

COMMUNITY eHEALTH ASSESSMENT – METRO BOSTON

REGION: Northeast

COMMUNITY: Metro Boston

PARTICIPATING ORGANIZATIONS:

Organization	Organization Type
Atrius Health	Provider Association
Bay Cove Human Services	Behavioral Health and Social Services
BID-Needham	Acute Care Hospital
BIDMC	Acute Care Hospital
Boston Medical Center	Acute Care Hospital
Children’s Hospital	Acute Care Hospital
Hallmark Health	Provider Association
Hallmark Health - Lawrence Memorial Hospital	Acute Care Hospital
Hallmark Health Melrose-Wakefield Hospital	Acute Care Hospital
Deutsches Altenheim German Center for Extended Care	Long Term and Post-Acute Care
The Dimock Center	Community Health Center
Eliot Community Human Services	Behavioral Health and Social Services
Mass General Hospital	Acute Care Hospital
NEQCA	ACO
Spaulding Rehabilitation Hospital	Long Term and Post-Acute Care
Vinfen	Behavioral Health and Social Services

DATE REVIEWED / UPDATED: 5/11/15

EXECUTIVE SUMMARY

Overview & Methodology

In order to better understand the health information technology and health information exchange ecosystem at the state and local level – so as to inform Community and Statewide eHealth Plans, MeHI conducted a needs assessment of healthcare stakeholders throughout fifteen communities in Massachusetts. The assessment utilized the semi-structured interview methodology and data collection process to gather information from participants. In addition to organizational and HIT environment information, the interview centered on four domains to better understand the

clinical/business needs, internal challenges, external barriers and ideas for improvement. Responses were collected, codified into categories, and then ranked by frequency of reporting.

MeHI held roundtable meetings in each of the communities to present and discuss the interview findings. Through group discourse, categories and themes evolved. Based on feedback and comments from the roundtables, MeHI synthesized the findings to develop focus areas for the Community eHealth Plans.

In addition to shaping the focus areas, the goal of the assessment and group meetings was to identify eHealth priorities and develop actionable plans – at the Community level - that demonstrate value for each community. The assessment findings, interview and meeting feedback, and Community eHealth Plans will inform and be integrated into the Statewide eHealth Plan.

Findings

In the second roundtable meeting, the group noted that all needs identified in the first roundtable are critical needs, but it depends on where organizations are in the IT adoption pathway. The primary needs identified by stakeholders in the Metro Boston region are around the use and promotion of the statewide HIE, The Mass HIway. Specifically, the stakeholders identified the following areas as their eHealth priorities:

1. Increase the number of trading partners signed up for and actively transacting on the HIway
2. Access to greater HIway education and more working use cases to increase adoption and use of the HIway. Education should be targeted at patients as well as community organizations to increase understanding and consent rates.
3. Policies for consent and sharing of sensitive information. Currently organizations need to manipulate IT systems to ensure sensitive data is not shared.
4. The community felt the remaining identified needs could be worked on once the first three priority needs were addressed.
 - a. Inform care providers when one of their patients is in the Hospital Emergency Department (ED) and when the patient is discharged.
 - b. Inform post-acute care providers of patient's medications immediately upon discharge for both avoidance of drug-to-drug adverse events, for medication reconciliation, and for patient medication management.

Identification of Internal Challenges and External Barriers: The primary barriers identified by stakeholders to addressing these needs are as follows:

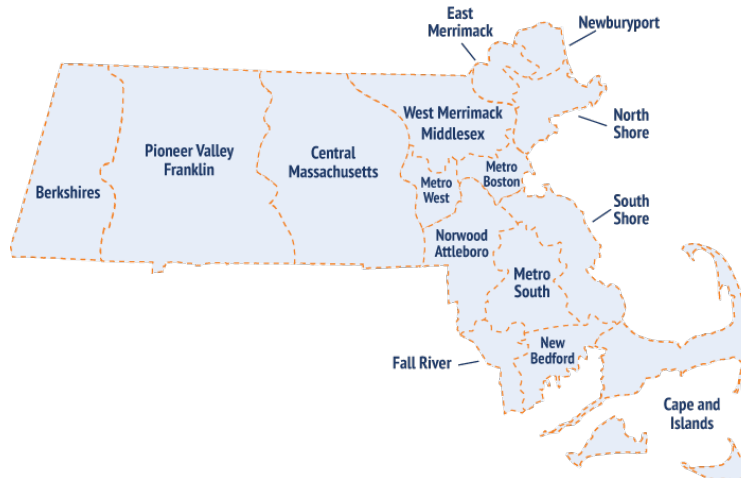
1. Lack of trading partners on the MA HIway to send discharge and C-CDA information securely. This stems from a lack of education and use cases around the functionality.
2. Lack of consumer or patient education about the HIway and patient consent details.
3. Lack of standards around sending sensitive patient information and C-CDA information to care partners (example is HIV status, Behavioral Health issues and substance abuse information).
4. Lack of financial capital in smaller organizations to hire resources for IT optimization and issue resolution.
5. Lack of process for positive patient identification among organizations.

Path Forward: Community stakeholders identified a variety of ideas to address needs and barriers with the following ideas prioritized by the community:

1. Narrowly identify a clinical initiative such as “Improve sharing of Discharge summaries Across Care Settings.” Major event changes are the first place to start to touch multiple organization types and show the value of electronic exchange. Systematically address organization connectivity, technology, workflow process, and human resource components until there is functioning information flow among organizations.
2. Onboard community organizations not currently transacting on the HIway. Ensure everyone knows who had the capability to send and receive via the HIway.
3. The HIway could provide a map to community organizations to show what each organization is capable of sending, what they are capable of receiving and make the toolsets available to see what can be done today with the HIE to move people forward.
4. Deploy programmatic staff that can facilitate a consumer engagement group to identify patient opinions on the HIway, assess what their level of education is around the technology and what their needs are to move forward with consent.

The overall findings for the community are found in the **Report of Community Needs** section of this Community eHealth Plan.

Table 1: The fifteen communities comprise the foundational framework for the Connected Communities Program. These are aligned with the Health Policy Commission’s Secondary Service Markets.



COMMUNITY DEMOGRAPHIC

The Metro Boston community consists of the following: Allston, Auburndale, Belmont, Boston, Brighton, Brookline, Cambridge, Charlestown, Chelsea, Chestnut Hill, Dedham, Dorchester, Everett, Hyde Park, Jamaica Plain, Malden, Medford, Melrose, Milton, Needham, Newton, Quincy, Revere, Roslindale, Roxbury, Saugus, Somerville, Wakefield, Waltham, Watertown, Wellesley, West Roxbury,

Weston and Winthrop.

Population - Total population of the Metro Boston Community is 1,558,880 living in the 179.54 square mile area. The population density is estimated at 8,682.78 persons per square mile which is greater than the national average population density of 88.23 persons per square mile. Between 2000 and 2010 the population in Metro Boston grew by 50,198 persons, an increase of 3.38%.

Income Per Capita - For the Metro Boston Community the income per capita is \$38,780. This is higher than the Massachusetts statewide income per capita which is \$35,484.

Poverty - In the Metro Boston Community, 28.89% or 424,744 individuals are living in households with income below 200% of FPL, which is higher than the Massachusetts average and 14.87% or 218,627 individuals are living in households with income below 100% FPL. These percentage rates are higher than the Massachusetts state rates in the same categories.

Linguistically Isolated Populations – The Metro Boston Community has a significant percent of linguistically isolated populations at 8.74%. This indicator reports the percentage of the population aged five and older who live in a home in which no person 14 years old and over speaks only English, or in which no person 14 years and over speaks a non-English language and speak English “very well.” The Massachusetts state percentage is 5.24%.

Population with Limited English Proficiency – This indicator reports the percentage of population aged five and older who speak a language other than English at home and speak English less than “very well.” In Metro Boston, this indicator is 14.49% compared to the Massachusetts state indicator of 8.84%.

Population by Race Alone - The racial make-up of Metro Boston County is 67.22% White, 13.91% Black, 9.75% Asian, 0.24% Native American, 0.04% Native Hawaiian, 4.56% Some Other Race and 4.28% Multiple Races:

Information acquired from **Community Commons on May 11, 2015**

<http://www.communitycommons.org/>

See **Attachment-1** for information on Community Commons, reporting methodology and data sources.

HEALTHCARE LANDSCAPE

Access to Primary Care – Metro Boston has 132.27 primary care physicians per 100,000 population. The Massachusetts state rate is 102.65 per 100,000 population. Doctors classified as “primary care physicians” by AMA include: General Family Medicine MDs and DOs, General Practice MDs and DOs, General Internal Medicine MDs and General Pediatrics MDs. Physicians age 75 and over and physicians practicing sub-specialties within listed specialties are excluded.

Lack of a Consistent Source to Primary Care – This indicator reports the percentage of adults aged 18 and older who self-report that they do not have at least one person who they think of as their personal doctor or health care provider. For Metro Boston, this indicator is 13.45%, or 138,341.12 people. This is slightly below the state indicator of 11.53%. This indicator is relevant because access to regular primary care is important to preventing major health issues and emergency department visits.

Facilities Designated as Health Professional Shortage Areas (HPSA) – Metro Boston has a total of 54 HPSA facility designations: 18 in primary care facilities, 18 in mental health care facilities and 18 in

dental health care facilities. The state of Massachusetts has a total of 158 HPSA facility designations: 56 in primary care facilities, 51 in mental health care facilities and 51 in dental health care facilities.

Population Receiving Medicaid – In Metro Boston, the percent of insured population receiving Medicaid is 22.38%, or 329,750, of the total population for whom insurance status is determined. This indicator reports the percentage of the population with insurance enrolled in Medicaid (or other means-tested public health insurance). This indicator is higher than the Massachusetts state indicator of 20.53%.

Information acquired from **Community Commons on May 11, 2015**

<http://www.communitycommons.org/>

See **Attachment-1** for information on Community Commons, reporting methodology and data sources.

Healthcare Organizations in the Community

The table below indicates the type and number of healthcare organizations known to MeHI. This is representative and not intended to be a complete inventory or count of healthcare organizations in the region.

Connected Community: Metro Boston (397 records)*	# Organizations
Ambulatory, General	134
Behavioral Health	86
Community Health Centers	46
Hospital, General	26
IDN/Health System/Network	10
Lab/Pharm/Imaging	4
Long-Term Post-Acute Care	91

REPORT OF COMMUNITY NEEDS

Ten interviews and two community roundtables were completed within the Metro Boston area for the Connected Communities Program to inform both the Community and Statewide eHealth Plans. These discussions included participants from multiple organization types – Hospitals, Long-term and Post-Acute Care, Rehabilitation, Behavioral Health, and large and small physician group practices. In the interviews and roundtables, organizations were asked to identify the top clinical and business needs that organizations are trying to solve with technology, top obstacles related to Health IT, and top ideas where technology may improve healthcare in Massachusetts. Obstacles related to Health IT were broken down into challenges faced within the organization and barriers perceived in the external healthcare market. The consensus view of stakeholders around community needs, ideas and obstacles is reflected in the Executive Summary section of this document.

Reported Clinical-Business Needs

What clinical or business needs are you trying to solve with technology?

Reporting Area-Frequency

Clinical-Business Needs	Metro	
	Boston	MA
Access to Clinical Information	30%	21%
Improve Internal Processes & Operations	15%	13%
Improve Population Health Analytics	11%	7%
Meet Regulatory/Incentive Requirements	7%	10%
Enhance Remote Patient Management	7%	4%
Enhance Alternative Payment Model (APM) Reporting	7%	4%
Improve Care Quality and Patient Safety	4%	9%
Improve Interoperability and Exchange	4%	9%
Improve Care Management	4%	9%
Enhance Clinical Quality Reporting	4%	3%
Improve Care Transitions	4%	2%
Know Patients, where they are and their status	6%	2%
Improve Medication Reconciliation	0%	14%
Increase Public Health Reporting	0%	3%
Promote Patient- & Family-centered Care	0%	3%
Remain competitive and grow business	0%	2%
Enable Interstate Exchange	0%	<1%

****Identified as a top priority need during community roundtable***

At the Metro Boston community roundtables, contributing organizations reviewed statewide and community specific clinical and business needs identified through interviews with individual organizations. The results from the Metro Boston community interview findings were compared to the statewide findings for the clinical and business needs category. Priority themes identified through thoughtful discussion around the preliminary interview findings in the first roundtable are highlighted in blue in the table above. As you will see, the identified themes are similar across the state and the Metro Boston community. Individual organization interviews and multi-organization group roundtable discussions focused on similar themes throughout the data collection and validation process.

The priority needs discussed with the Metro Boston roundtable members were slightly different from the top identified state clinical and business needs. The nuances of the community must be considered with reference to the current Health IT landscape. Many of the large Boston Hospitals are located in the Metro Boston community, making the need for care transitions to be enhanced through greater sharing of discharge summaries and care transition documentation. This leads to the first priority need for the community, increase the number of trading partners signed up for and actively transacting on the Hlway. Pioneers of the statewide HIE and health technology were present for the discussion and stated they want to send the data in a secure, electronic manner but were

finding it hard to find a consistent approach due to a lack of adoption of the technology with other organizations. These hospitals were actively transacting using the HIway, but were having trouble finding people to send information to because not enough post-acute and Behavioral Health organizations were educated, on boarded with the HIway or actively transacting. One major hospital had recently used resources to create a list of all their trading partners. These trading partners were then reconciled with the list with the organizations signed up with the HIway to ensure they were maximizing the use of Health IT and utilizing a streamlined, secure method to share care transition information.

The participating community organizations felt that the need to get more care team organizations on the HIway could be a result from another community need; greater access to HIway education and more working use cases to increase adoption and use of the HIway. Education should be targeted at patients as well as community organizations to increase understanding of the technology and increase patient consent rates. They felt this issue of education is very much tied to adoption because there is a need to have more organizations actively using the HIE to test and identify use cases, but at the same time there is a need for use cases to enhance adoption and show the benefits of secure electronic exchange. Also, greater education for patients and patient facing staff is needed to ensure they can clearly understand and verbalize information around consent and patient opt-in. More patients need to consent to have information sent via the HIway to also increase adoption and use by all types of organizations across the community.

To further identify the top clinical and business needs of focus during the second roundtable meeting, the Metro Boston community reviewed the needs discussed in the first community round table. The goal was to revisit the multiple needs that face the community organizations to further tease out the remaining top areas of focus. The list below identifies the needs identified in the first round table and was used to further the discussion.

1. Sharing sensitive information on the HIway in a compliant manner
2. Tracking patients and their care across organizations and care networks
3. Automatic receipt of data (Push vs. Pull of data)
4. Exchanging care data that is needed vs. exchanging data for Meaningful Use compliance
5. Increasing the number of organizations on the HIway for greater electronic exchanges
6. Remote patient care and self-care data monitoring
7. Access to greater HIway education and more working use cases to increase adoption and use of the HIway

Finally, the group identified a priority need for more defined and targeted policies for consent and sharing of sensitive patient information. Currently organizations need to manipulate IT systems to ensure sensitive data, such as HIV status, substance abuse or Behavioral Health information, is not shared. This becomes a major work-around for organizations and often results in not sending any information for these patients to ensure compliance with patient privacy and information sharing standards. The need makes the sending process and workflow fragmented and less streamlined.

The community felt the remaining identified needs discussed in the first roundtable could be addressed once the first three priority needs were met. By increasing adoption, education and standard policies around sharing sensitive information, there will be a greater and more streamlined process to inform care providers when one of their patients is in the Hospital Emergency Department (ED) and when the patient is discharged as well as inform post-acute care providers of patient’s medications immediately upon discharge for both avoidance of drug-to-drug adverse events, for medication reconciliation, and for patient medication management.

Community Priority Needs

The primary needs identified by stakeholders in the Metro Boston region are around the use and promotion of the statewide HIE, The Mass HIway. Specifically, the stakeholders identified the following areas as their eHealth priorities;

1. Increase the number of trading partners signed up for and actively transacting on the HIway
2. Access to greater HIway education and more working use cases to increase adoption and use of the HIway. Education should be targeted at patients as well as community organizations to increase understanding and consent rates.
3. Policies for consent and sharing of sensitive information. Currently organizations need to manipulate IT systems to ensure sensitive data is not shared.
4. The community felt the remaining identified needs could be worked on once the first three priority needs were addressed.
 - a. Inform care providers when one of their patients is in the Hospital Emergency Department (ED) and when the patient is discharged.
 - b. Inform post-acute care providers of patient’s medications immediately upon discharge for both avoidance of drug-to-drug adverse events, for medication reconciliation, and for patient medication management.

Reported Internal Challenges and External Barriers

Internal Challenges

What are your top HIT related challenges within your organization?

Internal Challenges	Metro Boston	MA
Lack of Staffing Resources	26%	25%
Lack of Financial Capital	26%	22%
Managing Workflow and Change	15%	14%
Technology Insufficient for Needs	15%	9%
Meeting Regulatory Requirements	7%	4%
Meeting Operational and Training Needs	4%	15%
Leadership Priorities Conflict with IT Needs	4%	2%
Market Competition and Merger Activity	4%	1%
Lack of Data Integration - Interoperability	4%	3%

Data Relevancy	4%	<1%
Market Competition and Merger Activity	0%	1%
Internet Reliability	0%	1%
Improve Medication Reconciliation	0%	<1%

**Identified as a top priority need during community roundtable*

Community Internal Challenges

The internal challenges identified through interviews completed in the Metro Boston community were closely aligned with the challenges faced by those interviewed across the state of Massachusetts. Rising to the top of the list for this community was a lack of staffing resources and financial capital. Financial capital is a need that the group felt tied in with the other top identified needs from the interview collection process. It is hard to have resources available to train and assist with operational workflow changes when financial capital is not readily available. Also, the community felt that staffing resources is an issue because not only is it hard to find qualified Health IT staff, but it is also difficult to retain the staff because the market is so competitive at this time and most organizations need IT resources with a basic level of skill. This can be particularly frustrating to organizations because they will invest the time to onboard and train the staff only to lose them to another Health organization in a year or two. The table above details the internal challenges interview results for the Metro Boston community and how they align with the interview findings in the state of Massachusetts.

In the first round table the group reviewed the interview findings noted in the table above. There was much discussion around the challenge of funding for additional technical resources. Participants felt that they were not able to fully use the technology functions in their current IT systems. To continue to progress in the adoption of Health IT, the organizations felt that funding for additional resources would help with ongoing training for staff, issue resolution and push the optimization for EHR and HIE capabilities. During discussion the group also felt that there are strong competing priorities in the organization and healthcare environment. This forces organizations to prioritize IT initiatives based upon funding, organization goals and current regulations. Community organizations, particularly smaller and Behavioral Health organizations, need to be flexible as priorities can drop or shift quickly due to a shift in organizational dollars and focus. The participating members also felt there was a lack of education and push to use the Hlway from organization leadership. The group felt that more use cases are needed to show an increase in productivity and cost savings to ensure leadership buy-in and focus on HIE technology. Educational efforts need to be focused on organization leadership to get top-down buy in and to prioritize of implementing Health IT technology. The group felt it is a competitive environment and leadership needs to stay on top of the Health IT market to ensure the organization does not fall behind the community.

In the second roundtable the group worked to further tease out the top internal challenges faced by organizations in the Metro Boston community. Through careful review of the feedback from the first roundtable, with items listed below, and the interview data presented the group, the discussion continued to focus on the three challenges discussed in the first round table; a lack of resources and staffing for IT optimization and issue resolution, competing priorities in the organization and

healthcare environment and a lack of education and push to the HIway from organization leadership.

1. Lack of resources and staffing for IT optimization and issue resolution
2. Competing priorities in the organizations and healthcare environment
3. Lack of education and push to use the HIway from organization leadership

Continued discussion focused on a lack of financial and staffing resources, competing focus in the healthcare market and a lack of education around Health IT and HIE with leadership. These themes were the top internal challenge identified throughout the data collection process for the Metro Boston Community.

External Barriers

What are your top environmental (external) HIT-related barriers impeding your progress?

External Barriers	Metro Boston	MA
Meeting Regulatory Requirements	40%	19%
Lack of Interoperability and Exchange Standards	20%	23%
Lack of HIE / HIway Trading Partners & Production Use Cases	10%	23%
Cost of Technology / Resources	10%	9%
Sensitive Information Sharing and Consent	5%	6%
Lack of EHR Adoption	5%	1%
Lack of HIE / HIway Education	5%	6%
Market Competition & Merger Activity	5%	4%
Vendor Alignment	0%	4%
Lack of Reimbursement/Unreliable Payments	0%	2%
Market Confusion	0%	1%
External Attitudes and Perceptions	0%	1%

****Identified as a top priority need during community roundtable***

Community External Barriers

Community organizations face many external challenges that often fracture focus and hinder progress towards Health IT adoption. Five of the top external barriers identified through interviews completed across the state are directly aligned with the top barriers discussed in the Metro Boston community interviews. The top areas identified by this community were focused on meeting regulatory requirements, a lack of interoperability and exchange standards, a lack of HIE and HIway trading partners and production use cases, the cost of technology and resources and consent and standards around sharing sensitive patient information through HIE technology. The interview findings, noted in the table above, were leveraged to facilitate discussion in both roundtables around identifying additional barriers and pinpointing the most challenging external barriers for organizations.

The first roundtable focused on the external barrier of a “wait and see” mentality towards Health IT and HIE adoption. So many organizations are not willing to onboard or invest in the technology until early adopters can show the benefits and cost savings attached to interoperability. The group felt this directly tied to the barrier of a lack of Hlway trading partners and use cases. Hospitals often have trouble finding organizations to exchange data with to streamline workflows and test alternate use cases for sending and receiving information to better the care of the patient. The group felt it was a bit of the “chicken and the egg” because they need people actively using the technology to increase the use cases and show benefit but they need to show the benefit to increase the number of organizations using HIE technology. The group noted that a lack of proper medication reconciliation and the management of patient medications after discharge greatly contributes to the readmission rate. Medication reconciliation and non-compliance is an area the group felt could really improve to decrease readmissions, increase patient safety and satisfaction and encourage organizations to adopt HIE technology to better care for mutual patients.

Another barrier discussed in the first roundtable is a lack of end consumer education around the Hlway. Many organizations struggle to get patients to opt-in to the HIE technology because they rely on front desk staff to have the knowledge, full training and time to fully discuss the Hlway. Patients need to know what the Hlway is and what it means to consent in to send information. The organizations can work diligently to train staff, but the task will remain difficult because in nearly all cases when the patient arrives and is asked to consent, it is the first time they are hearing about the Hlway or HIE technology. The group felt it is a lot of information for a patient to take in at one time, especially when it comes to the topic of sharing health information using new technology. The group felt that the Hlway needs to better educate the general public and patients on the basic functions of the statewide HIE and the benefits for their care when they consent to share information. This way, when the front desk staff asks the patient to consent to opt-in the patient has a basic understanding of the technology exists and its functionality.

Other external barriers discussed in the first roundtable were a lack of alignment of incentives and payment models and market competition and fragmentation among care organizations and ACOs. Competing ACOs in the same geography are causing market competition and hindering easy sharing of patient care data. These groups are working to remain competitive and care for patients within their network but do not have formal agreements or procedures around sending information to care team members outside the network. The current system relies on the patient providing the information instead of an automated system to promote this time of information sharing.

To continue discussion around the external barriers in the second roundtable, the group reviewed all the items discussed in roundtable one, shown below.

1. A “Wait and see” mentality toward Health IT and HIE adoption
2. Lack of Hlway trading partners and use cases
3. Lack of consumer education about Hlway and patient consent details
4. Lack of alignment between incentives and payment models
5. Market competition and fragmentation among care organizations and ACOs
6. Medication reconciliation and management of patient medications after discharge

The group discussion reiterated the interview findings and discussions from the first roundtable. Participating community organizations felt as though the identified external barriers of a lack of HIway trading partners and use cases and a lack of consumer education about the HIway and patient consent details were the top community external barriers.

Community Priority Barriers

The community group specified the following ***priority barriers*** to addressing needs;

1. Lack of trading partners on the MA HIway to send discharge and C-CDA information securely. This stems from a lack of education and use cases around the functionality.
2. Lack of consumer or patient education about the HIway and patient consent details.
3. Lack of standards around sending sensitive patient information and C-CDA information to care partners (example is HIV status, Behavioral Health issues and substance abuse information).
4. Lack of financial capital in smaller organizations to hire resources for IT optimization and issue resolution.
5. Lack of process for positive patient identification among organizations.

Reported HIT Improvement Ideas

What are your top ideas where technology (or technology related policy) may improve healthcare in Massachusetts?

HIT Improvement Ideas	Metro Boston	MA
Enable Interoperability & Exchange	15%	28%
Improve Care Quality & Patient Safety	12%	6%
Expand Consumer Engagement Technologies	12%	3%
Increase Education & Awareness	8%	15%
Provide Funding & Resources	8%	10%
Access to Clinical Information	8%	8%
Improve Care Transitions	8%	3%
Know Patients, where they are & their status	8%	1%
Enhance Reporting to State	8%	2%
Better Align Program/Policy	8%	6%
Enhance Alternative Payment Model (APM) Reporting	4%	<1%
Improve Care Management	4%	6%
Promote Costs Savings	0%	3%
Enable Population Health Analytics	0%	4%
Improve Vendor Cooperation	0%	3%

****Identified as a top priority need during community roundtable***

Community Prioritized HIT Improvement Ideas

Discussion of HIT Improvement ideas focused on solutions that would address the priority needs of the Metro Boston Community. The group agreed that the following ideas should be prioritized, because these ideas directly addressed the clinical and business needs of the community;

1. Narrowly identify a clinical initiative such as “Improve sharing of Discharge summaries Across Care Settings.” Major event changes are the first place to start to touch multiple organization types and show the value of electronic exchange. Systematically address organization connectivity, technology, workflow process, and human resource components until there is functioning information flow among organizations.
2. Onboard community organizations not currently transacting on the HIway. Ensure everyone knows who had the capability to send and receive via the HIway.
3. The HIway could provide a map to community organizations to show what each organization is capable of sending, what they are capable of receiving and make the toolsets available to see what can be done today with the HIE to move people forward.
4. Deploy programmatic staff that can facilitate a consumer engagement group to identify patient opinions on the HIway, assess what their level of education is around the technology and what their needs are to move forward with consent.

IDENTIFIED eHEALTH PRIORITY AREAS

1	Increase the number of trading partners signed up for and actively transacting on the HIway.	
2	Access to greater HIway education and more working use cases to increase adoption and use of the HIway. Education should be targeted at patients as well as community organizations to increase understanding and consent rates.	
3	Policies and procedures for consent and sharing of sensitive information. Currently organizations need to manipulate IT systems to ensure sensitive data, such as HIV status, Behavioral Health issues and substance abuse, is not shared.	

HIT IMPROVEMENT IDEAS

1	Narrowly identify a clinical initiative such as “Improve sharing of Discharge summaries Across Care Settings.” Major event changes are the first place to start to touch multiple organization types and show the value of electronic exchange. Systematically address organization connectivity, technology, workflow process, and human resource components until there is functioning information flow among organizations.	
2	Onboard community organizations not currently transacting on the HIway. Ensure everyone knows who had the capability to send and receive via the HIway.	
3	The HIway could provide a map to community organizations to show what each organization is capable of sending, what they are capable of receiving and make the toolsets available to	

	see what can be done today with the HIE to move people forward.	
4	Deploy programmatic staff that can facilitate a consumer engagement group to identify patient opinions on the HIway, assess what their level of education is around the technology and what their needs are to move forward with consent.	

ATTACHMENT - 1

Community Commons <http://www.communitycommons.org/>

Community Commons provides public access to multiple, public data sources and allows mapping and reporting capabilities to explore various demographic, social and economic and health indicators for defined areas and communities. Community Commons was specifically used to create custom, geographically defined report areas based on the zip codes within each of the **MeHI Connected Community** regions.

Community Commons generates custom area estimates for the selected indicators using population weighted allocations. These estimates are aggregates of every census tract which falls within the custom area, based on the proportion of the population from the tract which also falls within the area. Population proportions are determined for each census tract by dividing the sum of each census block’s population by the total census tract population. In this way, when a custom area contains 50% of the area of a census tract, but contains 90% of that census tract’s population, the figure for that census tract is weighted at 90% in the custom area tabulation.

Indicator data was assembled utilizing known, publicly available data sources identified in the table below;

Table – Data Source

Indicator	Data Source
Total Population	<i>US Census Bureau, American Community Survey: 2008-12</i>
Change in Total Population	<i>US Census Bureau, Decennial Census: 2000 - 2010</i>
Income Per Capita	<i>US Census Bureau, American Community Survey: 2008-12</i>
Population in Poverty - 100% FPL	<i>US Census Bureau, American Community Survey: 2008-12</i>
Population in Poverty - 200% FPL	<i>US Census Bureau, American Community Survey: 2008-12</i>
Children in Poverty	<i>US Census Bureau, American Community Survey: 2008-12</i>
Linguistically Isolated Population	<i>US Census Bureau, American Community Survey: 2008-12</i>
Population with Limited English Proficiency	<i>US Census Bureau, American Community Survey: 2008-12</i>
Population Receiving Medicaid	<i>US Census Bureau, American Community Survey: 2008-12</i>
Access to Primary Care	<i>US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File: 2012</i>
Facilities Designated as Health Professional Shortage Areas	<i>US Department of Health & Human Services, Health Resources and Services Administration, Health Professional Shortage Areas: April 2014</i>
Federally Qualified Health Centers	<i>US Department of Health & Human Services, Center for Medicare & Medicaid Services, Provider of Services File: June 2014</i>