

MA-SHARE

Creating Interoperable Healthcare in Massachusetts

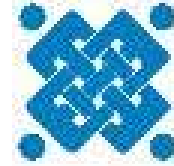
John D. Halamka MD

CIO, Harvard Medical School

CIO, CareGroup

CEO, MA-Share

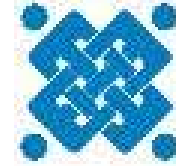




Brailer's Barriers

- Multitude of industry standards that have yet to be harmonized
- Differing security policies among organizations and states
- The risk that EHR products won't work as promised
- Lack of a consistent architecture for information exchange and control
- Lack of a business model that creates incentives for physician investment and adoption.

The Massachusetts RHIO



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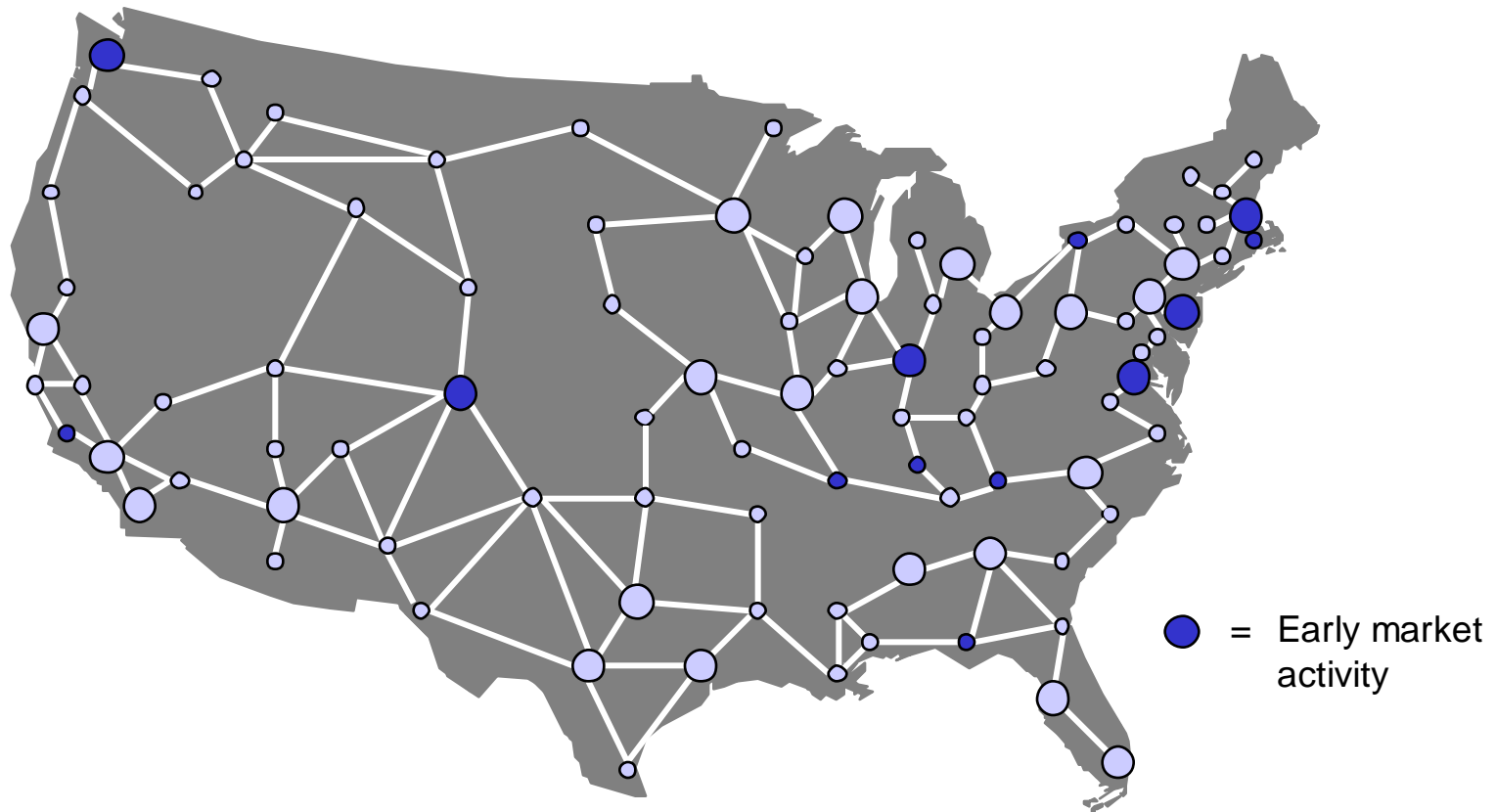
Community

- MHDC – The convener and educational organization, the business incubator
- NEHEN – The transactor of community administrative data
- MA-SHARE – The grid of community clinical utilities
- MAeHC – The last mile to the clinician offices for selected communities



envisioning creating a National Health

Information Network (NHIN)

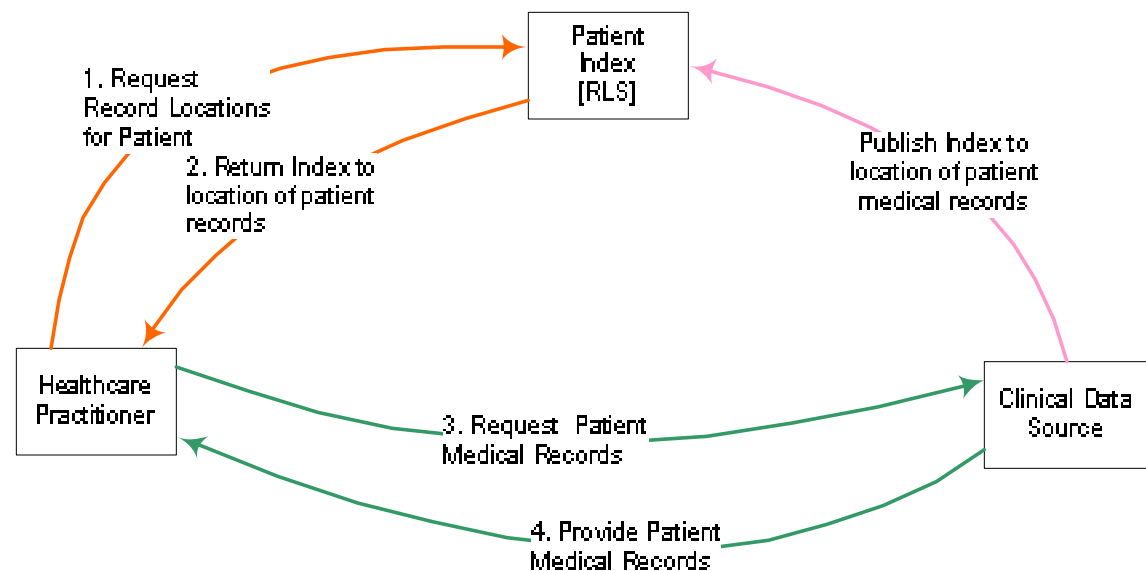


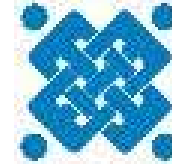
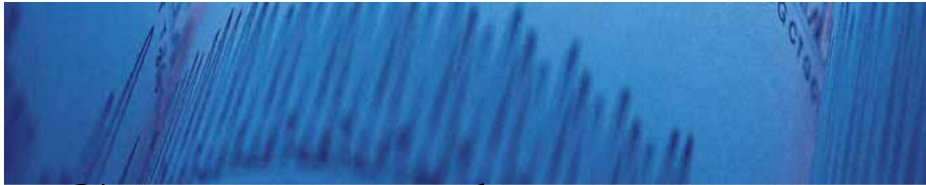
A secure and standards-based "network of networks", built at the local level through public / private collaboration, interconnected and interoperable, to share electronic health records nationwide

High Level Functional Architecture



- Publish patient index (record location) from local data source to central registry
- Acquire address (record location) of EHR system and local patient index from central registry
- Retrieve medical data directly from data source on peer-to-peer basis
- Conforms to Web-services interop pattern: Publish/Find/Bind





Screen Flow



CONNECTING FOR HEALTH™
MARKLE FOUNDATION *A Public-Private Collaborative*



Record Locator Service - DEMO

Log In

User Name

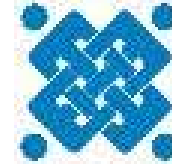
Password

Security Disclaimer

Log In:

[Forgot login? Contact your administrator.](#)

Use and disclosure of this information must comply with all applicable State and Federal privacy and security laws and regulations.



Screen Flow

Hello **jcalladi**
User at Boston Hospital

CONNECTING FOR HEALTHSM
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[Log off](#)

Record Locator Service - DEMO

Patient Identification

Required Data:

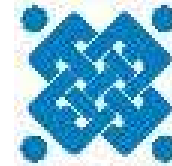
Name * *
First Last

Gender Male Female

DOB / / * ZIP Code *
mm / dd / yyyy

Enter data to search.

Required Fields when empty marked *



MA-SHARE

Screen Flow

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Record Locator Service - DEMO

Patient Identification

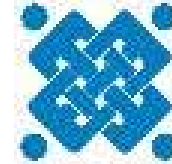
Required Data:

Name
First Last

Gender Male Female

DOB / / ZIP Code
mm / dd / yyyy

Searching for patient...



Screen Flow

Hello jcalladi
User at Boston Hospital

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Record Locator Service - DEMO

Patient Identification

Required Data:

Name
First Last

Gender Male Female

DOB / / ZIP Code
mm / dd / yyyy

...search complete.

2 Record(s) Found Elapsed Time: 2.23 second(s)

URI	MRN	Name	Gender	Birthdate	Zipcode
www.csc.com	101550	PAMELA MOY	F	3/26/1970	02360
www.asu.edu	778788	Pamela Moy	F	3/26/1970	02360

Search Engine – Scoring / Setting

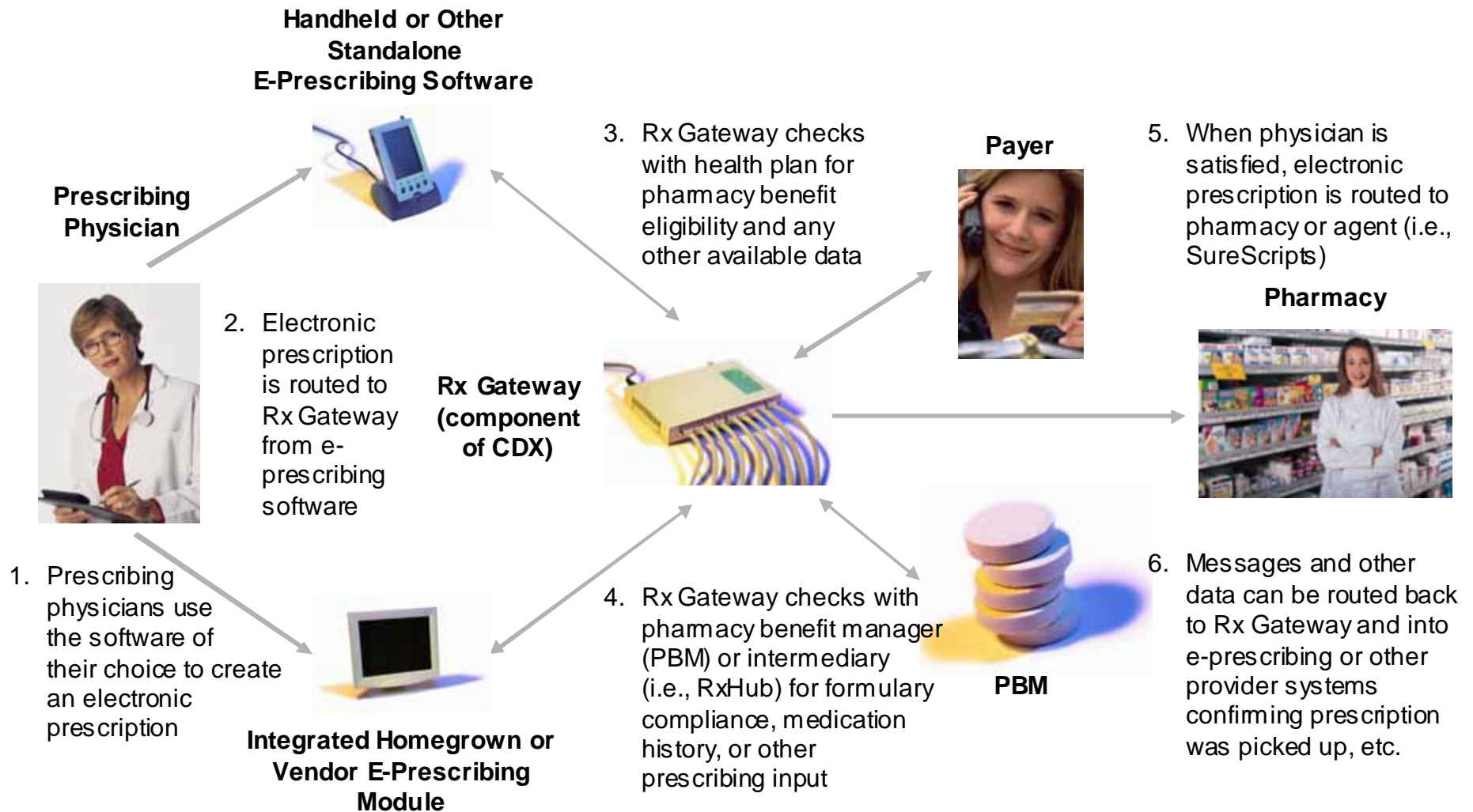


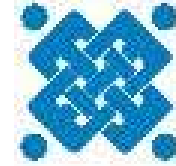
Thresholds

Comparison Scoring		<i>part of Initiate's Identity Hub Software</i>			www.initiatesystems.com	
		This example from their literature				
Rec#	Name	Address	Phone	DOB	SSN	Example Score
101	John Q Public	1043 W. Easy St, Phoenix, AZ 85535	5556060	10-24-1950	482891822	20.0
102	Jon Public	1043 W. Easy St, Phoenix, AZ 85535	5556060	10-24-1950	482891822	18.0
103	J Public		5553232	10-25-1950	482891822	11.0
104	John Q Long	552 Green Dr, Phoenix, AZ 85535		11-15-1962	57265225	5.0
105	Danny Smith		5552745	10-24-1950	48289244	5.0
106	Kevin Dohert	1028 W. Easy Ave, Phoenix, AZ .85535	5554289		48224857	4.0

- Matching threshold is set by RLS implementing organization (e.g. RHIO)
 - Threshold is an installation time parameter, based on security policies re: “false positives” and human disambiguation.
 - Architecture does not preclude specific matching requirements

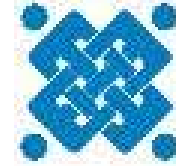
e-prescribing applications by providing more of an end-to-end solution as part of the CDX





Privacy and Security

- Opt in v. Opt Out
- Empowering the patient
- Chain of trust among participants



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Summary

- 2006 is the year
- Communities are key
- Massachusetts is an early innovator