



KENTUCKY

HEALTH INFORMATION EXCHANGE

Connecting Kentucky. Improving Healthcare.

What is an HIE?

- Health Information Exchange (verb) – electronic transmission of healthcare-related data among medical facilities, health information organizations that govern the exchange of data and government agencies
- The purpose of HIE is to promote the appropriate and secure access and retrieval of a patient's health information to improve the cost, quality, safety and speed of patient care



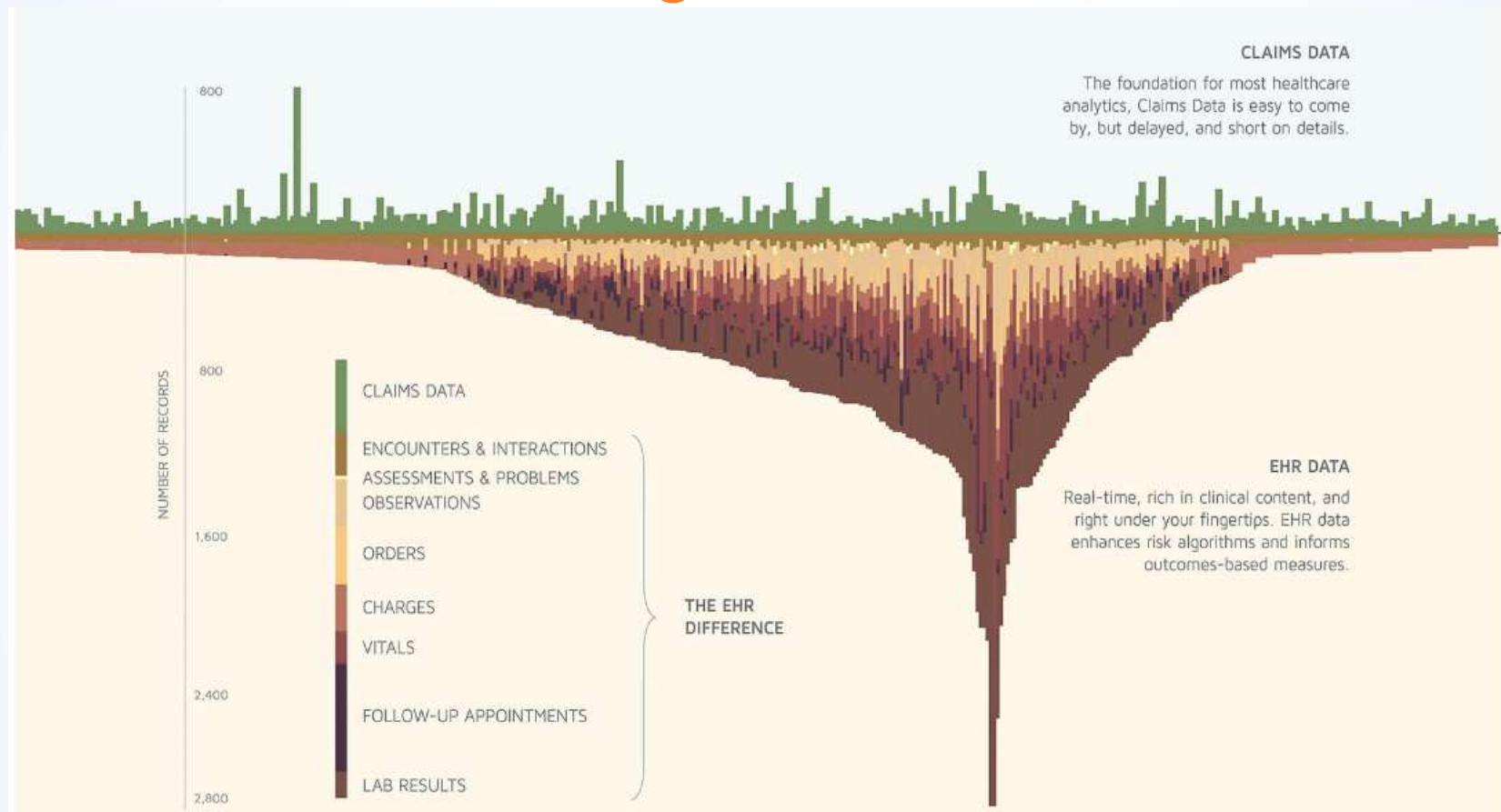
Who is KHIE?



What do we do?



What do we exchange?



<https://www.healthcareitnews.com/infographic/infographic-clinical-claims-data-what-lies-beneath>

What do we exchange?

KHIE Data Sets	
ADT/Patient Demographics	Name, Address, Phone, DOB – Required Clinician Information, Diagnosis, Facility Location, Next of Kin, Insurance Information - Optional
Lab Results	Include any pathology results
Radiology Reports	Transcribed findings and recommendations
Other Transcribed Reports	Any other type of transcribed reports. Ex: Operative report, ED report, Cancellation Notice, H&P. ANY document that is transcribed that a hospital wants to send.
CCD/CCDA	Summary of Care: Included when info is available in patient record <ul style="list-style-type: none">• Patient name• Current problem list• Current medication list• Current medication allergy list• Encounter diagnosis• Immunizations• Demographic information (preferred language, sex, race, ethnicity, date of birth)
Medicaid Claims Data	Anything Medicaid or MCO has paid
Immunization	Anything available in WebIZ

How much data do we exchange?

	Total	Hospital	Other
Immunization	2256	83	2173
ADT – Demographics	1002	101	901
Syndromic Surveillance	915	95	820
Lab Results	342	62	280
Reportable Lab	83	60	23
Radiology	40	35	5
Transcribed Notes	23	15	8
Platinum	330	33	297

95%

of hospitals
submit data to
KHIE

Additional Contributors

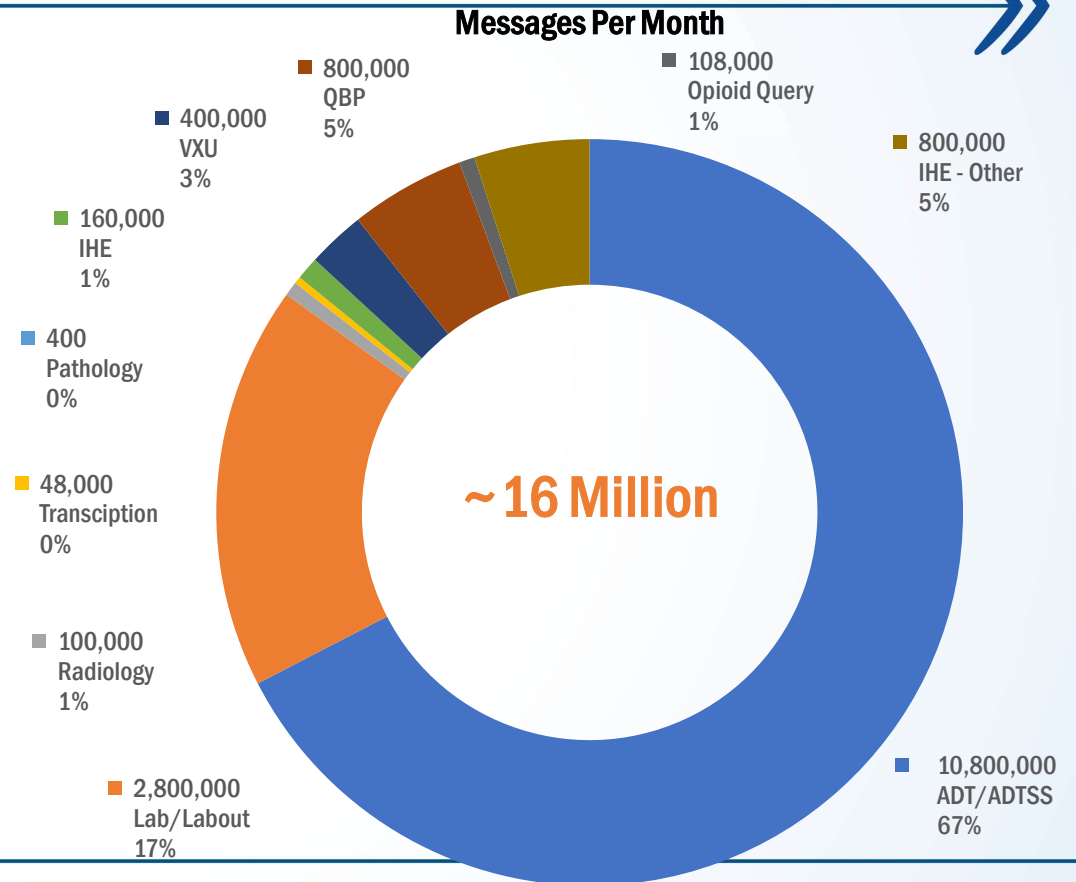
EMS &
Correctional Facilities

Behavioral Health



How much data do we exchange?

- KHIE processes roughly 16 million messages per month
- KHIE is on track to receive roughly 200 million messages by the end of this year
- ADTs account for the largest portion of the data that KHIE receives
- The amount of data KHIE receives is increasing dramatically due to a rapid expansion in Participant Onboarding



How do we make data available?

ePartnerViewer

Platinum

Event
Notifications

CMS CoP
Electronic
Notifications

Direct Secure
Messaging

Patient Alert
Query

Image
Exchange

Interstate
Exchange

Social
Determinants
of Health

KASPER

Medicaid
Claims

Federal Data
(VHA, DoD,
SSA)

KHIE

Public Health Reporting

Highway = Interface

Lanes = Data Feeds

- ADT
- Lab
- Immunization

Cars = Messages

- Patient Specific



KHIE

KHIE

Immunization
Registry

Cancer Registry

NEDSS
(Electronic
Lab Reporting)

Syndromic
Surveillance



Pandemic Reporting

COVID Tests

- Required to Submit Lab Results to KDPH or Local HD
- Electronic Options

Electronic Case Reporting

- Electronically Submit Case Reports
 - EHR
 - ePartnerViewer
- Available to LHD's

COVID Vaccine

- Required to Report to Immunization Registry in 24 Hours



COVID Test Reporting Through KHIE

HL7 VPN Feed

HL7 Web
Service Feed

HL7 SFTP
Upload

TXT “Flat File”
SFTP Upload

Direct Data
Entry



KHIE COVID Services

ePartnerViewer

Patient Alert
Query

Event
Notifications



29
years oldMOUSE, MICKEY
DOB 1991/11/01

Sex M

Address 92211 BELLAVUE DR UNIT 33 LEXINGTON KY 40210

Bookmark

View More

DATE SELECTION

☐ 3 months☐ 6 months☐ 9 months☒ 12 months☐ Custom

Retrieve

Showing Data for 2019/12/03 to 2020/12/02

ALERT: COVID-19 Positive Patient

Patient Summary

Medications & Allergies

Clinical Documents

Laboratory & Pathology

Reports

Encounters

Immunizations

Uncategorized

Patient Demographics

CLINICAL DOCUMENTS

DATE	NAME
12/02/2020	KHIE Summary CCD
10/08/2020	LOURDES - CarrollHosp-COVID-19_loinc test 07-17-2020
10/05/2020	LOURDES - Visit Notification Note

> VIEW ALL CLINICAL DOCUMENTS

ENCOUNTERS

START DATE	DIAGNOSIS
02/22/2020	CAR ACCIDENT - SKULL FRACTURE

> VIEW ALL ENCOUNTERS

LABORATORY

COMPLETED DATE	NAME
08/12/1940	CarrollHosp-COVID-19_loinc test 07-17-2020

> VIEW ALL LABORATORY

RADIOLOGY

COMPLETED DATE	NAME
01/01/1997	RadTesting LOINC 11525-3

> VIEW ALL RADIOLOGY

PATHOLOGY

COMPLETED DATE	NAME
01/01/1998	Path Testing LOINC 13338-9

> VIEW ALL PATHOLOGY

TRANSCRIBED REPORTS

COMPLETED DATE	NAME
01/01/1999	TrnTesting LOINC 11867-9

> VIEW ALL TRANSCRIBED REPORTS

UNCATEGORIZED

COMPLETED DATE	NAME
01/01/1990	Uncat Testing LOINC 11111-9

> VIEW ALL UNCATEGORIZED

IMMUNIZATIONS

There is no data to be displayed

PROCEDURES

PROBLEMS

MEDICATIONS

ALLERGIES

What's Next

2019

- ePartnerViewer
- Summary CCDv1 and v2
- Clinical Event Notifications
- Data Migration to new platform
- Participant Cutover to new platform

2020

- FHIR
- Cancer Registry
- SSO for EMR
- PCDH
- Advance Directive
- Electronic Case Reporting
- Provider Self-Service Testing
- Provider Message Testing
- Direct Data Entry for COVID-19 Labs
- DSM Use Cases
- ePartnerViewer Enhancements
- XDRO registry
- TWIST Integration
- COVID Reports/Flags
- New Event Notifications
- COVID-19 Flat File Process

2021

- Imaging Exchange
- Social Determinants of Health
- CMS Event Notifications



Imaging Exchange

ePartnerViewer Enhancements

Allows users such as radiology administrative staff to open the ePartnerViewer, search a patient, and review scaled-down radiology studies for that patient from other hospitals and providers

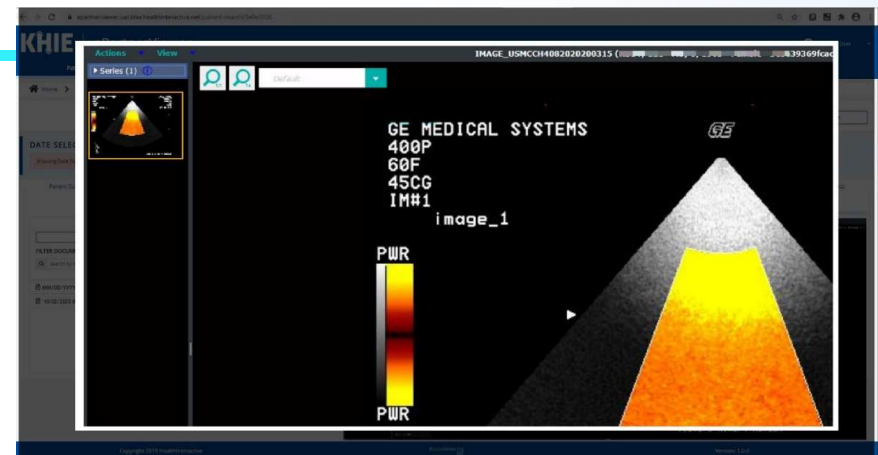
Interoperability

Provides the capability to exchange imaging data with other imaging systems, which will reduce the need for new radiology studies and cumbersome document and CD drive management

Workflow and Reporting

Provides users with reports and workflows to monitor access to the Image Manifest documents to confirm that radiology studies are being transferred safely and securely

KHIE



Social Determinants of Health

KHIE is always expanding the type of data it receives and is leading the way by integrating Social Determinant of Health data and indicators into the fold

Receiving SDOH Data

KHIE is adding capability to pull SDOH data from Clinical Documents that it receives using ICD and LOINC codes and leverages its Master Client Index to match those indices with right patient every time



Displaying SDOH Data

KHIE is adding a new portlet and tab in the ePartnerViewer to display SDOH data on the Patient Chart in KHIE, which is mobile compatible

In addition, KHIE is adding new technology that will extract the SDOH data from CDA documents and the Medicaid CCD and present SDOH in one consolidated section in the KHIE Summary CCD



Understanding SDOH Data

KHIE has developed a proprietary matrix which maps the SDOH codes received to a simple color coded SDOH indicators that allow health care professionals to make simple and informed decisions



Sending SDOH Data

ePartnerViewer users will be able to complete their own SDOH assessment for patients at the point of care, and makes this data available for all KHIE Participants

Adding a Social Determinants of Health portlet in the ePartnerViewer

Adding a Social Determinants of Health portlet in the ePartnerViewer

Displaying and Sending Social Determinant of Health Data

50
years old

BRADY, BOBBY
DOB 1970/07/12

Sex: M

Address 1234 TEST ST LEXINGTON KY 40137

Bookmarked

View More

DATE SELECTION

3 months

6 months

9 months

12 months

Custom

Showing Data for 2019/10/15 to 2020/10/14

Retrieve

Patient Summary

Medications & Allergies

Clinical Documents

Laboratory & Pathology

Reports

SDoH

Immunizations

Uncategorized

Patient Demographics

📁 Social Determinant of Health

APPLY FILTER

Date	Diagnosis	Clinician	Location	Provider	Source
06/20/2020	Disappearance and death of family member	BJAMES 2B 2BETA BJR	AMOHAMMAD		Afzal, Mohammad MD, Internal Medicine, LLC
06/19/2020	problems in relationship with spouse or partner	BJAMES 2B 2BETA BJR	AMOHAMMAD		Afzal, Mohammad MD, Internal Medicine, LLC
06/18/2020	Other specified problems related to psychosocial circumstances	BJAMES 2B 2BETA BJR	AMOHAMMAD		Afzal, Mohammad MD, Internal Medicine, LLC
06/17/2020	Problems related to living alone	BJAMES 2B 2BETA BJR	AMOHAMMAD		Afzal, Mohammad MD, Internal Medicine, LLC
	Disappearance and death of family member	BJAMES 2B 2BETA BJR			
	homelessness	AJAMES A ALPHA AJR			
	Other specified problems related to psychosocial circumstances	BJAMES 2B 2BETA BJR			
	problems in relationship with spouse or partner	BJAMES 2B 2BETA BJR			

SDOH

Assessment

● Adult Education

● Childcare

● Housing

● Income

● Safety

● Substance Abuse

● Disabilities

● Employment

● Food

● Health Care Coverage

Patient-specific SDH data aligned with KY Resource Engine Domains

Kentucky Health Information Exchange



[About](#) [Participants](#) [Services](#) [Get Started](#) [ePartnerViewer](#) [Resources](#) [COVID-19](#)



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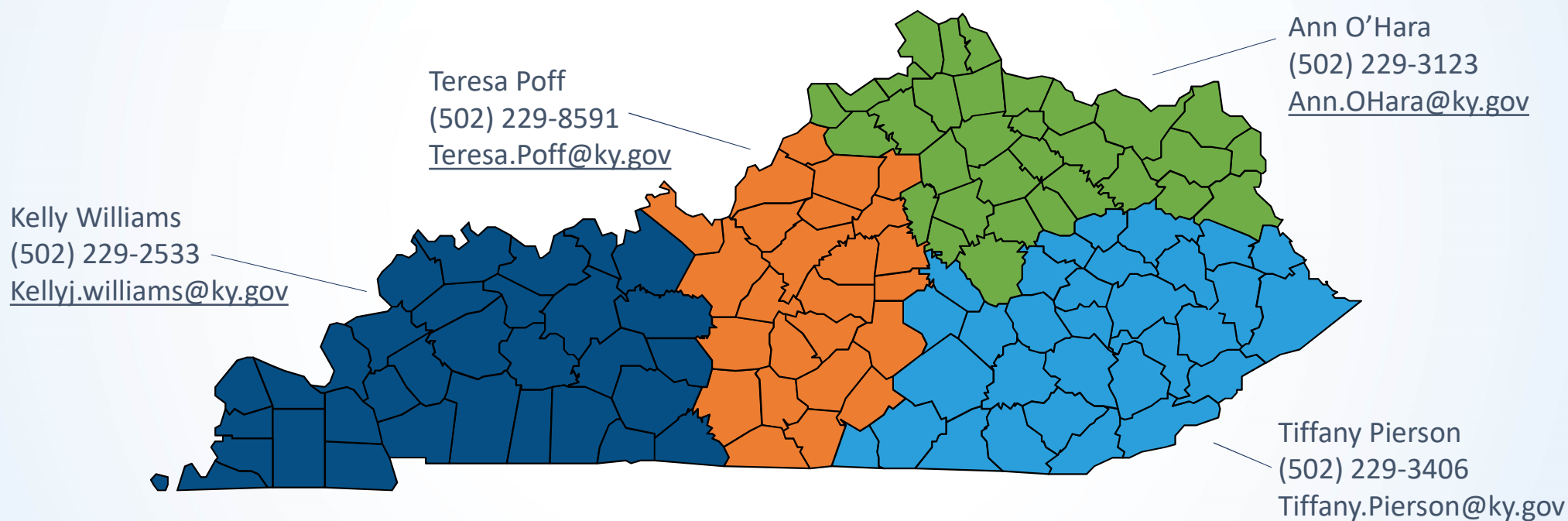
[Get Started >>](#)

It's easy. We're standing by.

We're working with

Promoting Interoperability

Outreach Coordinators





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