# COMMMUNITY eHEALTH ASSESSMENT – BERKSHIRES

REGION: Western/Central COMMUNITY: Berkshires

PARTICIPATING ORGANIZATIONS: Berkshire Health System, Neighborhood Health Center, Brien Center, Community Health Programs, VNA, Berkshire Healthcare, Berkshire Faculty Services, Suburban Internal

Medicine

DATE REVIEWED / UPDATED: 4/29/15

#### **EXECUTIVE SUMMARY**

### Methodology

In order to better understand the health information technology and health information exchange ecosystem at the state and local level, MeHI conducted a needs assessment of healthcare stakeholders throughout the state's fifteen connected communities. The assessment utilized a semi-structured interview guide and data collection process to gather information from participants. In addition to organizational and HIT environment information, the interview centered on four domains which were focused on understanding the clinical/business needs, internal challenges, external barriers and ideas for improvement. Responses were collected, codified into categories and ranked by frequency of reporting.

Community roundtable meetings were held in each of the communities and the interview findings were presented and discussed. Categories and themes were reviewed and evolved through group discourse. Based on feedback and comments from the groups, categories were re-prioritized and focus areas were developed.

The goal of the assessment and group meetings is to shape the data into focus areas, identify eHealth priorities and develop actionable plans that demonstrate value for the community. The assessment findings, interview and meeting feedback and Community eHealth Plans will be integrated into the State 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 Berkshires Community:

<u>Identification of Needs:</u> The primary need identified by stakeholders in this community is improved care coordination. Several specifically needed improvements are timely hospital admission notifications and discharge summaries, and exchange of allied services notes and care plans (especially behavioral health and community health programs), more specifically;

- 1. Inform primary care providers when one of their patients is admitted to the hospital emergency department (ED) and when the patient is discharged.
- 2. Make available the clinical notes from all providers treating the patient, whether PCP, behavioral health, PACP and/or hospital.

- 3. Exchange discrete clinical data for specific purposes such as medication lists for medication reconciliation, active problem list, allergies and vital signs if they can be incorporated into EHRs or a shared clinical summary.
- 4. Send/receive clinical information from hospitals to post-acute care providers upon discharge.

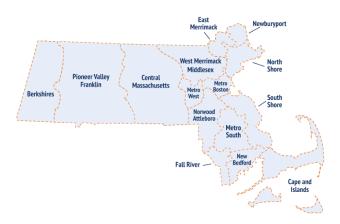
<u>Identification of Internal Challenges and External Barriers:</u> The primary barriers identified by stakeholders to addressing these needs are as follows:

- 1. The regulatory/consent models required to share sensitive patient information across care settings and organizations is too burdensome and inhibits care coordination, especially as it relates to behavioral health and substance abuse.
- 2. Time, difficulty and cost of integration for small-medium size providers is high. Without technical and financial assistance, it will be nearly impossible for independent providers or groups to integrate at the levels required for reliable and consistent care coordination.
- 3. Lack of clarity on the use of the tools. For example, the HIway versus the local exchange versus other methods such as lab interfaces.
- 4. Lack of vendor alignment and capable electronic health record (EHR) systems at some organizations.
- 5. Funding is difficult in the Berkshires due to the lower population density to help fund investments in technology.

<u>Identification of Path Forward:</u> Stakeholders identified the following initiatives to address needs and barriers:

- 1. Define a set of local, regional and state uses of HIT and HIE to meet the goal of improving care coordination (as defined above), prioritize these as a community, with time, cost and technology scope definitions, then begin from the highest priority in solving the challenges.
- 2. Support and build upon the local exchange platform to enable more rapid development and adoption by the community.
- 3. Identify where specific gaps are in the community such as the need for an interface to the Brien Center (behavioral health), then address gaps in the prioritization across the community in a coordinated effort among all organizations.
- 4. Identify opportunities to leverage or re-use work developed elsewhere or in other communities to bring to the Berkshires to help solve challenges.
- 5. Identify funding sources to help build a sustainable infrastructure for exchange. Leverage alreadymade investments and build open, re-usable pathways and methods that work for all.

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**

<u>Population</u> - Total population of the Berkshires Community is 132,313 living in the 893.14 square mile area. The population density is estimated at 148.14 persons per square mile which is much lower than the Massachusetts population density of 847.02 persons per square mile. Between 2000 and 2010 the population in the Berkshires Community fell by 3,700 persons, a change of -2.71%.

<u>Income Per Capita</u> - For the Berkshires Community the income per capita is \$29,029. Massachusetts statewide income per capita at \$35,763.

<u>Poverty</u> – In the Berkshires Community, 26.98% or 37,539 individuals are living in households with income below 200% of FPL and 12.74% or 16,108 individuals are living in households with income below 100% FPL. These percentage rates are higher than the Massachusetts state rates in the same categories.

<u>Linguistically Isolated Populations</u> – The Berkshires Community has a low percent of linguistically isolated populations at 0.97%. 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%

<u>Population with Limited English Proficiency</u> – 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 Berkshires Community, this indicator is 2.34% compared to the Massachusetts state indicator of 8.87%.

<u>Population by Race Alone</u> - The racial make-up of the Berkshires Community is 92.64% White, 2.61% Black, 1.29% Asian, 0.23% Native American, 0.03% Native Hawaiian, 0.84% Some Other Race and 2.35% Multiple Races.

Information acquired from Community Commons http://www.communitycommons.org/ (as of 3/31/15)

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

#### **HEALTHCARE LANDSCAPE**

<u>Access to Primary Care</u> – The Berkshires Community has 111.27 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.

<u>Lack of a Consistent Source to Primary Care</u> – 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 the Berkshires Community, this indicator is 11.16%, or 15,450 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.

<u>Facilities Designated as Health Professional Shortage Areas (HPSA)</u> – The Berkshires Community has a total of three HPSA facility designations; one in primary care facilities, one in mental health care facilities and one in dental health care facilities. The state of Massachusetts has a total of 154 HPSA facility designations; 54 in primary care facilities, 50 in mental health care facilities and 50 in dental health care facilities.

<u>Population Receiving Medicaid</u> - In the Berkshires Community, the percent of insured population receiving Medicaid is 26.15%, or 32,906 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%.

Information acquired from Community Commons http://www.communitycommons.org/ (as of 3/31/15)

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: Berkshires (52 records)*	# Organizations
Hospital, General	3
Long-Term Post-Acute Care	16
Ambulatory, General	18
Community Health Centers	3
IDN/Health System/Network	6
Behavioral Health	6

### **REPORT OF COMMUNITY NEEDS**

MeHI performed a needs assessment of healthcare providers and stakeholders representing the Berkshires 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	Berkshires	MA
Access to Clinical Information *	29%	21%
Improve Internal Processes & Operations *	14%	13%
Improve Care Management *	14%	11%
Improve Interoperability & Exchange *	14%	9%
Enhance Clinical Quality Reporting	14%	3%
Enable Interstate Exchange	14%	1%
Improve Care Quality & Patient Safety	0%	9%
Enhance Alternative Payment Models (APM)	0%	4%
Meet Regulatory / Incentive Requirements *	0%	10%
Increase Public Health Reporting	0%	3%
Promote Patient- & Family-centered Care	0%	3%
Enhance Remote Patient Management	0%	4%
Remain competitive and grow business	0%	2%
Improve Population Health Analytics	0%	7%
Know Patients, where they are & their status	0%	2%

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

The most frequently cited areas of clinical and business needs reported in the Berkshires community interviews centered on the abilities to improve and enhance Access to Clinical Information, Internal Processes and Operations, Care Management, Interoperability and Exchange, Clinical Quality Reporting and Interstate Exchange. These are mostly consistent with the interview findings across the state with two notable exceptions – Improve Care Quality & Patient Safety, and Meeting Regulatory/Incentive Requirements were more frequently reported as an area of need by stakeholders across the state than by those interviewed in the Berkshires community.

### Care Coordination

There were multiple comments from interviewees surrounding the challenges to manage and consolidate systems and standardize interfaces and exchanges. This included the need for facilitating their local HIE and increasing collaboration with other regional HIEs such as the Pioneer Valley Information Exchange (PVIX).

Comments were also made regarding the need for enhanced closed loop referral processes. It was suggested that if organizations could have the ability to view referral appointments (i.e. date, time) they could better ensure patient compliance. Additionally, the local hospital system is currently implementing an HIE to facilitate exchange and clinical data repository in response to the high need for care management and coordination. Generally it was agreed that care coordination needs to be improved overall with the effect being improved quality and safety for patients. Bi-directional sharing of patient information was discussed by the group as being very important but unfortunately hampered by consent issues. It is especially necessary for high risk patients, i.e. behavioral health and substance abuse patients. Providers need to see the complete picture to provide the best and safest care. Another commenter mentioned that adequate care coordination is also necessary for proper and successful EHR implementation by explaining that "it is all connected."

### Operations and Interoperability

The need for streamlining encounters using EHR tools was another identified need during the interview process. These comments were mentioned by provider organizations with multiple sites and/or utilizing disparate EHRs. Also mentioned was the need to standardize data, interfaces and exchanges.

Building off of the need for improved care management is the need for improved interoperability and exchange, especially regarding the ability to identify which organizations and vendors are connected to the HIway or other HIEs and to understand their exchange capabilities. There was also discussion about the need for improved data exchange internally within organizations as well.

Provider organizations discussed their frustration with gathering data needed for quality reporting and how improving the process would be highly beneficial. Also noted is the need to focus on "little data" and the emerging trend of mobile health. This was discussed as being on the horizon and the need for tracking and warehousing this data is imminent.

Demographically, the Berkshires community shares patients with Vermont, New York and Connecticut. Eventually there will be a need to have the ability to exchange data across state lines.

### **Community Priority Needs**

The community group was able to identify a few priority areas of need. It was clear from the interview responses and the widely attended community roundtable that the issues of collaboration around healthcare technology and exchange are important for this community. The CFO of the health system as well as the state representative for Berkshire County both attended the roundtable event and provided valuable input and leadership.

By far the largest issue facing the community is the need to provide more coordinated and integrated healthcare (from an information viewpoint). They felt that by improving care coordination holistically across the community, they and their patients would benefit the most from these efforts. It was discussed that by improving care coordination, other important goals would be supported, such as having good, actionable data for population health measurement, improvements in healthcare costs by reducing duplicative testing and diagnostic services and overall improved patient safety and fewer adverse events, all culminating in safe, more effective and cost efficient healthcare services.

The community group specified the following *priority needs* to address;

- 1. Inform primary care providers when one of their patients is admitted to the hospital emergency department (ED) and when the patient is discharged.
- 2. Make available the clinical notes from all providers treating the patient, whether PCP, behavioral health, PACP and/or hospital.
- 3. Exchange discrete clinical data for specific purposes such as medication lists for medication reconciliation, active problem list, allergies, adverse reactions and vital signs if they can be incorporated into EHRs or a shared clinical summary.
- 4. Send/receive clinical information from hospitals to post-acute care providers upon discharge

### **Reported Internal Challenges and External Barriers**

### **Internal Challenges**

What are your top HIT related challenges within your organization?

Internal Challenges	Berkshires	MA
Technology Insufficient for Needs *	40%	9%
Internet Reliability	20%	1%
Meeting Regulatory Requirements *	20%	4%
Sensitive Information Sharing and Consent*	20%	3%
Meeting Operational and Training Needs	0%	15%
Managing Workflow and Change	0%	14%
Lack of Staffing Resources	0%	25%
Lack of Financial Capital *	0%	22%

Market Competition and Merger Activity	0%	1%	
Lack of Data Integration – Interoperability *	0%	3%	
Data Relevancy	0%	0%	
Improve Medication Reconciliation	0%	0%	
Leadership Priorities Conflict with IT Needs	0%	2%	

\*Identified as a top priority challenge during community roundtable

The most frequently cited internal challenge reported in the Berkshires community interviews centered on the issue of *Technology Insufficient for Needs*. Also mentioned but not as frequently were *Internet Reliability, Meeting Regulatory Requirements* and *Sensitive Information Sharing and Consent*. These internal challenges for the Berkshires are not consistent with the most commonly reported internal challenges across the state where *Lack of Staffing Resources* and *Lack of Financial Capital* were cited most frequently.

### Technology

Frequently mentioned as an internal challenge was that organizations were lacking sufficient technology to meet healthcare IT needs. Technical resources, such as lack of proper bandwidth and the need for hub services, fell under this category. Communication and collaborative services are needed to support interoperability and there was a clear desire to improve technology so that organizations can improve telemedicine and integrative care capabilities. Also mentioned were the need for improved HISP to HISP capabilities and normalization of clinical data. The general message was that technology is not up to the standard of what providers are required to do and this hampers their abilities to achieve other priorities.

Problems with reliability of speed of internet, part fiber and part hosting ISP, was also mentioned. One commenter described that when a system crashes, it is necessary to go to paper which then requires transcription into the system. This is an iterative problem which continues to be an issue for provider practices.

#### Regulatory Requirements and Sensitive Information

Generating interest in patient portals, primarily for meeting Meaningful Use requirements was another internal challenge shared by stakeholders. One commenter felt that a large part of this problem was due to patient demographics in the region and that regulators need to recognize the differences in patient populations and adjust their measures and incentives accordingly. There were additional comments that there are too many portals and this is confusing for patients, leading to a lack of interest in using them. Tying back to the *Technology* section, commenters felt that regulatory incentives are not aligned with the technology available to them.

The process of authentications and authorization for access to data was noted as another internal challenge. This process is necessary for the purposes of data exchange and can be costly and time consuming for provider organizations.

### **Financial**

The high costs of HIT, especially for smaller practices, was noted as a significant internal challenge. Many practices cannot afford to develop what is needed to effectively share patient information electronically. Many simply lack the capital to invest. Also discussed was the remoteness of the Berkshires community. The region relies on investments made by Berkshire Health System (BHS), so these investments need to

be sound. Due to the lack of population density and reduced lives to spread the costs, their return on investment (ROI) is not as great as in more populated communities (i.e. Boston).

### **External Barriers**

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

External Barriers	Berkshires	MA
Lack of HIE / HIway Trading Partners & Production Use Cases *	29%	23%
Meeting Regulatory Requirements	14%	19%
Lack of Interoperability and Exchange Standards *	14%	23%
Market Confusion	14%	1%
Vendor Alignment *	14%	4%
Market Competition & Merger Activity	14%	4%
Sensitive Information Sharing and Consent *	0%	6%
Cost of Technology / Resources *	0%	9%
Lack of HIE / HIway Education *	0%	6%
External Attitudes and Perceptions	0%	1%
Lack of EHR Adoption	0%	1%
Lack of Reimbursement/Unreliable Payments	0%	2%

\*Identified as a top priority barrier during community roundtable

The most frequently cited external barriers reported in the Berkshires community interviews centered on lack of HIE/HIway Trading Partners and Production Use Cases, the abilities to meet Regulatory Requirements and lack of Interoperability and Exchanges Standards. These are consistent with the most commonly reported external barriers across the state. Market Confusion, Vendor Alignment and Market Competition & Merger Activity were additional barriers cited in interviews conducted in the Berkshire community.

### HIE / HIway Partners and Production Exchanges

There were many comments on the topic of the Mass HIway and other HIE networks. There remains much market confusion regarding the capabilities, pathways for HISPs and various EHR vendors. Not knowing which other organizations are on the Mass HIway and available to connect was mentioned frequently along with concerns about HIE / EHR maturity of trading partners. Another concern was HISP to HISP connections and that vendors are not interested in addressing provider's needs with the functionalities of their products.

#### Regulatory

The difficulty managing and meeting regulatory, payer and program requirements was cited frequently by community stakeholders. One commenter felt that new mandates are issued before prior mandates are reasonably resolved, making it nearly impossible for providers to keep up with requirements. Particularly, the smaller organizations really struggle with regulatory requirements. They do not have the resources (time and money) needed to comply. Also, multiple comments and concerns were expressed

regarding privacy and security, and understanding and operationalizing consent and disclosure requirements. The need for multiple consent forms makes the process very difficult and the consents don't always align with patient needs. One commenter stated that the opt-in requirement is the "crux of the consent problem" and has become a substantial administrative burden.

### Vendor Alignment

Vendor alignment issues were noted as a significant barrier in coordinating exchange with other organizations / vendors. Many organizations are still waiting for vendors to complete the HISP to HISP connections. There was a general sense of vendors being too focused on the financial needs of organizations and not on clinical needs. Discrete data is least helpful for clinicians – they need to see clinical notes and the "thought process." Ultimately the group agreed that there is a need for both discrete data and clinical notes and it is not an either / or situation. Both need to be accurately captured and maintained in EHR systems.

### **Market Confusion & Competition**

Also mentioned was confusion over the use of HIEs and the HIway. As mentioned previously, BHS is implementing its own regional HIE. Many providers in the Berkshires share patients with the Pioneer Valley and need to utilize PVIX as well. Additionally there is confusion regarding the use of the Mass HIway. An interviewee commented on the desire to share data on HIEs but is concerned about competition and trust. This commenter fears that too much information may be available on the local HIE and that there needs to be a mechanism in place that only allows patient data exchange and not financial or provider information.

#### **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 group specified the following *priority barriers* to addressing needs;

- 1. The regulatory / consent models required to share sensitive patient information across care settings and organization is too burdensome and inhibits care coordination, especially as it relates to behavioral health and substance abuse.
- 2. Time, difficulty and cost of integration for small-medium size providers is high. Without technical and financial assistance, it will be nearly impossible for independent providers or groups to integrate at the levels required for reliable and consistent care coordination.
- 3. Lack of clarity on the use of the tools. For example, the HIway versus the local exchange versus other methods such as lab interfaces.
- 4. Lack of vendor alignment and capable electronic health record (EHR) systems at some organizations.
- 5. Funding is difficult in the Berkshires due to the lower population density to help fund investments in technology.

### **Reported HIT Improvement Ideas**

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

HIT Improvement Ideas	Berkshires	MA
Enable Interoperability & Exchange *	50%	28%
Better Align Program / Policy *	17%	6%
Improve Vendor Cooperation *	17%	3%
Promote Costs Savings *	17%	3%
Increase Education & Awareness *	0%	15%
Provide Funding & Resources	0%	10%
Access to Clinical Information	0%	8%
Improve Care Transitions	0%	3%
Enhance Alternative Payment Model (APM) Reporting	0%	0%
Enhance Reporting to State	0%	2%
Know Patients, where they are & their status	0%	1%
Enable Population Health Analytics	0%	4%
Improve Care Quality & Patient Safety	0%	6%
Expand Consumer Engagement Technologies	0%	3%
Improve Care Management	0%	6%

\*Identified as a top priority idea during community roundtable

The most frequently cited improvement ideas centered on *Enable Interoperability and Exchange, Better Align Program / Policy, Improve Vendor Cooperation* and *Promote Cost Savings*. These were somewhat consistent with the most commonly reported ideas across the state in that *Interoperability and Exchange* was the most frequently cited improvement idea. The Berkshire community differed from the state in its less frequent responses for *Provide Funding and Resources* and *Access to Clinical Information*.

## **Education and Awareness**

Although this category was not a priority from the community interviews, it was a matter of great discussion at the roundtable meeting. There were many comments to increase HIT education and awareness and to provide clear, consistent messaging on HIway / HIE matters. Also mentioned was the need for education and support resources, not just for providers but patients as well. For patients specifically, there needs to be an education / awareness campaign to allay their fears about data security and their personal information being stolen. This fear is a real barrier when consent is being requested. One commenter stated that patient education is always necessary and must be continuous. Also, efforts to reduce the stigma of behavioral health through education was a topic of discussion. This data needs to be included in the patient's record for a complete representation of their health.

## Interoperability and Exchange

There were multiple comments / requests to improve coordination of systems and advance interoperability between trading partners. Again, the discussion led to the need to improve the content and accuracy of data exchanged with behavioral health (or any type of "sensitive" information). Another angle on this topic mentioned by the group was the difficulty of having contracted clinicians and the inability to "parse out" data in individual EHRs even though they are sharing patients. One idea suggested that would address this problem would be the ability to use patient data packets to be shared between providers, possibly read only or could be re-written with privileges. Another improvement idea for interoperability and exchange is to develop a universal patient data storage and collection format so that information can be "fetched" by providers that need it. This data would need to be loaded bi-directionally.

### Align Program / Policy

As was discussed in the External Barriers section, the group felt that program / policy regulations were not always realistic for the regional demographics. In essence, the group felt that regulations were hampering their progress, not supporting it. Of mention was the affect misaligned policies has on smaller providers, specifically specialty practices. One commenter stated that specialists are even further behind than larger practices with their incentives to use EHRs. Because of the time and cost resources associated, some feel the incentive is not there. This discussion was summed up with a comment that financial, regulatory and technology need to align for providers to be successful. Currently, these three things are not in sync.

Another comment that fell under this category was the idea that incentive programs should provide technical support to providers while also addressing sustainability plans and measures. Often "big name" programs require increased administrative overhead for the provider, usually because the regulations are often ahead of technology available. Also mentioned was the government's "serious lack of effective feedback mechanisms."

### **Vendor Costs**

Finally, there were some specific ideas for vendor cooperation and promoting cost savings. It was expressed that often the focus of vendors is financial and not clinical. Also, vendors don't want to share data. One commenter recommended forming user groups that collaborate by sharing best practices and creating tools to achieve workaround ideas for what their EHRs aren't doing for them.

Many felt that vendors need more regulation. Currently, regulations only call for HIPAA compliance on EHRs, but there needs to be more. Government should require that databases are portable, either by patient record or by the total practice. Unique patient identifiers was mentioned at this point as a way that vendors could address the clinical needs of providers.

Affordability of systems and platforms is a struggle for many providers. Although specific ideas for reducing costs were not suggested, there was consensus that some sort of vendor control needs to be in place to contain these costs.

	IDENTIFIED eHEALTH PRIORITY AREAS	
1	Notifications for patient admissions and discharges from the Emergency Department to Primary Care Provider.	
2	Share clinical notes with all providers treating patient.	
3	Share clinical data beyond notes.	
4	Discharge summary and instructions to LTPAC.	

	HIT IMPROVEMENT IDEAS	
1	Define a set of local, regional and state uses of HIT and HIE to meet the goal of improving care coordination, prioritize these as a community, with time, cost and technology scope definitions, then begin from the highest priority in solving the challenges.	
2	Support and build upon the local exchange platform to enable more rapid development and adoption by the community.	
3	Identify where specific gaps are in the community such as the need for an interface to the Brien Center (behavioral health), then address gaps in the prioritization across the community in a coordinated effort among all organizations.	
4	Identify opportunities to leverage or re-use work developed elsewhere or in other communities to bring to the Berkshires to help solve challenges.	
5	Identify funding sources to help build a sustainable infrastructure for exchange. Leverage already-made investments and build open, re-usable pathways and methods that work for all.	

#### **ATTACHMENT - 1**

## Community Commons <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>

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