The Kentucky Health Information Exchange (KHIE) is a secure, interoperable electronic network that supports statewide exchange of patient health information among healthcare providers across the Commonwealth.
Introduction

This document is intended to serve as an overview of the various initiatives and activities of the Kentucky Division of Electronic Health Information in 2016. This annual report will focus on the Kentucky Health Information Exchange (KHIE) and address the following major areas: adoption & growth, key projects, outreach & education, sustainability and future goals.

Adoption and Growth

The year 2016 was another year of growth in the number of participants, data submissions and utilization of the health information exchange.

- The number of provider locations with a signed KHIE Participation Agreement increased from 799 to 904, representing 4,905 provider locations (which represents thousands of individual providers’ data).
- Data feeds increased from 2,380 to 2,659, representing 1,342 provider locations submitting data for active use in the health information exchange. Examples of data feeds: admission/discharge/transfer messages; immunization data; syndromic surveillance data; electronic laboratory messages; clinical summaries and reports
- Utilization:
  - Number of users on the KHIE Community Portal/Virtual Health Record increased by 750 with an average 446,000 queries per month
  - Clinical Summary Exchange averaged 311,000 queries per month
  - Direct Secure Messaging users increased to 418 provider locations with an average exchange of 10,700 clinical summaries per month
Key Projects in 2016

- **Public Health Reporting**
  - Provider locations (points of care) submitting electronic public health data increased by 90.
  - The Kentucky Department for Public Health established a team to address syndromic surveillance data submission (Syndromic Surveillance Workgroup) which includes KDPH, KY Injury & Prevention Research Center (KIPRC) and KHIE. The workgroup is identifying key use cases for syndromic surveillance data, including the monitoring for trends and patterns related to the opioid epidemic.

- **Cross-Enterprise Document Sharing**
  - Completed integration with KentuckyOne Health, Inc and successfully completed connections with 11 hospitals, now contributing an average of 1500 clinical summaries per day
  - Completed integration with the Kentucky Primary Care Association, which represents over 250 members/provider locations averaging over 100,000 queries to KHIE per month

- **Integration of the Behavioral Health Record**
  - Integration work continued with several of the key behavioral health providers in Kentucky, including the KY Department for Behavioral Health as well as Community Mental Health Centers (Pathways, Bluegrass.org, Kentucky River). Integration (exchange of clinical summaries) with Pathways planned for the first quarter of 2017.

- **Preparation to Assist Providers with Stage 3 Meaningful Use**
  - Business and technical requirements were developed for KHIE’s vendor so that 2015 Certification with the Office of the National Coordinator for Health Information Technology (ONC) could be completed in early 2017. Stage 3 MU begins on January 1, 2018.

- **Patient-Centered Data Home (PCDH)**
  - PCDH is cross-border interstate integration with other regional health information exchanges for the purpose of electronic patient record exchange. This work expands KHIE’s footprint in that records follow our population if and when, they seek care outside of their home state. KHIE worked diligently with Indiana, Ohio, West Virginia, Michigan and East Tennessee throughout 2016 to accomplish this goal. The first phase planned for 1st quarter 2017.
Outreach & Education

The overarching role of a KHIE Outreach Coordinator is to act as an extension of KHIE to represent its vision for promoting and facilitating health information technology across the Commonwealth of Kentucky.

On a daily basis, KHIE Outreach Coordinators are instrumental in engaging providers and assisting them with the administrative side of onboarding to KHIE. The Outreach Coordinator (OC) gathers critical information about the provider regarding goals for connecting to KHIE. In 2016, KHIE hosted 89 intake calls for providers wishing to participate in KHIE. As the designated Public Health Authority for the state of KY for Meaningful Use, the role of the KHIE OC has evolved to include focusing on needs and objectives to support providers in pursuit of CMS’ MU activities, as related to Public Health Reporting and Transitions of Care.

To promote health information technology in 2016, KHIE Outreach Coordinators collaborated on various levels with key stakeholders to promote health information technology across the state. They represented KHIE at 32 different conferences held across the Commonwealth. In 2016, the KHIE Outreach team collaborated with QSource to promote the benefits of the health information exchange in local healthcare communities to coordinate the care of their patients. The KHIE Outreach team presented at 6 ‘community meetings’ in the various regions across the state.

Additionally, the KHIE Outreach team plays a major role in training an organization’s users for access to the KHIE Community Record, which is the way the majority of authorized users view their patient’s health history in KHIE. The team hosts an on-site training for each organization. In 2016, KHIE trained 30 locations, tripling its efforts in 2015!

KHIE was called to duty in 2016 when one of its participants experienced a crisis when its computer system was compromised. Because of this, the organization could not access its own patients’ data; yet, they had to continue providing healthcare to the community. KHIE to the rescue!!! The KHIE outreach/training team was able to quickly provision additional users and conduct trainings for these new users so that clinicians and providers could have access to and view their patient data through KHIE!!

Another key area of outreach is KHIE’s collaboration with these key partners within the Cabinet and across the Commonwealth, especially in the area of Electronic Health Record (EHR) Adoption and Meaningful Use (MU) (the CMS EHR Incentive Program). KHIE continues to convene a MU Collaborative Workgroup with representatives from the KY Medicaid EHR Incentive Team, KY Department for Public Health, KY Regional Extension Center, NeKy RHIO, KY Quality Improvement Organization (QSource) and of course KHIE. This collaborative workgroup is used to review and work through new and modified CMS requirements and all things ‘Meaningful Use.’ The primary objective is to have consistent guidance and ‘one clear voice’ for our providers across Kentucky, so they receive the best and most efficient assistance as they maneuver the often-murky waters of the EHR incentive program (meaningful use). To date, the CMS EHR Incentive Program (Medicaid & Medicare) has paid out over $600 million in incentive dollars to Kentucky providers (hospitals, physicians, clinics,
etc.). KHIE plays a pivotal role in this program in that all electronic public health reporting for Meaningful Use has been deferred from Public Health to KHIE. Subsequently, if a provider in Kentucky is pursuing Meaningful Use and incentive payments, they MUST participate in KHIE for public health reporting. This arrangement with Public Health has provided tremendous advantage for KHIE to work with healthcare providers all across our state.

**KHIE & Sustainability**

KHIE is supported by a sustainability plan established by the Cabinet for Health and Family Services (CHFS) utilizing funds received from an approved Implementation Advance Planning Document Update (IAPDU) through the Centers for Medicare and Medicaid Services (CMS) along with assessment fees collected from Kentucky insurers to cover the “state share” and “fair share” portions.

Qualified expenditures are cost allocated with CMS to support KHIE. This cost allocated funding supports Meaningful Use (MU) of electronic health records to make accessible health information exchange (HIE) and onboarding services to hospitals and providers participating in the Kentucky Medicaid Electronic Health Record (EHR) Incentive Program.

HIE sustainability requires value to be delivered to the end-user that exceeds all costs of service. At its core, KHIE provides baseline services supporting evolving MU requirements and additional value-added services across the state on a universal access basis. As healthcare reform progresses, it is anticipated that there will be increased value to stakeholders for both direct services and trusted third party interconnection.

The sustainability plans of the Kentucky Health Information Exchange are also subject to the oversight of the Kentucky Health Information Exchange Coordinating Council and the more specific oversight of the Business Development and Finance Committee for that council.

**Accomplishments in 2016**

- Continued to release technical functionality to support a more robust electronic exchange
- Increased number of live provider locations from 1315 to 1342
- Increased number of data feeds from 2380 to 2659
- Completed integration (Platinum connectivity) with the KY Primary Care Association that facilitates query for clinical information in KHIE
- Completed integration (Platinum connectivity) with KentuckyOne Health with 11 facilities contributing an average of 1500 clinical summaries to KHIE daily
- Supported providers with meaningful use requirements for public health reporting and transitions of care
- Provided HISP (health information service provider) connections to additional hospitals
- Assisted the KY REC with four Meaningful Use Roadshows, from Hazard to Owensboro
• Completed certification with the national ‘eHealth Exchange’ (Sequoia Project)
• Kicked off the integration work with the Veterans Administration
• Connectivity to border states is in progress (see Patient Centered Data Home’ under ‘Key Projects’
• The KY Department for Behavioral Health began the rollout of Meditech to their 14 state-owned facilities and integration with KHIE is in progress
• The KY Department for Public Health completed rollout of eClinicalWorks to the pilot group of local health departments (#10). Integration with KHIE is in progress.

Goals for 2017

• Acquisition of new technology platform for ‘Next Generation’ KHIE
• Increase integration projects (Platinum connectivity)
• Increased utilization of KHIE
• Complete connectivity with state behavioral health facilities
• Complete connectivity with local health departments
• Complete border state connectivity (Patient Centered Data Home initiative)
• Launch work with MCO’s and other payers
• Implement event notification services (alerts) by end of year

Conclusion

Although many challenges prevail, the Kentucky Health Information Exchange continues to forge ahead and make progress. The KHIE footprint across the state continues to grow, and as we foster new and different collaborations this next year as health care works to transform from fee-for-service to value and quality outcomes focused, we hope to demonstrate our value proposition even more. KHIE, as a statewide ‘public utility’, can and will make a difference for Kentucky in meeting the triple aim: better care, better health and smarter spending.