COMMMUNITY eHEALTH PLAN – NEEDS ASSESSMENT

REGION: **Southeast**

COMMUNITY: **Metro South**

PARTICIPATING ORGANIZATIONS: *Brockton Neighborhood Health Center, Family and Community Resources, Brockton Area Multi Services, Inc., Harbor Health Services, Health Imperatives, Pinnacle Health Management, Signature Healthcare, Steward Healthcare*

DATE REVIEWED / UPDATED: 5/19/15

EXECUTIVE SUMMARY

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. Additionally, a subset of the identified themes will be incorporated into a community incentive/grant program to ensure alignment between plans and grants.

Findings

The overall findings for the community are found further down in this document in the ***Report of Community Needs*** section. Below, are the primary findings for the Metro South Community:

Identification of Needs: The most frequently reported business and clinical needs identified by stakeholders in the Metro South Community are the following;

1. Meet Regulatory and Incentive Requirements
2. Improve Internal Processes & Operations
3. Improve Care Management
4. Improve Interoperability & Exchange

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

Primary Internal Challenges

1. Meeting Operational and Training Needs
2. Managing Workflow and Change
3. Lack of Staffing Resources

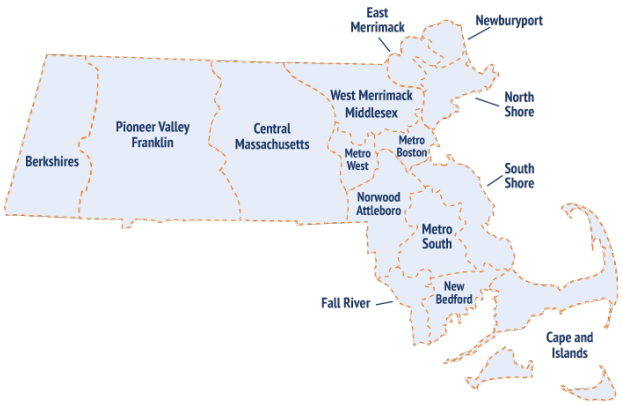
Primary External Barriers

1. Lack of HIE / HIway Trading Partners & Production Use Cases
2. Meeting Regulatory Requirements
3. Lack of Interoperability and Exchange Standards

Identification of Path Forward: Stakeholders reported the following HIT improvement areas to address needs and barriers:

1. Enable Interoperability & Exchange
2. Enhance Reporting to State
3. Increase Education & Awareness
4. Better Align Program / Policy
5. Enable Population Health Analytics

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

Population - Total population of the Metro South region is approximately 405,693 living in the 380.21 square mile area. The population density is estimated at 1067.02 persons per square mile which is greater than the national average population density of 88.23 persons per square mile. According to the U.S. Census Bureau Decennial Census, between 2000 and 2010 the population in the Metro South region grew by 13,453 persons, a change of 3.45%.

Income Per Capita - For the Metro South region, the income per capita is $29,176. Massachusetts statewide income per capita at $35,763.

Poverty - In the Metro South region, 24.03% or 94,660 individuals are living in households with income below 200% of FPL and 9.97% or 39,266 individuals are living in households with income below 100% FPL. The percent population under age 18 in poverty is 13.91% or 12,804 individuals. These three percentage rates are slightly lower than the Massachusetts state rates in the same categories.

Linguistically Isolated Populations – The Metro South region has a lower percent of linguistically isolated populations at 3.98% than the Massachusetts state rate. 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 5.19%.

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 the Metro South region, this indicator is 8.17% compared to the Massachusetts state indicator of 8.87%.

Population by Race Alone - The racial make-up of the Fall River-New Bedford region is 76.74% White, 15.56% Black, 2.62% Asian, 0.18% Native American, 0.01% Native Hawaiian, 2.55% Some Other Race and 2.35% Multiple Races

Information acquired courtesy of Community Commons http://www.communitycommons.org/

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

HEALTHCARE LANDSCAPE

Population Receiving Medicaid - In the Metro South region, the percent of insured population receiving Medicaid is 23.77%, or 90,760, 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 21.41%.

Access to Primary Care – The Metro South region has 73.56 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.

Facilities Designated as Health Professional Shortage Areas (HPSA) – The Metro South region has a total of 8 HPSA facility designations; 3 in primary care facilities, 3 in mental health facilities and 2 in dental 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.

Federally Qualified Health Centers (FQHCs) – The Metro South region has a rate of 0.5 FQHCs per 100,000 population with a total of 2 FQHC facilities in the Metro South region. The state of Massachusetts has a total of 108 FQHCs with a rate of 1.65 per 100,000 population.

Information acquired courtesy of Community Commons 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 South (105 Records)	# Organizations
Hospital, General	3
Community Health Center	2
Long-Term Post-Acute Care	29
Ambulatory, General	32
IDN/Health System/Network	14
Lab/Pharm/Imaging	2
Behavioral Health	23

REPORT OF COMMUNITY NEEDS

MeHI performed a needs assessment of healthcare providers and stakeholders representing the Metro South Community. The assessment was comprised of stakeholder interviews which followed a semi-structured interview guide and data collection process. In addition to organizational and HIT environment information, the interview centered on four domains which were focused on understanding clinical/business needs, internal challenges, external barriers and ideas for improvement. Responses were collected, codified and prioritized. Community roundtable meetings were held in each of the communities and the interview data was discussed and re-prioritized based on feedback from the roundtable group. Categories and themes were shared at the community roundtables and evolved through group discourse.

During Community Roundtable sessions, stakeholders were presented with the state and regional interview findings and engaged in a much deeper review, discussion and clarification of categories and themes. The multi-stakeholder review yielded a much richer understanding of the local needs, barriers and the experiences of some of the different care sectors within the community. As such, the group was able to re-prioritize certain areas that they felt would be the most essential and valuable to focus on within the community.

Reported Clinical-Business Needs

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

	Reporting Area-Frequency	
Clinical-Business Needs	**Metro South**	**MA**
Meet Regulatory/ Incentive Requirements	35%	10%
Improve Internal Processes & Operations	18%	13%
Improve Care Coordination *	12%	11%
Improve Population Health Analytics	6%	7%
Improved Interoperability & Exchange *	6%	9%
Enhance Alternative Payment Model (APM) Reporting	6%	4%
Increase Public Health Reporting	6%	3%
Remain competitive and grow business	6%	2%
Access to Clinical Information *	6%	21%
Know Patients, where they are & their status *	0%	2%
Promote Patient- & Family-centered Care	0%	3%
Enhance Remote Patient Management	0%	4%
Improve Care Quality & Patient Safety	0%	9%
Enable Interstate Exchange	0%	1%
Enhance Clinical Quality Reporting	0%	3%

*Identified as a top priority need during community roundtable

The most frequently cited areas of clinical and business needs reported in the Metro South community interviews centered on the abilities to meet *Regulatory and Incentive Requirements* and improve *Internal Processes and Operations, Care Coordination* and *Population Health Analytics*. These are mostly consistent with the interview findings across the state although improving *Access to Clinical Information* was reported more frequently by stakeholders across the state.

Regulatory and Incentive Requirements

Difficulty meeting regulatory and program requirements was cited frequently by community stakeholders. There were multiple comments on data collection and reporting and the difficulty "standardizing data collection to meet a variety of program and funding requirements". Smaller organizations reported challenges with current and future Meaningful Use attestations, efforts to standardize EHR data collection and pending ICD-10 transitions were noted as critical operational needs. Also mentioned, was the need to improve understanding capabilities for Department of Public Health reporting.

Interoperability and Exchange and Access to Clinical Information

There were multiple comments regarding the need to increase secure messaging between providers. The ability to exchange brief, secure messages between providers would have a huge impact on care coordination. However, commenters noted a lack of understanding about trading partners HIE readiness and capability. One commenter noted the difficulty just finding contact information for providers, specialists and other care settings, let alone understanding their HIE capabilities and preferences. Others suggested that a more locally oriented HIE would be beneficial, although not likely.

Care Coordination

There were a variety of comments on better coordinated care and closed-loop referrals. A few respondents noted that closing the loop on referrals doesn't always mean getting a full set of information back on patients – sometimes it just means having the communication to know that the patient is receiving treatment. Another commenter noted the amount of dedicated staff needed to "chase" consult notes from specialists.

There were multiple references and comments citing a major disconnect between primary, behavioral health and other care settings. Clinical information is not being shared at all and communication is nearly non-existent between many organizations seeing the same patients. Organizations serving vulnerable populations (mental health, domestic violence) do not share much, if any information externally for patient privacy and protection. However, these organizations do have a large need to receive information on their patients and they lack the resources to "track down" information from primary and specialty care settings.

Community Priority Needs

The interview respondents and participants in community roundtable discussions reported the following areas of need most frequently. These areas represent a starting point for community oriented activity and an opportunity to establish and improve collaboration among the participating organizations.

The most frequently reported business and clinical needs that stakeholders in the Metro South community are trying to solve with HIT;

1. Meet Regulatory and Incentive Requirements
2. Improve Internal Processes & Operations
3. Improve Care Management
4. Improve Interoperability & Exchange

Reported Internal Challenges and External Barriers

Internal Challenges

What are your top HIT related challenges within your organization?

Internal Challenges	Metro South	MA
Meeting Operational and Training Needs *	36%	15%
Managing Workflow and Change *	23%	14%
Lack of Staffing Resources	18%	25%
Lack of Financial Capital *	9%	22%
Meeting Regulatory Requirements	5%	4%
Technology Insufficient for Needs *	5%	9%
Leadership Priorities Conflict with IT Needs	5%	2%
Internet Reliability	0%	1%
Data Relevancy	0%	0%
Sensitive Information Sharing and Consent	0%	3%
Market Competition and Merger Activity	0%	1%

Lack of Data Integration – Interoperability	0%	3%
Improve Medication Reconciliation	0%	0%

*Identified as a top priority need during community roundtable

The most frequently cited internal challenges reported in the Metro South community interviews centered on meeting *Operational and Training Needs*, managing *Workflow and Change* and lack of *Financial Capital* and *Staffing Resources*. These are consistent with the most commonly reported internal challenges across the state.

Meeting Operational and Training Needs

Many respondents and commenters noted the challenges with training staff, adapting systems and operations and maintaining the right resource skills and HIT competencies. Other commenters noted specific resource intensive areas such as referral management, language and interpretation services and maintaining data quality, especially around established data exchanges. And, one group commented on the need for more holistic training standards and noted a disconnect between how providers, nurses and administrative staff are trained which creates challenges.

Managing Workflow and Change

There were multiple comments regarding the difficulty managing multiple data pathways for certain functions which complicate workflows. Examples noted referral workflows having multiple sending/receiving pathways – PWTF eReferral program, Mass HIway, NextGen Share and fax/phone exchanges which create numerous, sometimes confusing options for the end-users. Another commenter noted the difficulty and reluctance of staff to "log-in" to multiple, external systems to view patient information. And finally, there were comments on the difficult paradigm shifts for certain staff, difficult organizational culture challenges and concerns of decreased productivity.

Lack of Financial Capital

Many respondents cited lack of funding to support HIT as a primary challenge for their organization. Comments ranged from a general lack of capital finance to support current and future IT needs, infrastructure improvements and expansion and the challenges securing funding for projects with no immediate return on investment.

External Barriers

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

External Barriers	**Metro South**	**MA**
Lack of HIE / HIway Trading Partners & Prod Use Cases *	45%	23%
Meeting Regulatory Requirements *	20%	19%
Lack of Interoperability and Exchange Standards	20%	23%
Sensitive Information Sharing and Consent *	5%	6%
Lack of HIE / HIway Education *	5%	6%
Cost of Technology / Resources	5%	9%
External Attitudes and Perceptions	0%	1%
Market Confusion	0%	1%
Lack of EHR Adoption	0%	1%

Vendor Alignment *	0%	4%
Lack of Reimbursement/Unreliable Payments	0%	2%
Market Competition & Merger Activity	0%	4%

*Identified as a top priority need during community roundtable

The most frequently cited external barriers reported in the Metro South community interviews centered on the lack of *HIE/HIway Trading Partners and Production Use Cases,* meeting *Regulatory Requirements* and lack of *Interoperability and Exchange Standards*. These are mostly consistent with the commonly reported external barriers across the state.

HIE / HIway Trading Partners and Production Use Cases

There were multiple comments regarding HIE use case development and the need for resources to facilitate connection activities between organizations. A few respondents noted that they have known trading partners with a connection to the HIway, but they are not using the HIway to exchange information. Other commenters indicated there was a lack of understanding of which organizations are connected to the HIway. The need for education, assistance and awareness building was mentioned frequently by participants.

Meeting Regulatory Requirements

Respondents noted a lack of uniformity in reporting requirements from the state, insurance organizations and others as a significant barrier, stating that multiple and different information requirements create a difficult environment to capture information. One commenter noted, “it’s like counting beans in 10 different ways”. Also mentioned was a perceived disconnect between reporting requirements and what an organization actually wants to know or understand about a certain population. And in some cases, the technology is geared towards meeting the requirements and not necessarily oriented to understanding needs of certain patients.

And finally, there was general consensus that planning for upcoming requirements for Meaningful Use Level 2 and transitions to ICD-10 is a significant challenge.

Interoperability, Exchange Standards and Sharing Sensitive Information

There were a variety of comments on organizations looking improve integration between independent systems and looking for better ways to access patient records at other facilities. A few commented on HIPAA and state regulations creating the need for very careful and deliberate approaches to exchanging information. There were a few pointed comments, that certain organizations are not effective at capturing necessary patient consent for release of information.

Other commenters noted quality of data issues and concerns coming from certain exchanges and interfaces. A few participants commented on problems with HISP connections and challenges relying solely on vendors to solve interoperability issues. Commenters noted multiple delays, pathways are not always clear and some organizations have sought outside companies to help solve issues.

Community Priority Barriers

During the Community Roundtable sessions, there was some discussion on whether certain items/issues should be reflected as internal challenges or external barriers. It was noted that in some cases, external barriers are realized as internal challenges. And in other cases, the internal challenges in certain organizations and sectors, such as BH and LTPAC, are creating external barriers for other stakeholders.

Internal challenges and external barriers are combined here to mitigate and align these perspectives, and

where possible identify barriers that would have the biggest impact for the most stakeholders, if removed.

The community groups reported the following priority barriers to addressing needs;

Primary Internal Challenges

1. Meeting Operational and Training Needs
2. Managing Workflow and Change
3. Lack of Financial Capital and Staffing Resources

Primary External Barriers

1. Lack of HIE / HIway Trading Partners & Production Use Cases
2. Meeting Regulatory Requirements
3. Lack of Interoperability and Exchange Standards

Reported HIT Improvement Ideas

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

HIT Improvement Ideas	Metro South	MA
Enable Interoperability & Exchange *	35%	28%
Enhance Reporting to State	15%	2%
Increase Education & Awareness *	15%	15%
Better Align Program / Policy	10%	6%
Enable Population Health Analytics *	10%	4%
Provide Funding & Resources	5%	10%
Improve Care Transitions	5%	3%
Improve Care Management	5%	6%
Improve Care Quality & Patient Safety	0%	6%
Promote Costs Savings	0%	3%
Know Patients, where they are & their status	0%	1%
Enhance Alternative Payment Model (APM) Reporting	0%	0%
Access to Clinical Information	0%	8%
Improve Vendor Cooperation	0%	3%
Expand Consumer Engagement Technologies	0%	3%

*Identified as a top priority need during community roundtable

The most frequently cited improvement ideas centered on enabling *Interoperability & Exchange*, enhance *Reporting to State*, increase *Education and Awareness* and better *Align Program-Policy*. These were somewhat consistent with the most commonly reported ideas across the state although, *Funding* and *Access to Clinical Information* were cited more frequently in interviews across the state.

Interoperability and Exchange

There were multiple comments regarding the need to improve exchange between community hospitals, health centers and specialists. Also noted, was the need for increasing participation in the HIway and

making '*Query and Retrieve'* functionality available would benefit a number of organizations. There were comments regarding the need to establish default pathways for data exchanges. Currently, multiple EHR systems, HIE connections, state, payer and program specific portals create a myriad of pathways for clinical information exchanges, causing complex and indistinct workflows. A few commenters suggested the development of regional, use case specific standards for data sharing.

Reporting to the State

Some commenters suggested a more unified approach to state agencies and funding sources and a decrease in program fragmentation. Others noted improving the abilities of state to accept reporting directly out of the EHR and adjustment of programs and regulations to better accommodate BH and LTPAC sectors.

Finally, one participant noted the e-Referral program through the Prevention and Wellness Trust Fund was working well and expansion of capabilities would be helpful.

Education and Awareness

There were a few suggestions to increase education on quality of care, cost controls, HIT skill development, workflow adoption and support. One commenter suggested a summary of state regulations that require HIT adoption. There were also general agreement among a number of participants that topical, peer group sessions and meetings would be beneficial.

Population Health and Analytics

A few organizations commented that improved, supported population health analytics solutions would better enable global payment reform opportunities. Organizations cited the difficulties gathering and assembling timely and local population health data.

	IDENTIFIED eHEALTH PRIORITY AREAS	
	Selection of specific eHealth priorities to address in the community is a discussion and action area for future community engagement efforts and activity.	

	HIT IMPROVEMENT IDEAS	
1	Enable Interoperability & Exchange	
2	Enhance Reporting to State	
3	Increase Education and Awareness	
4	Better Align Program / Policy	
5	Enable Population Health Analytics	

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