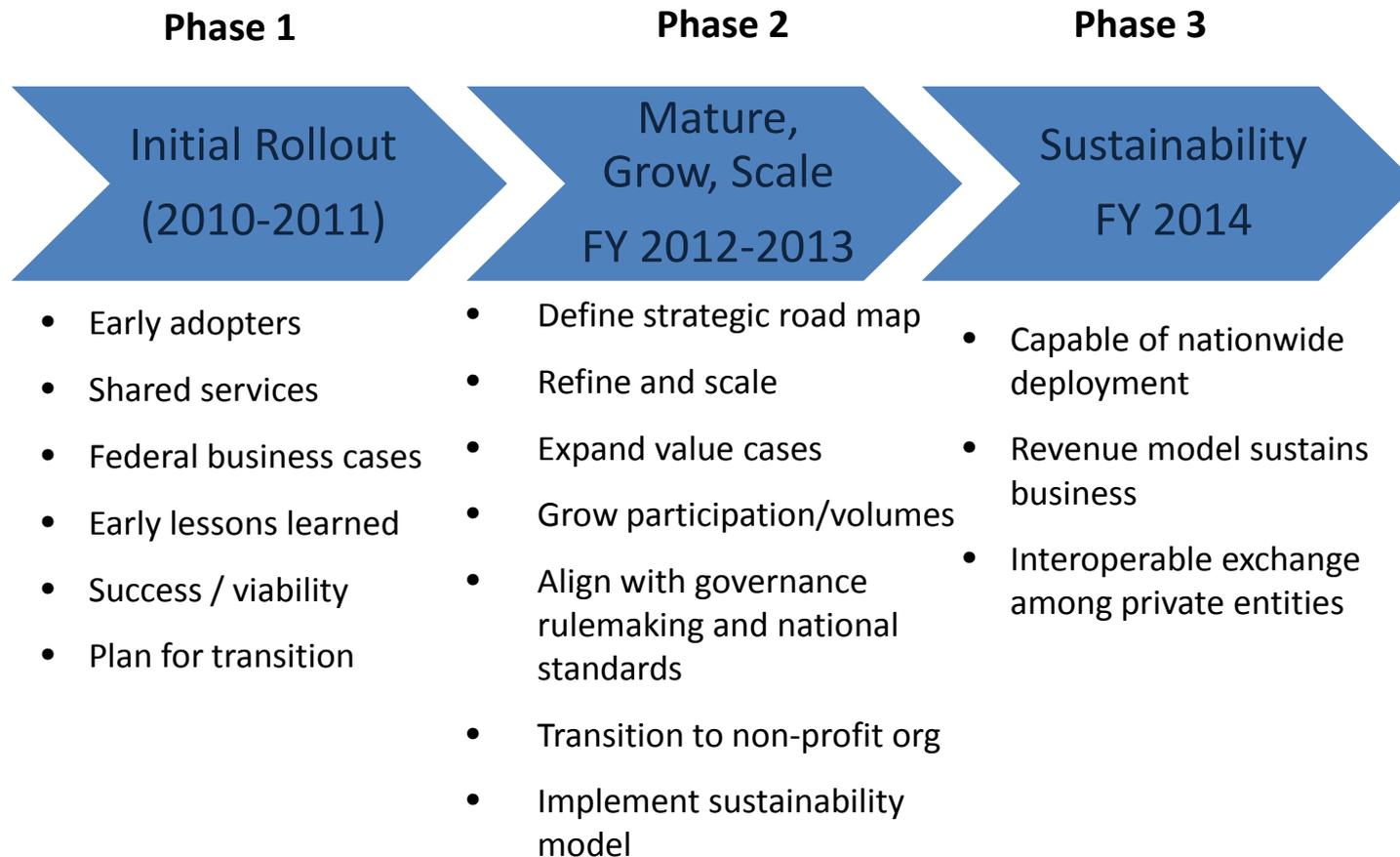
Data Use and Reciprocal Support Agreement (DURSA)

- In effect since December 2009 and provides the legal framework for the exchange of health information among a group of federal and non-Federal entities as part of the NwHIN Exchange (“the Exchange”).
- Amended DURSA 2011
 - removes all references to governance of the NwHIN
 - clarifies that the Exchange is a voluntary group of exchange partners (i.e., the organizations participating in the Exchange, not “the nationwide health information network.”)
 - indicates that the Exchange Coordinating Committee only has authority with regard to these exchange partners and that it has no authority with regard to “the nationwide health information network.”

Exchange Participation Under New Circumstances

- Non-Federal entities may continue to participate under their existing valid legal instrument, such as a federal contract, grant, or cooperative agreement.
- The legal instrument should continue to include NwHIN activities in the scope of activities to be performed by the non-federal entity.
- Upon expiration of current contracts/grants/cooperative agreements, entities' signature of Joinder Agreement DURSA will be sufficient to continue participation.
- New non-Federal entities may participate by executing the Joinder Agreement to the DURSA, without contracts/grants/cooperative agreements.

Strategic Road Map: Transition to Sustainability



Questions/Discussion