THE TECHNOLOGY TO POWER EHRs AND HIEs

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Health IT 11
The Tools for Meaningful and Accountable Care

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Meaningful First, Then Accountable

- First things first – the Top 10 Challenges to achieving meaningful use*

Hospitals

1. Doing CPOE right the first time
2. Helping physicians transition to competent, willing users of the EHR
3. Integrating the right clinical decision support into CPOE
4. Starting the record in the Emergency Dept.
5. Managing new types of electronic information
6. Capturing the data for quality performance measurement
7. Bringing clinical data analytics up to par
8. Sharing data with patients and other providers electronically
9. Meeting new requirements for privacy and security
10. Dealing with ICD-10 at the same time

Eligible Professionals

1. Capturing the data
2. Establishing effective workflows to reinforce data entry (including medication reconciliation)
3. Driving provider involvement in adopting the EHR
4. Implementing appropriate CPOE
5. E-prescribing – as soon as possible
6. Developing a process for managing clinical decision support
7. Implementing patient health information exchange workflows
8. Formulating a provider health information exchange strategy
9. Ensuring privacy and security compliance
10. Initiating EHR-based quality performance measurement

* From CSC white papers, 2010, available at http://www.csc.com/health_services/insights/

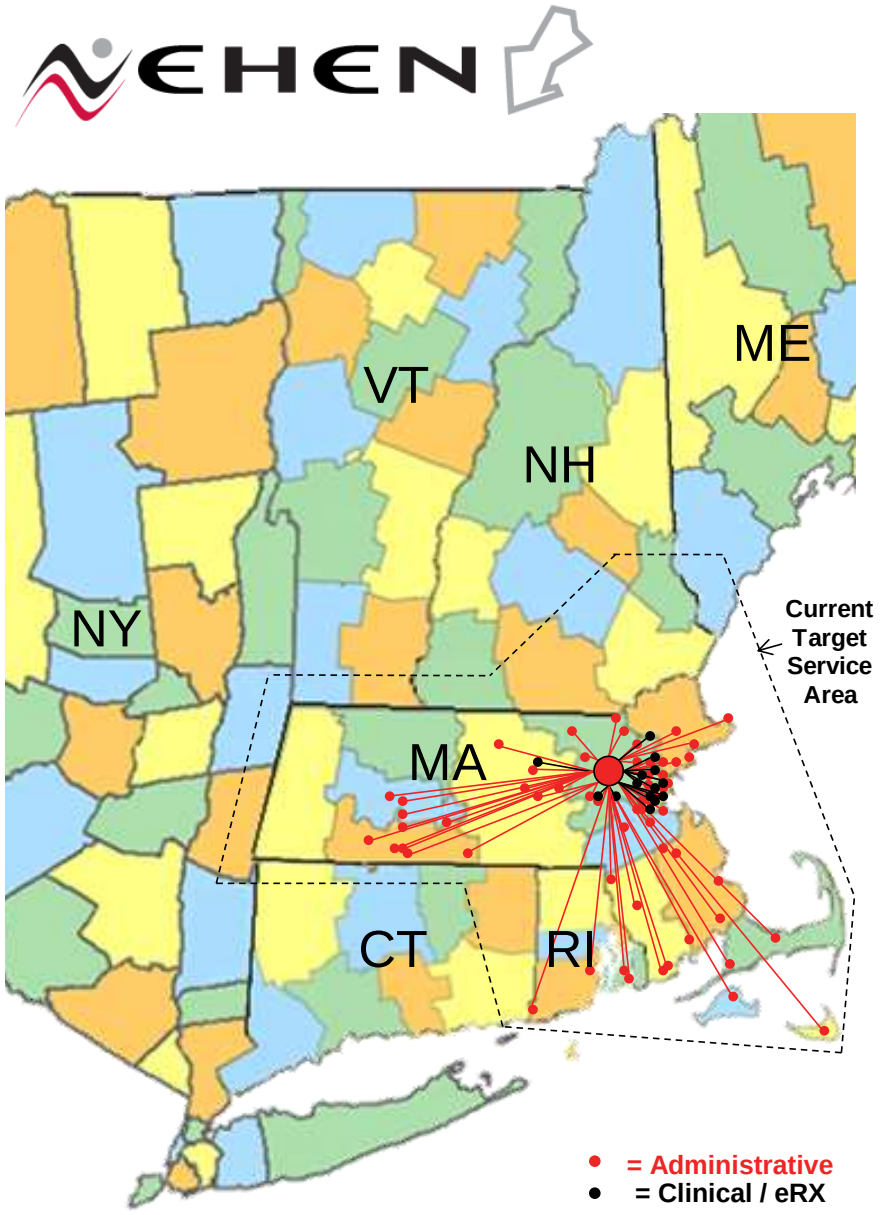
First you need to have an EHR and then you need to address a number of daunting challenges: Certification ≠ Meaningful Use.

Supporting Meaningful Use with HIE

- The various meaningful use requirements and specifications can be boiled down to 11 essential use cases for health information exchange in healthcare operations and patient care
  1. Route visit data to other providers and authorized parties
  2. Route data in support of care transitions, including referrals
  3. Route lab and imaging orders and results
  4. Query patient history
  5. Route electronic prescriptions
  6. Retrieve medication history for medication reconciliation and other medication management
  7. Route visit and other data for clinical decision support
  8. Route data to patients and enable ownership and management
  9. Adjudicate and manage claims and/or patient responsibility
  10. Route visit and other data for standardized quality reporting
  11. Route visit and other data for standardized public health reporting

Local HIE in Massachusetts

- NEHEN is the most widely-adopted HIE solution in New England
  - Spanning the Massachusetts and Rhode Island
  - Longest sustained and most widely scaled
    - 100M+ annual transactions
  - Managed by CSC
- Serving organizations of all types and size, public and private
  - Federated and hosted options
- Expanding clinical HIE
- Aligned with state and interstate HIE
  - Provider directory, NHIN Direct, etc.
  - Well-positioned for regional expansion



NEHEN Clinical HIE Today – Driven by Meaningful Use

Supported Services

- NEHEN Administrative Exchange
- NEHEN Clinical Data Exchange
- NEHEN e-Prescribing Exchange

	Clinical Exchange Features/Functions
Use Cases	Provider-to-Provider Clinical Summary Exchange Clinical Summary Supporting Multiple Use Cases (e.g., Discharge Summary, Visit/Encounter Summary, Referral Summary, Admission Notification)
Use Cases	Provider-to-Payer Exchange Clinical Summary for Case Management & other Use Cases Lab Results for Quality Measurement & other Use Cases
Use Cases	Quality Reporting Clinical Summary for Quality Analysis
Use Cases	Public Health Reporting Clinical Summary for Health Equities Analysis Lab Results Immunizations Syndromic Surveillance
Enabling Technologies	Clinical Summary Viewer Built into NEHENExpress
Enabling Technologies	Community Participant/Provider Directory for Message Routing Centrally hosted by NEHEN
Enabling Technologies	Secure Messaging
Enabling Technologies	Audit Control Reportable Event Logging NEHENExpress Audit Report Viewer

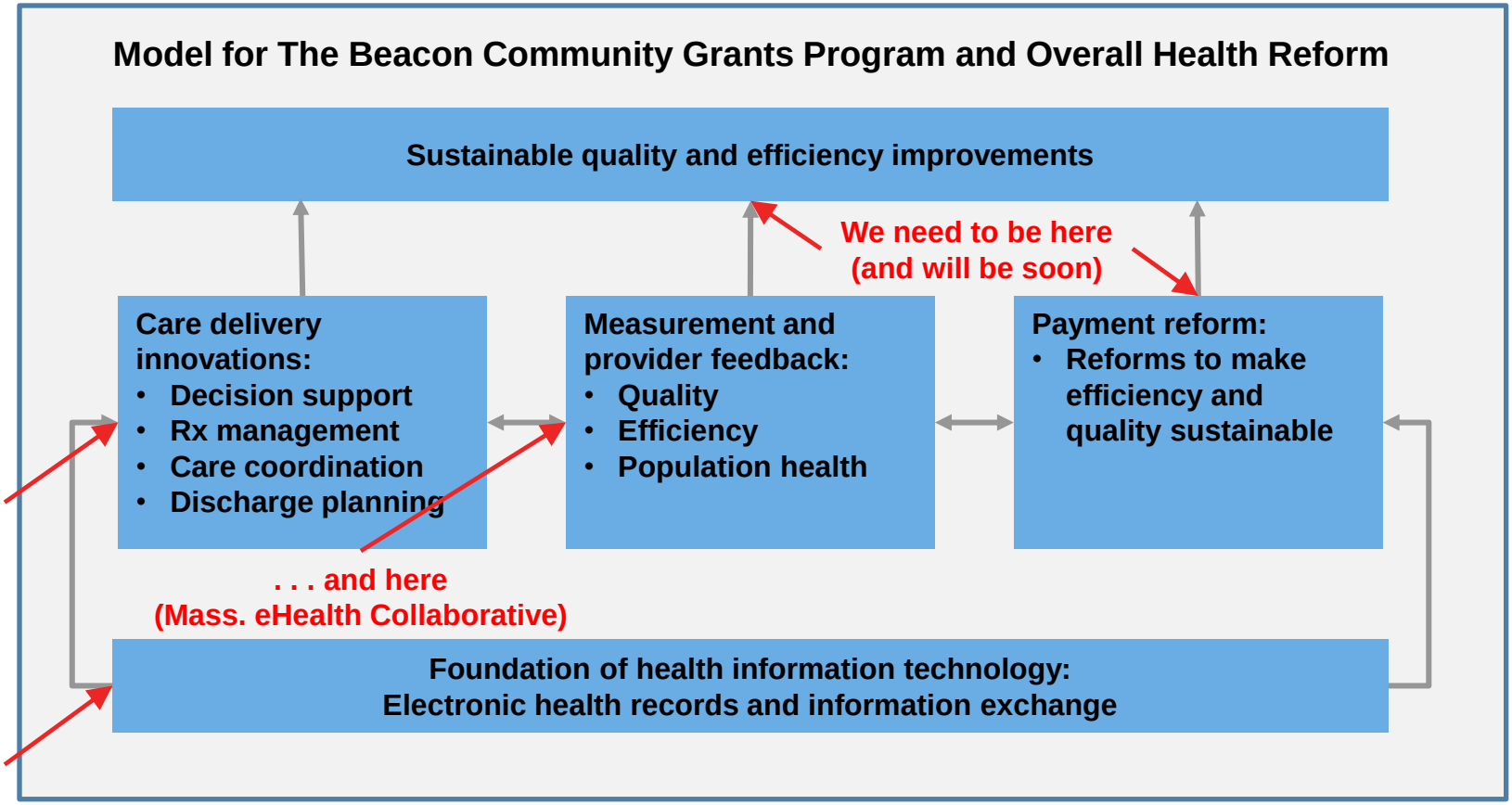
NEHEN's Clinical Exchange Services / Adoption

Participant	Clinical Summaries[1]		Lab Results[2]		Immunizations[3]		Syndromic Surveillance[4]	
	Send	Receive	Send	Receive	Send	Receive	Send	Receive
Atrius Health	Planned	✎			✎		Planned	
Beth Israel Deaconess	✓	✓	🗒		🗒		✎	
BI Deaconess – Needham	✎	✎						
Children's Hospital	✓	✓			Planned			
Fallon Clinic	✎	✎			Planned			
Mount Auburn Hospital	✎	✎						
Mass. Eye & Ear Infirmary	Planned	Planned						
New England Baptist	✎	Planned						
Northeast Health System	✎	✓						
Partners HealthCare	Planned	🗒						
Signature Health	Planned	Planned						
Tufts Medical Center	🗒	✎						
Winchester Hospital	Planned	Planned						
Boston Public Health Comm.		🗒[5]		🗒		Planned		✎
Mass. Dept. of Public Health				Planned		🗒		
Mass. eHealth Collaborative		🗒[6]						
Neighborhood Health Plan		✎		✎				
Network Health		✎		✎				
Tufts Health Plan		✎		✎				

1 HL7 CDA R2 CCD, HITSP C32
2 HL7 2.5.1, LOINC
3 HL7 2.5.1, CVX (as specified by CDC)
4 HL7 2.5.1
5 For health equities analysis
6 For quality measurement and reporting

Legend:
✓ Production
🗒 Testing
✎ In design / development

Next Up – Accountable Care



Source: Health Information Technology: Laying The Infrastructure For National Health Reform, Blumenthal et al, *Health Affairs*, June 2010

Beyond the foundational capabilities of today's HIE/HIT, accountable care will require inline clinical decision support, data aggregation and business intelligence for retrospective analysis, expanded patient engagement and a greater emphasis on and availability of mobile apps.

THANK YOU

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