

**Commonwealth of Massachusetts**  
Executive Office of Health and Human Services



# **Health Information Technology Council May Meeting**

**May 6, 2013**

**3:30-5:00 P.M.**

**One Ashburton Place, 21<sup>st</sup> Floor, Boston**



## Today's Agenda:

- 1. Meeting Minutes approval [5 min]**
- 2. Mass HIway Implementation Updates**
  - a) Network Health/Tufts Medical Center [25min] – Peter Bristol, Bill Shickolovich, Phill Argyis
  - b) Beth Israel Deaconess Medical Center [15min] – John Halamka
- 3. Mass HIway Update**
  - a) Outreach & Sales Update [10min] – Sean Kennedy
  - b) Implementation & Support Update [10min] – Manu Tandon
  - c) Phase 2 Update [5min] – Manu Tandon
- 4. HIE Strategic & Operational Plan Update [10min] – Sean Kennedy**
- 5. Wrap up and next steps [10 min] – Manu Tandon**



## Discussion Item 1:

Mass Hiway Implementation Updates – BIDMC, Network Health and Tufts Medical Center



# Network Health & Tufts Medical Center Investing in HIE – Mass Hlway Status



# About Network Health

- A statewide Medicaid Managed Care Organization (MCO) providing coverage to ~225,000 enrollees in Mass Health and Comm Care.
- 500 employees based out of our Medford headquarters, many of whom are social workers, nurses, and behavioral health professionals.
- Provides integrated care management services to our enrollees, which support and augment care delivered by our provider and hospital partners.
- Heavily invested in analytics, risk stratification and predictive tools and shares all the resulting information with providers through CareInsight, our web-based performance analytics platform.
- View health information exchange as a catalyst and necessity for improved patient experiences through more timely and coordinated action, improved quality, and cost containment.



# Clinical Data Trading Partners

## **Testing:**

- Tufts Medical Center (active)
- Beth Israel (on-deck)

## **In planning:**

- Children's Hospital
- Brockton Neighborhood Health Center

## **Others we hope to engage with:**

- More PCMH and CHC sites
- More hospitals: UMASS Memorial, MGH
- Everyone



# Working with Tufts Medical Center

- 6/10/11, 3:58 PM: Commitment between Tufts Medical and Network Health to work together as part of the clinical HIE prototype efforts led by NEHEN
- 10/16/12, 11:47 AM: Tufts Medical and Network Health join other early adopters in the Golden Spike launch of Mass HIWay
- 4/17/13, 10:18 PM: Tufts Medical and Network Health successfully send and receive 40,000 test transactions across the Mass HIway



# Working with Tufts Medical Center

## **A few of the good people doing important work:**

### Phillip, Atia

Determined project leaders with impressive sticktoitiveness

### Jean

Clinical leader championing our cause

### Carmen, Aaron

Technical excellence on the frontline

### Kimberly, Ian, Jeanine

Coordinators/technologists from EOHHS & Orion providing professional advice, upgrades and support





# Priority Use Cases

- **Inpatient Discharge Summary (receiver)**
- **Emergency Dept Visit Summary (receiver)**
- **Lab Data (receiver)**
- **eCarePlans (sender)**



# Adaptors (Interfaces)

- Network Health's clinical care management system is McKesson CCMS
- Microsoft Biztalk is used as the main interface engine which connects the LAND gateway to CCMS. Current version of CCMS is HIE/CCD-unfriendly; future versions promise improved interoperability
- For inbound, currently we use a custom process to parse the CCD, identify the patient, attach a human-readable version of the CCD to the patient's record in CCMS, and alert clinicians.
- For outbound, we are developing a custom process to populate and transmit CCDs for the eCarePlan use case



# What We've Learned So Far

- Clinical data exchange makes a real difference in people's care
- Attach and view first; parse & load later
- Test network is important
- Clinical champions make things happen
- The impact on clinical workflow cannot be underestimated
- Security and consent matters take time
- Value of information rises with its currency, but the workflow triggers to transmit CCDs are involved
- Nomenclature mapping is difficult
- There's no challenge we can't overcome

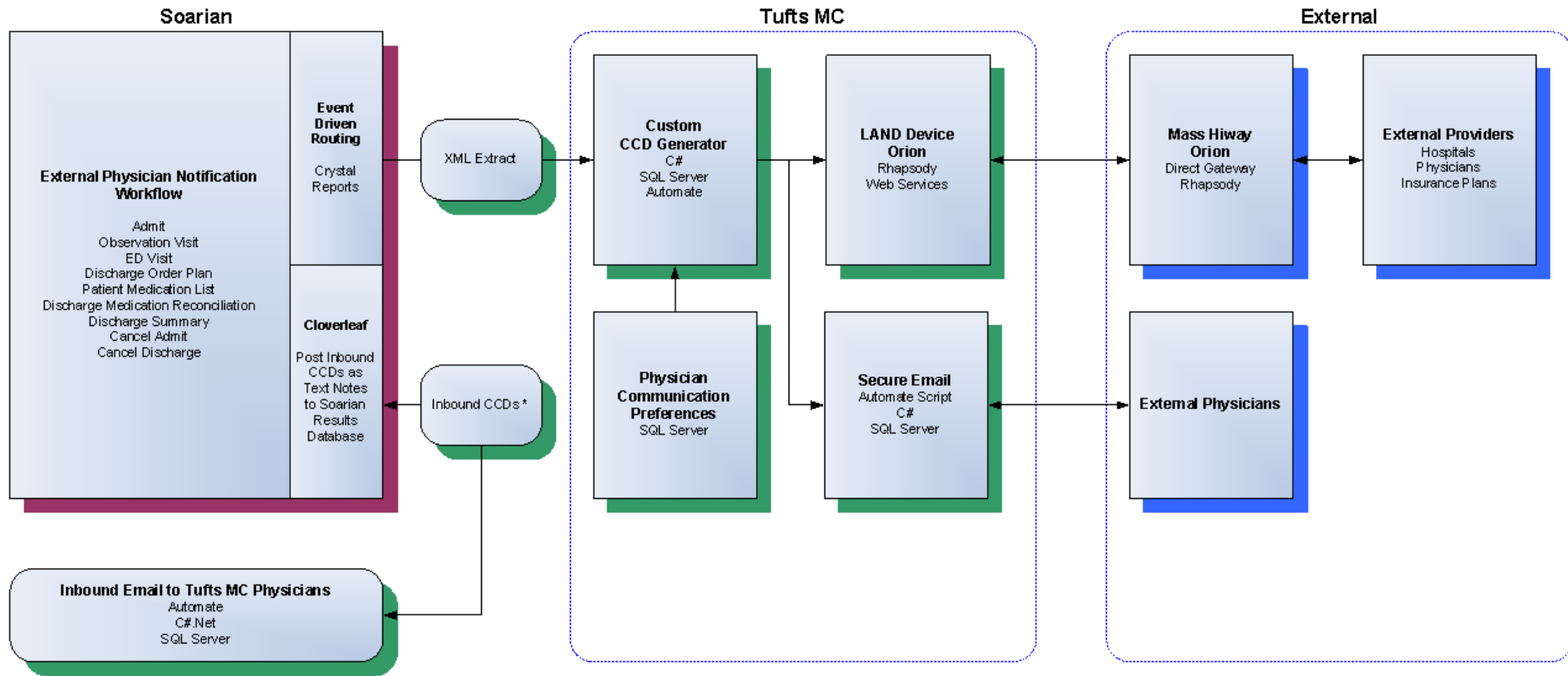
# Tufts Medical Center - Overview

- Tufts Medical Center
  - World-class academic medical center
  - Full-service hospital for adults and Floating Hospital for Children
  - Principal teaching hospital for Tufts University School of Medicine
- Inpatient
  - Inpatient Discharges per Year: 20,000
  - Inpatient Services: 30+
- Outpatient
  - Outpatient Visits per Year: 500,000
  - Outpatient Clinics: 80+
- EMRs
  - Inpatient: Soarian Clinicals (Siemens)
  - Outpatient: eCW / EHX (eClinicalWorks)

# Tufts Medical Center - Technology Components

- Soarian Clinicals – Siemens
  - *Full clinical repository including orders, results, vital signs, I&O, assessments, allergies, medications*
    - *Hosted ASP at Siemens in Malvern, PA*
- TIBCO Engine
- Automate – Network Automation
- SQL Server
- C#
- Secure Web Services, REST, SOAP

# Tufts Medical Center – Mass HIE Integration



## Notes:

- \* Inbound CCDs from Mass Hiway

## Legend:

- Green – TuftsMC
- Red – Siemens
- Blue – External

# Tufts Medical Center - Strategy

- CCD Creation
  - Initial Strategy: Create custom CCD using Soarian Extract, XML, C#, SQL Server, Automate scripting
  - Long-term Strategy: Migrate CCD creation to Siemens platform: Clinical Letter and AIS
  - Coded Sections:
    - Currently have coded payor section only
    - Allergies, Medications, Problems, Lab Results are next priority
- Integration with Mass HIE
  - Implement Orion Rhapsody Interface Engine / LAND Device
  - Communicate with LAND Device via Web Services

# Tufts Medical Center - Strategy (Continued)

- Sending CCDs Outbound
  - Mass HIE: Send CCDs outbound via Mass HIE LAND Device to external Providers: Hospitals, Primary Care and Referring Physicians, Insurance Plans
  - HIM Review: CCDs are sent to electronic review folder. HIM manually reviews each CCD for Patient Sensitive Information prior to sending externally
- Receiving CCDs Inbound
  - Mass HIE: Receive CCDs inbound via Mass HIE LAND Device
  - Post to Soarian Clinicals
    - Technical Approach
      - Initial Strategy: Post inbound CCDs from Mass HIE to Soarian as text result
      - Long-Term Strategy: With Soarian Clinicals v3.4, include coded sections and consume in Soarian
    - Patient Matching Approach
      - Initial Strategy: HIM department will review manually, assigning MR # to enable posting to appropriate patient
      - Long-Term Strategy: Exploring matching algorithms for potential automation



# Tufts Medical Center - Testing Status and Next Steps

- Testing Status

- Conducting volume testing with Network Health; sending 40,000 CCDs per Day
- Updated hardware to accommodate volume needs; delivered new LAND Device with 900 Gig data partition and data encryption enabled
- Exploring CCD size considerations; reviewing Mass HIE size (10 Meg) with potential future CCD components

- Next Steps

- Complete Volume Testing
- Address consent requirements as defined by Mass Chapter 305 Opt-In Section 6F-1
- Go Live with Network Health

# Tufts Medical Center - Thank You

- Mass HIE
  - Kim Grose
  - David Bowditch
- Orion Health
  - Ian Rowe
  - Jonathon Price
  - Nick Choi
  - Russ Lutz
  - Sean Burke
- Network Health
  - Peter Bristol
  - Atia Amin
  - Carmen Wu
- Tufts Medical Center
  - Aaron Tatko



Beth Israel Deaconess  
Medical Center



HARVARD MEDICAL SCHOOL  
TEACHING HOSPITAL

# Beth Israel Deaconess Medical Center Mass HIway Progress Report



# BIDMC Mass Hlway Progress Report

## Rapid Progress among many stakeholders

- We have successfully sent a CCD to MAeHC with a filename that works for both of us. We will send 4,000 CCD's / day beginning in May.
- We are currently testing with Network Health to move our feed of CCD's from NEHEN to HIE. We have successfully tested BIDMC sending.
- Likely all our feeds will move to the HIE soon. Only Neighborhood health has not asked to test with us yet.
- Tufts has expressed interest in moving our current feed of Lab data to HIE and requested we test with them.



# BIDMC Mass Hlway Progress Report

## **Rapid Progress among many stakeholders**

- Working with DPH in using the HIE to send immunization HL7 messages. Lab data should soon follow.
- Partners has expressed interest in moving our current CCD feed for joint clinical support from NEHEN to HIE. We are ready to test
- BPHC has expressed interest in moving our current feeds of syndromic surveillance and lab information to the HIE from NEHEN. We are ready to test



# BIDMC Mass Hlway Progress Report

## Modular Certification

- Three test scripts exercise Direct functionality (b1, b2, e1)
- Propose to bring CCHIT, Orion, and BIDMC together to execute those tests needed for the Mass Hlway to achieve modular certification
- BIDMC needs to do this anyway for self certification of its home built systems



## Discussion Item 2:

**Mass HIway Update – Outreach & Sales Update, Implementation & Support Update, Phase 2 Update**



Outreach

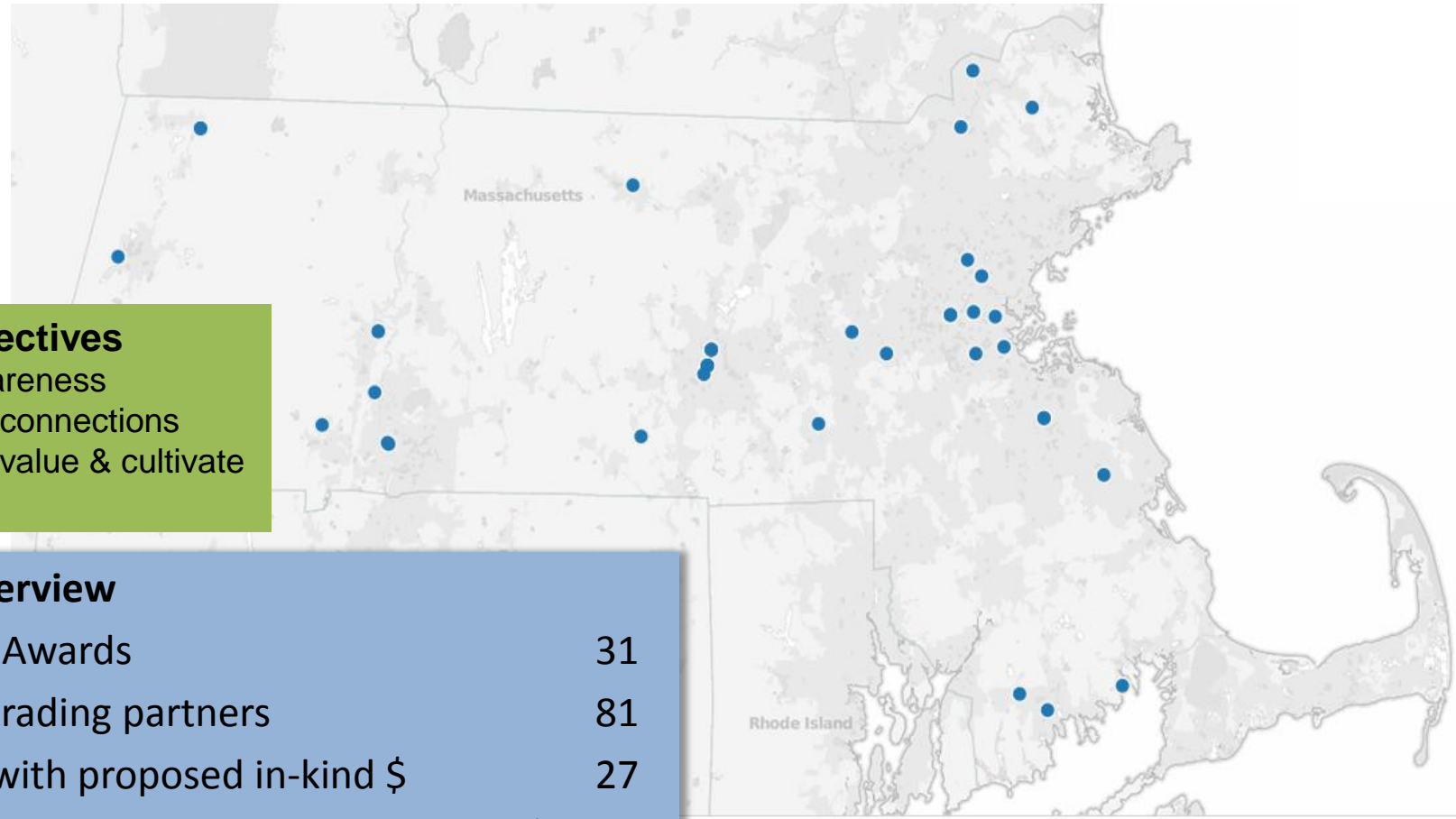
Sales

Implementation

Support



# Hiway Implementation Grants



- Grant Objectives**
1. Build awareness
  2. Catalyze connections
  3. Build the value & cultivate 'stories'

**Grants Overview**

Planned Awards	31
Unique trading partners	81
Awards with proposed in-kind \$	27
Grant funding	\$2.2M

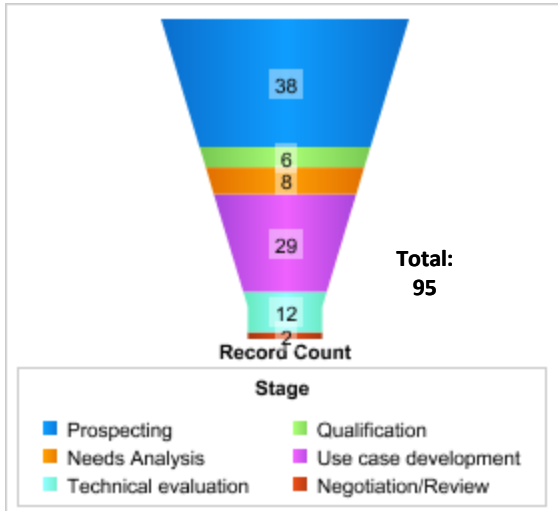
Map plotting 'primary applicants' of grants awarded



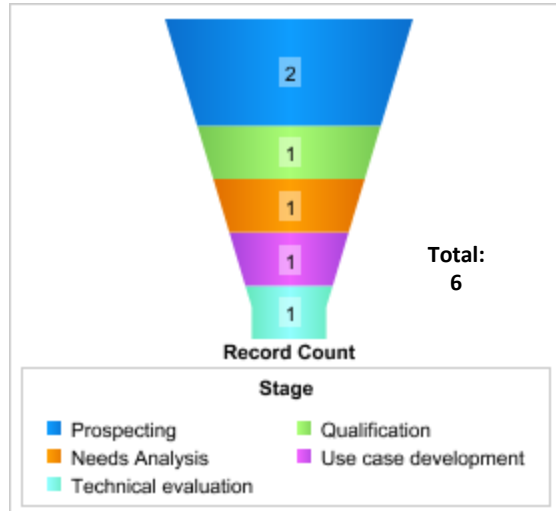


**Data as of 4/29/2013**

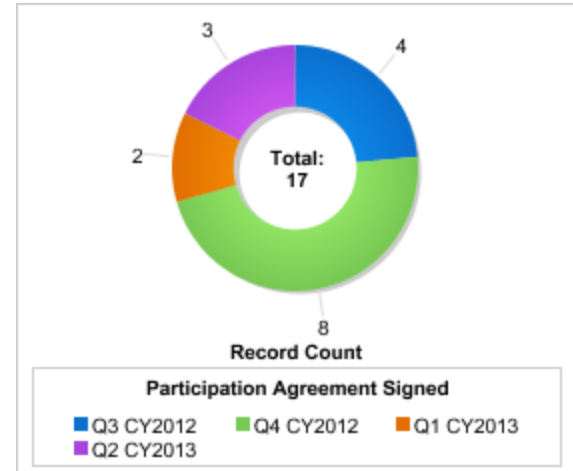
**# Opportunities (by stage)**



**# Opportunities (new in April)**



**# Participation Agreements signed**



Total Orgs	HIway Revenue
~410	~\$850,000

Total Orgs	HIway Revenue
17	~\$20,000

**# Grants Awarded (anticipated)**

Grant	#
HIway Vendor Interface Grants	2
HIway Implementation Grants	27

**NOTE:** Orgs may not be unique. Some orgs are in more than one opportunity. Revenue, however, is **not** counted twice.

'Sales' gains commitments (i.e. a signed Participation Agreement, signed Grant contract) from organizations by cultivating opportunities. Opportunities reflect a set of trading partners centered on a common use case.



Organization	Use Case	Target Date
<b>Tufts Medical Center and Network Health</b>	Discharge Summaries from Tufts Medical to Network Health for follow-up care – in testing	April 15 in Production May 10, 2013
<b>BIDMC with MAeHC, Network Health</b>	Data analytics; movement of CCDs	May 2013
<b>BIDMC and DPH Immunization</b>	DPH Registries for ELR and Immunizations went live on 4/28/13; BIDMC will begin process to move immunization data through the HIway	May 2013
<b>Holyoke Medical and community providers</b>	Coordination of care will be first Direct connection (w/o LAND); also has potential to connect its HIE to the MA HIway	May 2013 for Holyoke Medical test connection; working through process to connect with other providers within Holyoke HIE
<b>Next Active:</b>		
<b>Boston Public Health, Children’s, Atrius, Partners</b>	Various stages of testing using Direct LAND	TBD
<b>Providers using DPH registries</b>	ELR, Immunizations – expectation that initial set of providers will be the above	Ongoing
<b>Meditech</b>	50+ sites in Commonwealth	June-July 2013



Outreach

Sales

Implementation

Support



- **Transactions exchanged up from 5,984 in March to 337,956 during the month of April – all test**
- **Developers Tool Pilot**
  - Collection of integrated artifacts for quicker, efficient connection to HIway (i.e. XDR SOAP connector)
  - Experience shows this is more effective than spec release
- **In support of providers connecting to the DPH registries:**
  - Implemented messaging, outreach plan with DPH
  - Modified Participation Agreements to allow “bridge” between current agreement and use for public health
  - Developed Implementation Guides



# Phase 2 overall timeline



## Mass HIway Phase 2 high level project schedule

Activity	Target date
Submit IAPD to CMS	Dec 2012
CMS approval of Phase 2 IAPD	<del>April 2013</del> <b>Completed</b>
Phase 2 contract (or change order) executed	<del>April 2013</del> May 2013
Go-live - Public Health - Immunization Registry Node	<del>April 28 2013</del> <b>Completed on 4/28/13</b>
Go-live - Public Health - Reportable Lab Results (ELR) Node	<del>April 28 2013</del> <b>Completed on 4/28/13</b>
Testing - Public Health - Syndromic Surveillance Node	<del>April 12 2013</del> May 24, 2013
Testing - EOHHS – Children’s Behavioral Health (CBHI) Node	May 24, 2013
Go-live for Phase 2, Release 1 (Other Public Health interfaces)	May – Oct 2013
Go-live for Phase 2, Release 2 (CDR, EMPI, RLS, Consent)	Oct 2013 – Mar 2014



## Discussion Item 3: Mass Hlway Strategic and Operating Plan Update



## Timeline

Task	Date
Preliminary outline and section assignments to EOHHS/MeHI	29-Mar
HIT-C meeting - intro HIE-SOP update plan	8-Apr
First draft for review by EOHHS & MeHI	17-Apr
Iteration period	18-Apr – 10-May
Submit draft to HIT-C for review	10-May
Receive HIT-C feedback	17-May
Incorporate any HIT-C feedback	21-May
Final Approvals	23-May
<b>Submission to ONC</b>	<b>24-May</b>

- **The purpose of the 2013 HIE-SOP submission is to update ONC on our efforts.**
- **The primary components of this update include the following new submissions:**
  - Sustainability Plan
  - Program Evaluation Plan
  - Privacy and Security Framework
- **Additionally, we will update them on any ‘Changes in HIE Strategy’.**



**Discussion Item 4:**  
**Wrap up and next steps**



## HIT Council 2013 Meeting Schedule\*:

- January 14 – 11<sup>th</sup> Floor Matta Conference Room
- February 4 – 11<sup>th</sup> Floor Matta Conference Room
- March 13 – 11<sup>th</sup> Floor Matta Conference Room
- April 8 – 21<sup>st</sup> Floor Conference Room
- May 6 – 21<sup>st</sup> Floor Conference Room
- **June 3**
- July 1
- August 5
- September 9
- October 7
- November 11
- December 9

*\*All meetings to be held from 3:30-5:00 pm at One Ashburton Place, 21<sup>st</sup> Floor, Boston, unless otherwise noted*





# Wrap up



**Next HIT Council Meeting: June 3, 2013**

**Preliminary Agenda:**

- Advisory Group Update/Discussion
  - Discussion Topics?
- Mass Hlway Update