Pennsylvania eHealth Partnership Advisory Board Meeting

August 6, 2021

Agenda

10 a.m. Welcome and Introductions

10:05   Minutes of May 7, 2021 Meeting

10:10   Department of Human Services Priorities

10:30   HIE Trust Community Committee Updates

10:50   PA eHealth Partnership Program 2020-2021 Accomplishments

11:20   Keystone Health Information Exchange Overview

11:40   2020 PA HIT Environmental Scan Findings

11:50   Vice Chair Nominations

11:55   Public Comment

12 p.m. Adjournment

Next Meeting:
    November 5, 2021 – via Teams Meeting
    10 a.m. – 12 noon

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David F. Simon, JD

Consumer Representative

and

PA eHealth Advisory Board Chair

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PA eHealth Advisory Board

Mr. MARTIN CICCOCIOPPO, Director, PA eHealth Partnership Program
Pennsylvania Department of Human Services (Secretary of DHS Designee)

Ms. PAMELA E. CLARKE, Senior Director, Quality, Health Promotion Council (House
Appointed HIO Representative)

Mr. JOSEPH FISNE, Associate Chief Information Officer
Geisinger Health System (Senate Appointed HIO Representative)

Mr. SCOTT FRANK, Chief Information Officer
Capital Blue Cross (Insurer Representative)

Dr. BRIAN HANNAH, formerly Vice President, Chief Medical Information Officer
Mercy Health (Hospital Representative)

Dr. TIMOTHY HEILMANN, Chief Medical Information Officer
UPMC Susquehanna (Physician or Nurse Representative)

Ms. TERI L. HENNING, Chief Executive Officer
Pennsylvania Homecare Association (Home Care or Hospice Representative)

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PA eHealth Advisory Board continued

Mr. MICHAEL HUMPFREYS, Chief of Staff
Pennsylvania Insurance Department (Insurance Commissioner Designee)

Ms. JULIE KORICK, Director of Finance & Business Development
Pennsylvania Association of Community Health Centers (Underserved Representative)

Ms. MINTA LIVENGOOD, Vice Chair, Consumer Subcommittee of the MAAC
(Consumer Representative)

Mr. PAUL MCGUIRE (Vice Chair), Chief Operating Officer, Quality Life Services
(Post-Acute Care Facility Representative)

Dr. MICHAEL A. SHEINBERG, Chief Medical Information Officer
Penn Medicine Lancaster General Health (House Appointed HIO Representative)

Mr. JARED SHINABERY, Deputy Secretary for Health Innovation, PA Department of
Health (Secretary of Health Designee)

Mr. DAVID F. SIMON (Chair), Chief Legal Affairs Officer
Philadelphia College of Osteopathic Medicine (Consumer Representative)

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Ex Officio Members

Ms. PHYLLIS SZYMANSKI, Director
ClinicalConnect HIE (Nominated as Senate HIO Appointee)

Mr. DON REED, Chief Operating Officer
HealthShare Exchange (Nominated as House HIO Appointee)

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Andrew Barnes, MAJS

Executive Deputy Secretary

Pennsylvania Department of Human Services

Brian Wells

Vice President and Chief Technology Officer

HealthShare Exchange

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HIE Trust Community Committee

Chairperson:

- Keith Cromwell, Program Manager, Central Pennsylvania Connect HIE

HIE Trust Community Committee Meeting Summaries:

- HIETCC Meeting Agenda, July 7, 2021

- HIETCC Meeting Minutes, June 2, 2021

- HIETCC Meeting Minutes, May 12, 2021

- HIETCC Meeting Minutes, April 7, 2021

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HIE Trust Community Committee

Topics covered/discussions w/continued focus on:

- RISE PA – Potential Grant Program for HIOs to Select RRT Vendor

- Lehigh Valley Health Network Becoming an HIO

- PA eHealth Strategic Planning

- Interstate Data Sharing – DHIN Onboarding to P3N ADT Service

- HIO Support for Public Health Reporting

- WIC Access to P3N Portal

- FFY2021 Grant Programs

- P3N Operations and Transparency

- Encounter Notification – P3N ADT Service Inpatient and Ambulatory Expansion

- P3N Certification Package – Beginning Annual Review

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Martin Ciccocioppo, MBA MHA

Director

Pennsylvania eHealth Partnership Program

Office of Medical Assistance Programs

Pennsylvania Department of Human Services

VISION

Electronic health information exchange (eHIE) enables initiatives striving to improve patient experience, population health and healthcare cost.

MISSION

To establish a statewide interoperable system for participating organizations to electronically move health information in a manner that ensures the secure and authorized exchange of health information to provide and improve care to patients.

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PA eHealth Objectives (2018-2021)

- Engage all providers in robust health information exchange.

- Increase the speed and accuracy of diagnosis for individuals and populations.

- Alert providers/care teams to an admission of patient.

- Reduce readmissions and redundant tests by sharing patient information and care plans with other providers and payers who care for the same patients.

- Increase patient satisfaction by reducing their time spent in the healthcare system and eliminating frustrating duplication.

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PA eHealth Strategic Plan (2018-2021)

1. Improve upon our existing services by leveraging other state services and resources

2. Expand the coverage area of providers exchanging data

3. Increase bi-directional access to public health reporting registries

4. Provide improved analytics to better support performance measurement and quality reporting

5. Enhance the types of patient data exchanged

6. Update the certification program to better serve all current and new participants

7. Offer expanded system access to patients and providers

8. Expand exchange capabilities to include external state and federal partners

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1. Leverage state services and resources

Fiscal Year 2020-2021 Accomplishments:

- PA eHealth supported production connections to four Department of Health (DOH) public health registries and one DHS registry.
- Implemented Phase 1 of provider directory improvements, leveraging data from DHS, DOH, Department of Aging, Department of Drug and Alcohol Programs, Department of State, and the Centers for Medicare and Medicaid Services.
- Supported the Governor's Interagency Health Reform Council's goal of whole-person health reform.

Current Activity:

- Leveraging health information exchange in support of the IHRC HIE recommendations and integrating social services into the delivery of health care.
- Working to implement Phase 2 of provider directory improvements to make it public-facing.
- The new Pennsylvania Patient and Provider Network (P3N) system will integrate into the Medicaid Management Information System (MMIS).

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2. Expand coverage area of exchange

Fiscal Year 2020-2021 Accomplishments:

- DHS awarded $7.7 million in HIE Onboarding Grants to connect 223 organizations to P3N Certified HIOs.
- DHS awarded $500,000 in Payor Onboarding grants to improve interoperability with MA MCOs.
- Required MA Patient Centered Medical Homes to participate with P3N Certified HIOs.
- Worked closely with the Lehigh Valley Health Network to encourage them to become a P3N Certified HIO; signed application and participation agreement received in June 2021.

Current Activity:

- Working with DOC to provide clinical information to the P3N when inmates are receiving medical services in the community.
- Requesting funding for additional HIE Onboarding Grants.
- Requesting funding for resource and referral tool grant program for HIOs to select and become interoperable with a closed-loop referral vendor for addressing SDOH.

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3. Increase bi-directional access to PHG

Fiscal Year 2020-2021 Accomplishments:

- DHS awarded $60,000 to HIOs to support their efforts to connect their member organizations (MOs) to the electronic lab public health registries through the PHG.
- In SFY 2020-2021, DOH processed more than 8.5 million messages through the Public Health Gateway (PHG).
- All five P3N Certified HIOs achieved production status with respect to one or more PHG registries, including production connection by all five to the Electronic Lab Registry (eLR).
- Thirty-four HIO MOs are reporting the results of COVID-19 tests to the eLR through the PHG.

Current Activity:

- Since the Promoting Interoperability Program ends in CY 2021; working on sunsetting the electronic clinical quality measures registry.
- The new P3N system will also become the new PHG with improved integration.

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4. Improve data quality through analytics

Fiscal Year 2020-2021 Accomplishments:
- DHS awarded nearly $300,000 in Patient Matching Improvement Grants to HIOs in FFY 2021 to improve patient matching within HIOs and across the P3N.
- Facilitated a complete refresh of patient demographic information in the P3N master patient index for a large HIO.
- Provided to HIOs, on a monthly basis, an HIO demographic data fill-rate report and, on a weekly basis, a report that identifies individual patient registrations with missing demographic information.
- As a result of PA eHealth's efforts, patient matching or linking has steadily increased from 30.5% in June 2020 to 36.5% in June 2021.
- Selected new P3N system vendor.

Current Activity:
- The new P3N system will include referential data to improve patient matching.
- The new P3N system will include direct PA eHealth access to robust P3N performance analytics.

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5. Enhance the types of data exchanged

Fiscal Year 2020-2021 Accomplishments:
- In SFY 2020-2021, the P3N sent more than 17.5 million Admission Discharge Transfer (ADT) records on behalf of nearly 700,000 patients who were receiving care outside of their "home" HIO.
- Added seven acute emergency department ADT feeds to the P3N statewide ADT Service for a total of 114 EDs; added 68 inpatient ADT feeds for a total of 98.
- PA eHealth leveraged the P3N statewide ADT Service to support daily COVID-19 reports of exposed and confirmed COVID-19 cases to DOH, including patient demographic information.
- Began development of a resource and referral tool grant program for HIOs to select and become interoperable with a RRT vendor.

Current Activity:
- Increasing ED and IP ADT feeds.
- Adding ambulatory ADTs in the second half of CY 2021.
- Pursuing funding for RRT grant program.
- The new P3N system will include a care plan registry.

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6. Update the certification program

Fiscal Year 2020-2021 Accomplishments:
- In August 2020, PA eHealth and the P3N HIE Trust Community Committee completed its annual review of the P3N HIO Certification Package and determined that no changes were required.
- Developed a new three-year PA eHealth Partnership Program Strategic Plan, which became effective July 1, 2021.

Current Activity:
- PA eHealth and the P3N HIE Trust Community Committee have begun their annual review of the P3N HIO Certification Package.
- Monitoring downtime notification policy compliance.
- Implementing programs that address the Goals and Objectives in the 2021-2024 Strategic Plan.
- Will evaluate policies and procedures in light of the new P3N system and federal interoperability requirements.

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7. Offer expanded system access

Fiscal Year 2020-2021 Accomplishments:
- Medicaid Fee-for-Service Case Managers use of the P3N Portal to improve the timeliness and completeness of their care plans for new and vulnerable enrollees continues to increase (more than 500 patients accessed per month).
- PA eHealth engaged in extensive discussions with the DOH Special Supplemental Program for Women, Infants and Children to provide their pediatric nutritionists with access to the P3N Portal to support a new telehealth model; granting access is complicated because the WIC centers are not HIPAA covered entities.

Current Activity:
- The new P3N system will be integrated into the new MMIS, giving improved clinical and claims data access to DHS and the P3N participants.
- The new P3N System will allow patient access to their data.
- Continuing discussions with DOH and DHS on providing program access to the P3N Portal.

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8. Facilitate inter-state and federal exchange

Fiscal Year 2020-2021 Accomplishments:
- Began onboarding the Delaware Health Information Network (DHIN) to the P3N ADT Service.
- Continued discussions with Maryland and West Virginia on alerting a patient's care team when that patient crosses state boundaries in obtaining health care services.
- Secured a no-cost contract change request with IBM to onboard the DHIN to the P3N ADT Service.

Current Activity:
- Continuing onboarding of DHIN to P3N ADT Service.
- Maryland and West Virginia are reviewing ADT data sharing agreement.
- Participating in meetings with the Sequoia Project, ONC's Recognized Coordinating Entity for implementing the Trusted Exchange Framework and Common Agreement (TEFCA), to support health information exchange with a Qualified Health Information Network (QHIN) in the future; the new P3N System will have functionality expected to be required for a QHIN.

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PA eHealth Vision and Mission (2021-2024)

VISION

Electronic health information exchange (HIE) enables initiatives striving to improve patient care and experience, population health, and health care cost.

MISSION

To enhance, expand and maintain the statewide interoperable system for participating organizations to electronically move health information in a manner that ensures the secure and authorized exchange of health information to provide and improve care to patients and reduce costs.

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Strategic Goals and Objectives (2021-2024)

1. Enable ubiquitous, robust HIE, while maintaining privacy and security
   A. Expand the number and types of stakeholders actively participating in HIE
   B. Educate stakeholders, including patients and their advocates, on the value of participating in HIE
   C. Align health information exchange with Interoperability Rules and the Trusted Exchange Framework and Common Agreement (TEFCA)

2. Increase timely access, accuracy, and availability of clinical information to support diagnosis and treatment of individuals and to improve population health outcomes
   A. Expand HIO access to public health reporting registries
   B. Support newer technology for access to clinical information
   C. Promote health equity

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Strategic Goals and Objectives (2021-2024)

3. Improve upon our existing P3N services by leveraging state services and resources
 A. Integrate P3N into the Medicaid Management Information System (MMIS)
 B. Provide P3N access to state program areas

4. Alert patient care teams to relevant patient health care encounters
 A. Expand the number and types of ADT messages contributed to the P3N ADT Service
 B. Capture meaningful information from ADTs for analysis and population health reporting

5. Support care coordination to improve quality and reduce health care costs
 A. Reduce duplicative or unnecessary services
 B. Support value-based purchasing and other initiatives intended to bend the cost curve
 C. Improve HIO access to public health reporting registries by incorporating PHG into the P3N

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Strategic Goals and Objectives (2021-2024)

6. Improve patient outcomes and satisfaction
    A. Enable the sharing of care plans and treatment data with a patient's care team
    B. Support telehealth by providing remote access to clinical information
    C. Implement newer technology for access to clinical information

7. Optimize health information exchange stakeholders' experience
    A. Make the data more usable in the stakeholder's workflow
    B. Provide easy access to help when it is needed

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Kim Chaundy, MBA

Senior Director Health

Information Exchange & Interoperability

Geisinger Health System

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PA eHealth Partnership Program Advisory Board Quarterly Meeting - (8/6/21)

About KeyHIE

P3N-Certified, Participant-Led Health Information Organization (HIO), Non-Profit PA Corporation

One of the oldest HIEs in the US, founded in 2005

Serving more than 8.3M patients, in PA & surrounding states

Mission: To nurture information sharing between providers with secure access to quality healthcare data, when and where it is needed

KeyHIE
Keystone Health Information Exchange®

About KeyHIE

KeyHIE is a service that provides timely access to important patient data, when and where it is needed.

Uses for KeyHIE include:

- Information retrieval for direct patient care (queries)
- Alerts to providers regarding patient events (hospital admissions & discharges)
- Data "push" directly into disparate EHRs
- Data aggregation and delivery for cross venue care (ACOs and bundled payments)
- Data aggregation for analytics (population health)
- Data aggregation for patients (HIE-connected patient portal)

KeyHIE
Keystone Health Information Exchange®

About KeyHIE

245 Unique Healthcare Organizations

KeyHIE Participants
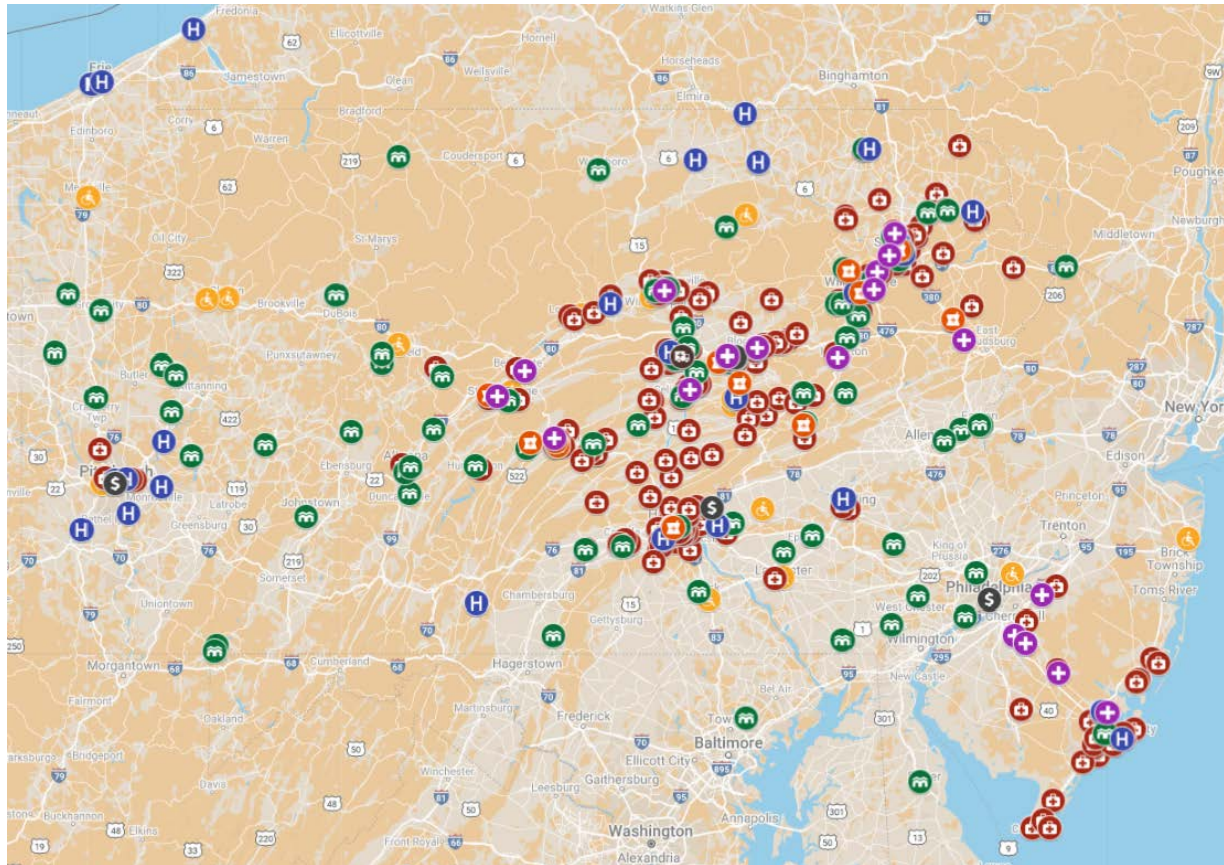
- 🧑‍🦽 31 Home Health
- ⚕️ 301 Physician Practices
- 🏠 80 Long Term Care
- Ⓗ 40 Hospitals
- 🚑 3 EMS
- 💊 18 Pharmacy
- 💲 5 Insurance
- ➕ 19 Urgent Care

KeyHIE
Keystone Health Information Exchange®

External Connections
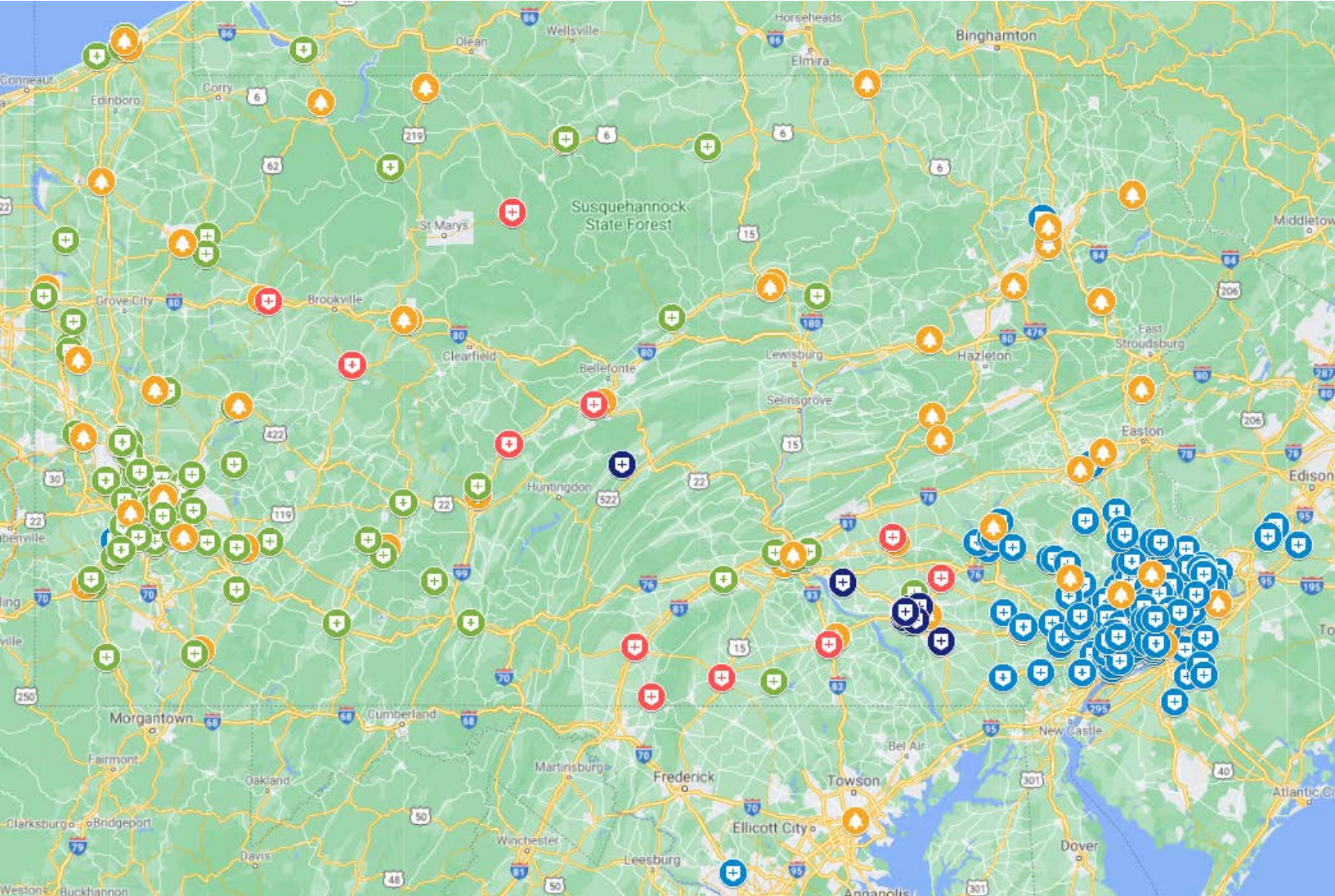
KeyHIE External Connections – P3N & Sequoia

KeyHIE Growth

- ## KeyHIE Participation Growth since 2019 = 31%

KeyHIE Participants
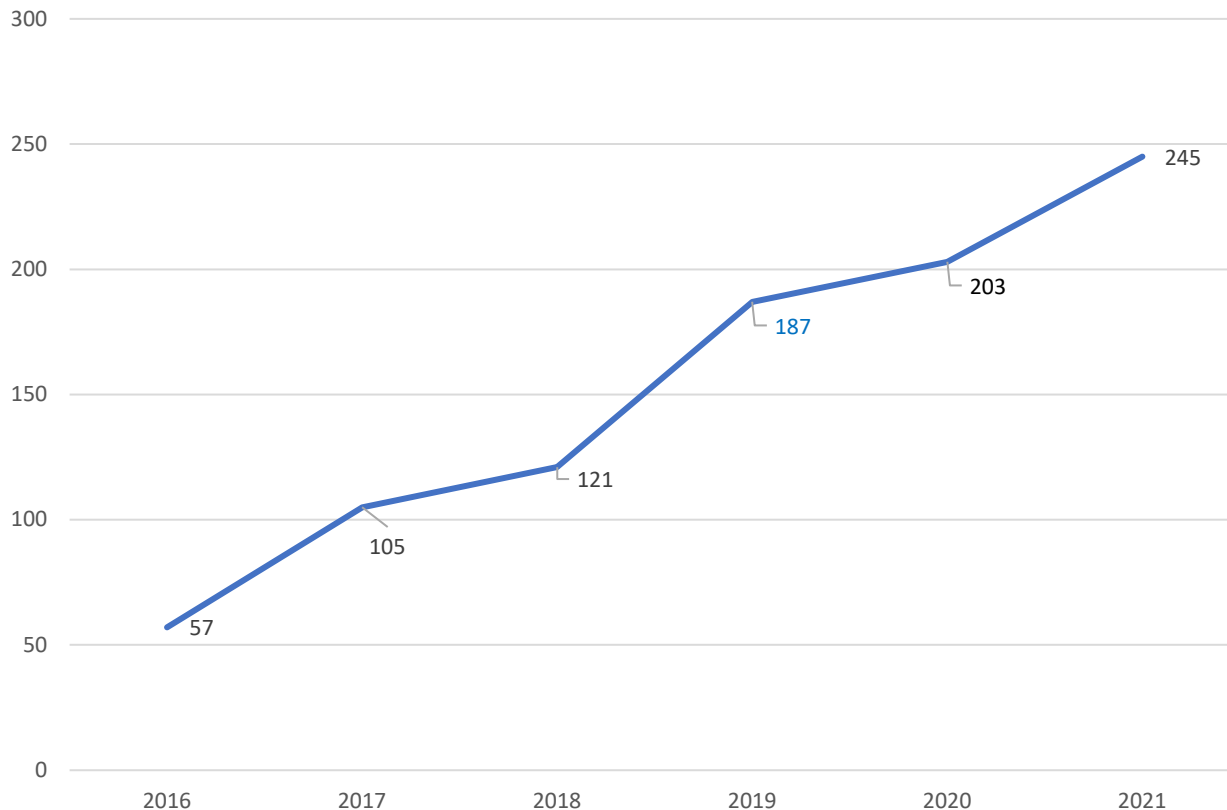
KeyHIE Delivers:
- Timely Access to Clinical Data
- Complete Data for Care
- Results Delivery
- Proactive Notifications

Participant Value:
- Care Gap Closure
- Meaningful Use
- Reduces Duplicative Testing
- Lower Cost of Care

P3N Document Queries

Total # of successful inbound Participant document retrieves P3N processed
Target: 2,000,000/month - Red (1,301,726 for February 2021)
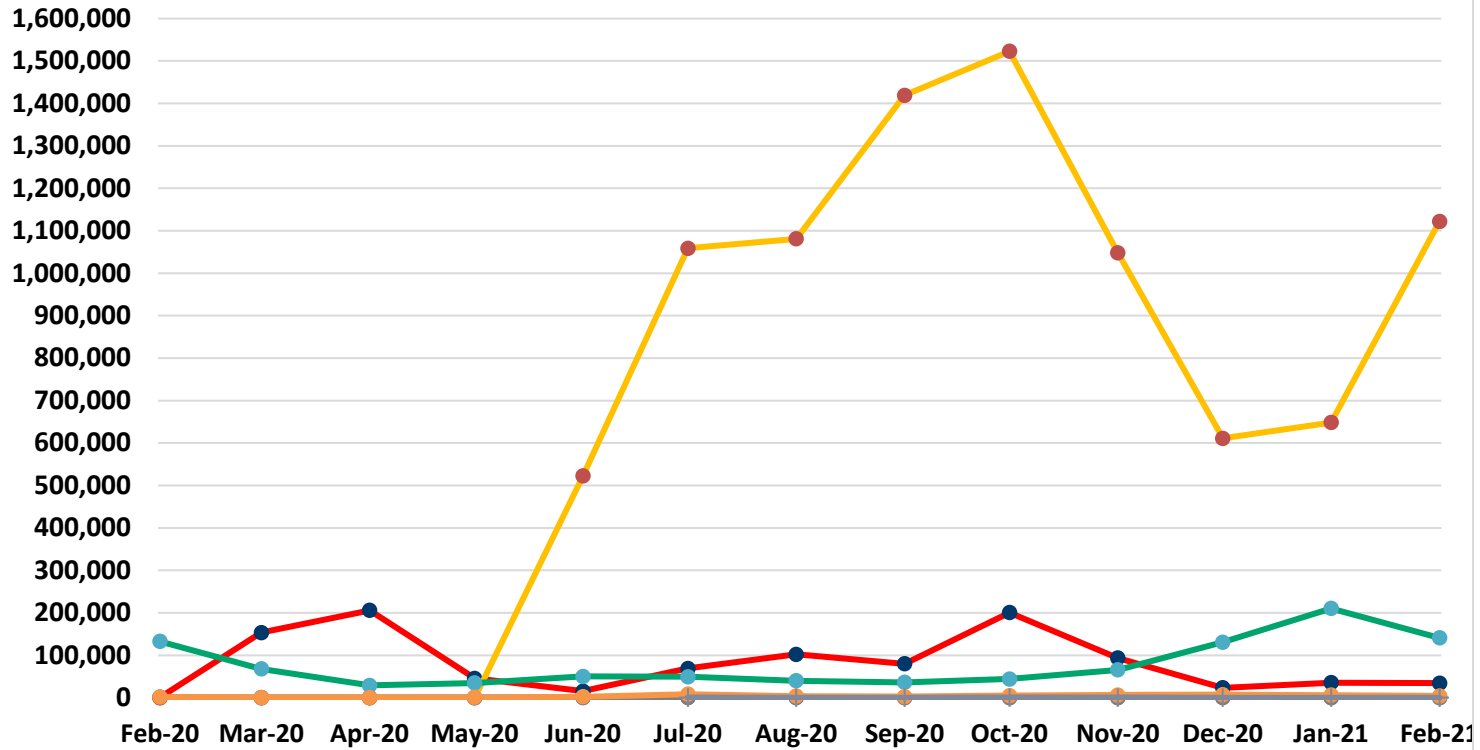
	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21
KEYHIE	636	153,573	205,834	45,540	15,513	68,930	102,255	79,793	200,602	93,457	23,229	35,568	34,470
CCHIE	91	103	54	69	51	93	77	55	66	42	75	71	82
HSX	475	308	225	515	789	632	685	319	30	203	1,061	177	91
Mt. Nittany	208	0	1	28	522,223	1,058,930	1,080,879	1,419,173	1,522,635	1,047,646	610,958	648,290	1,122,033
CPCHIE	132,828	67,991	28,882	34,668	50,145	49,523	39,926	36,083	44,209	65,469	130,857	210,144	140,964
PA DOC	1,919	315	316	881	2,105	8,170	3,726	2,712	4,874	6,475	7,259	5,874	4,037
P3N Web Portal						213	147	31	446	402	61	18	49

KeyHIE Update - June 2021

Certified PA HIO

Connected to P3N & eHealth Exchange

8,399,233

Unique patients with health records in KeyHIE

5,525,207
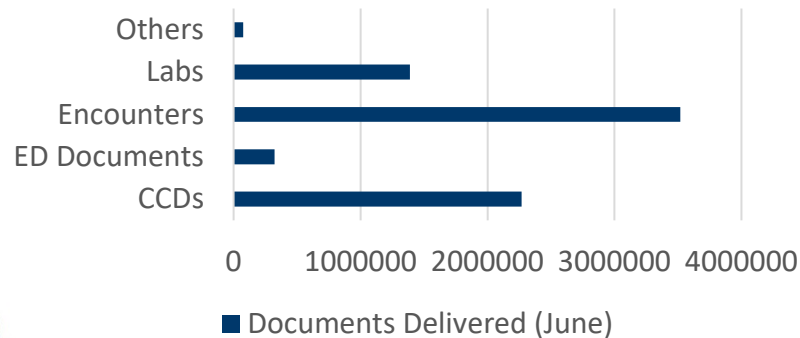
New documents available

5,785

Active KeyHIE users
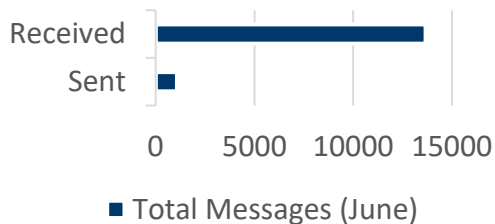
69

Organizations moved to opt-out consent model

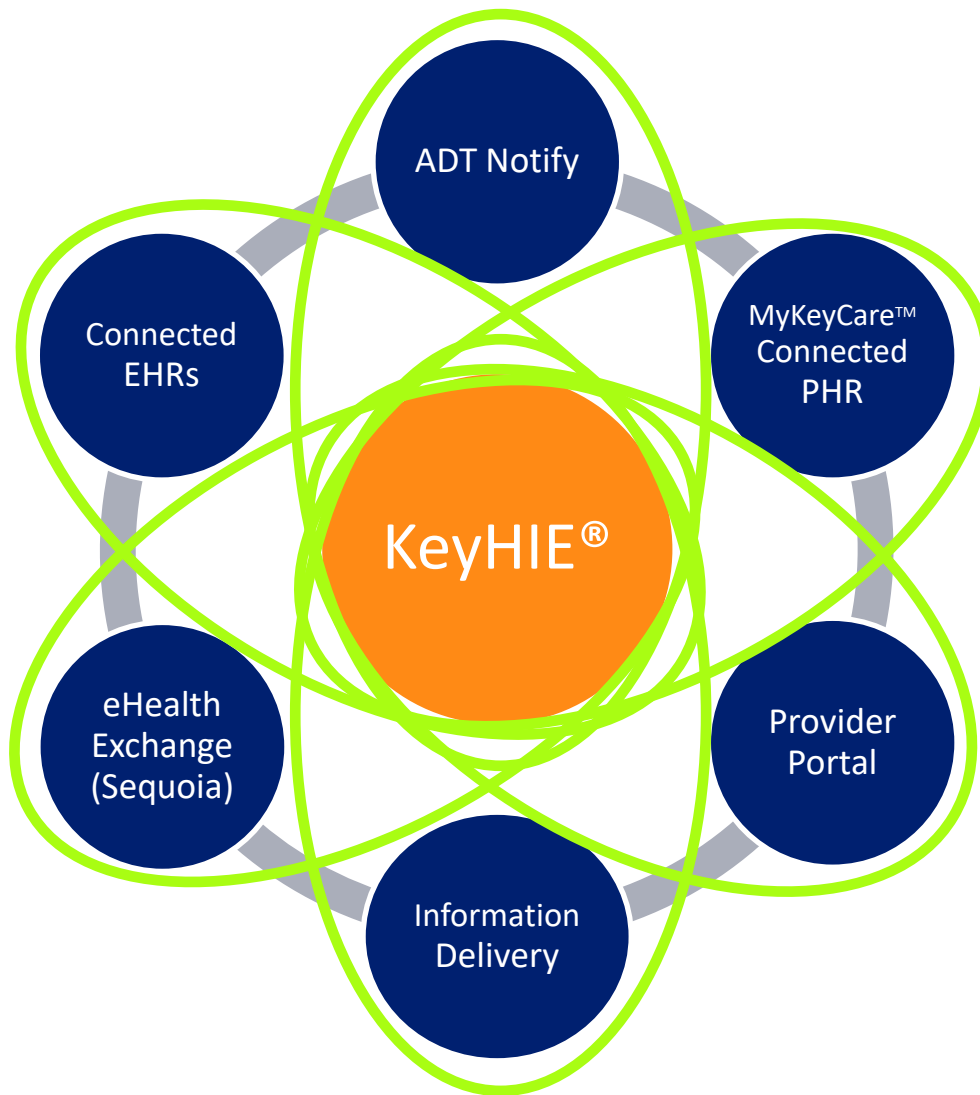**Information Delivery Service**

Documents Delivered

- Others
- Labs
- Encounters
- ED Documents
- CCDs

0   1000000   2000000   3000000   4000000

■ Documents Delivered (June)

Direct Secure Messaging (web)

Total Messages

Received

Sent

0   5000   10000   15000

■ Total Messages (June)

35,304 patients signed up for MyKeyCare

KeyHIE Products & Services

- Connecting the care continuum
- Connecting patients
- Delivering reports and results
- Alerts and messages
- Nationwide Exchange
- Statewide Registries

EHR Integrations: 2005-2021
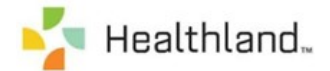
KeyHIE Services

KeyHIE Insights
Analytics Platform Powered by HIE Data

HEDIS, STARS, MIPS, Custom Developed Measures for Quality Programs
Actionable Provider Level Insights
Future Support of Claims Based Utilization, Network Management Metrics

Information Delivery Service
Notification And Document Delivery Service

Real Time and batched notification and document delivery
HIOs, Providers, Patients and Payer Workflows
Delivery from external sources, including files for HEDIS

Provider Portal
Clinical Viewer, Sequoia, Direct Secure Messages

Connectivity with VA, SSA and Sequoia
Connectivity with P3N
Real-Time Clinical Viewer for HL7 and CDA documents

KeyHIE Transform
Home Health, Hospice, Emergency Service Providers

Connectivity Options for Home Health and Hospice, LTPAC
Interoperable and cost effect integration

MyKeyCare
MU3-Compliant Patient Portal

Online Patient Portal and Mobile App
360 View of Patient's health information
Secure Messaging with Providers

KeyHIE
Keystone Health Information Exchange®
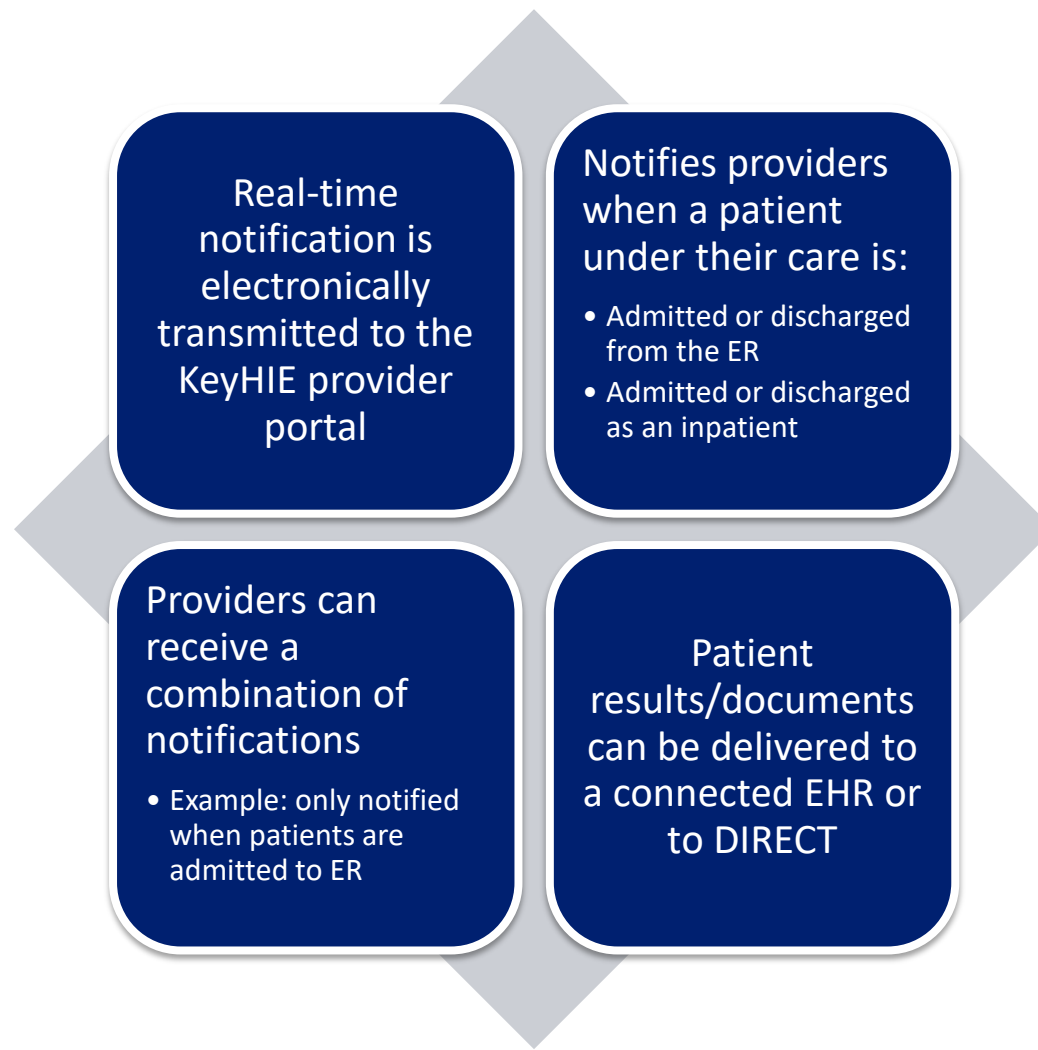
KeyHIE Provider Portal

Your providers can:

- View clinical summaries/documents
  - EHR
  - Web portal
- Receive KeyHIE Notifications/IDS
- Admission, ER, Discharge
- Documents delivered
- Connect to PA Patient & Provider Network (P3N)
- Connect to eHealth Exchange (Sequoia)

Documents Available:

- Lab/test results
- H&Ps
- Consults
- Discharge & ED summaries
- Radiology reports
- EKG tracings
- Continuity of Care Documents (CCDs)
  - Allergies
  - Medications
  - Health problems

KeyHIE
Keystone Health Information Exchange ®

Notifications & Information Delivery

Real-time notification is electronically transmitted to the KeyHIE provider portal

Notifies providers when a patient under their care is:
- Admitted or discharged from the ER
- Admitted or discharged as an inpatient

Providers can receive a combination of notifications
- Example: only notified when patients are admitted to ER

Patient results/documents can be delivered to a connected EHR or to DIRECT

Use Case: Follow up with patients after being discharged from an inpatient setting.

IDS Key Features

Core Feature

Intelligent rule sets

Personalized rule per HIO

Real-time and batched delivery

Flexible delivery format and channels

Use standard or customized rule sets

HIO(s)

Ability to send notifications and documents to HIOs

Ability to manage patient population for an HIO

Clinical data sharing and consumption reports

Manage providers per HIO

Provider

Ability to send notifications and documents to individual providers

Customized provider-specific notifications and document delivery

Provider level data consumption and sharing reports

Manage patient population per provider

IDS Key Features

Payor

Notification delivery to Case Managers

Real-time Identify Payer Population

Extract HEDIS data elements for Quality Reporting

Document delivery to Payor for identified HEDIS population

ACO

Notification and document delivery to ACOs

Real-time Identify ACO Population from different facilities

Document delivery to ACO Case Manager

Manage custom relationship between Patient and Case Manager

External Sources

Share notifications and documents from External Sources (P3N and Sequoia)

Notifications and documents for specific patient population

KeyHIE Transform

KeyHIE Transform is a nationally available, web-based service that allows nursing homes, home health agencies & EMS to participate in an HIE

- Register and pay online
- Download and configure
- Submit MDS, OASIS or HIS files
- Submit Patient Care Reports (PCRs)
- Submit CCDs into an HIE without traditional point-to-point integration
- Transform into HL7 CCD and ADT registration message
- Return CCD and registration message to customer
- Publish CCD and registration message to KeyHIE
- Customer tools and support available

KeyHIE Transform
powered by BridgeGateHealth

https://transform.keyhie.org

KeyHIE
Keystone Health Information Exchange®

KeyHIE Transform

Available nationwide. Allows nursing homes, home health agencies & EMS to participate in an HIE.

Nursing Homes and Home Health

MDS, OASIS, or HIS

Clinical Summary

HIE

http://transform.keyhie.org

KeyHIE Transform
powered by BridgeGateHealth

DIRECT Secure Messaging

Secure, encrypted web-based communication (secure email)

Certified Health Information Service Provider (HISP)

Available as a standalone service (KeyHIE Direct) or embedded into EHR

DIRECT Result/Document Delivery

Key patient information delivered via DIRECT

Example: Lab results delivery

Benefits for participating organizations

Receive patient transfer information (and other vital information) electronically

Save valuable time spent on faxing and making phone calls

Make it easier for business partners to exchange data

MyKeyCare

Secure, online patient portal

- View medical documents from multiple KeyHIE-participating facilities

- Download medical documents

- Message your healthcare team

- Request an appointment or prescription renewal

- View educational material
- Track personal health information
  - Patient-entered/uploaded data

Patient Value

Patient's health care providers are part of KeyHIE and have immediate access to prior health records.

Patient has a MyKeyCare account and accesses it frequently which gives real-time access for consistency of treatment.

Example: Patient broke her leg while traveling out of state. Health records were immediately available to review prior location of break to assess and diagnose care plan to get her home safely and follow up with her current in-state provider.

KeyHIE COVID-19 Response

KeyHIE - COVID-19 Surveillance (Visuals do not represent Positive Cases)

Exposure by City Zipcodes

Confirmed Exposure
Possible Exposure
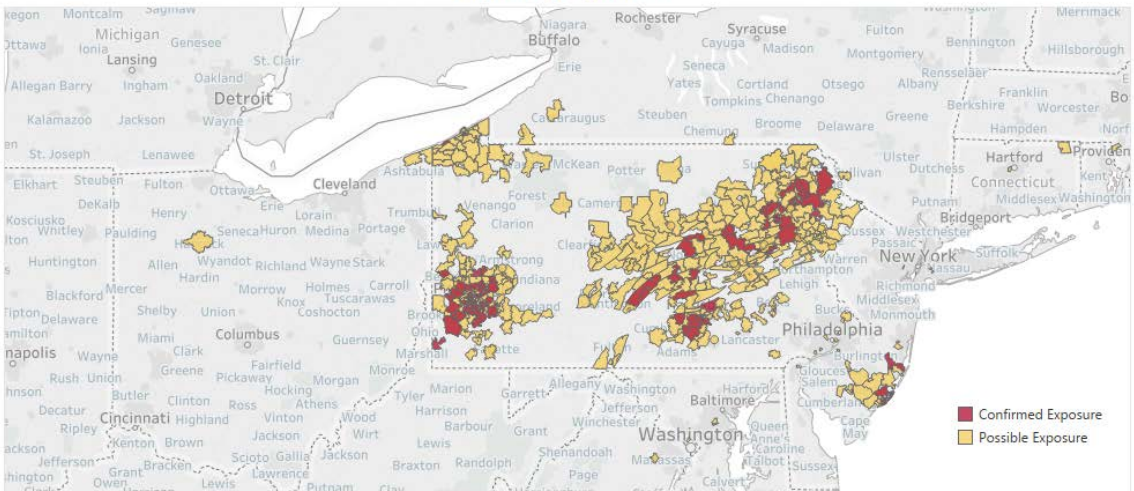
Lab Result By City Zipcode

Results
Detected OR POSITIVE
Negative OR NOT DETECTED
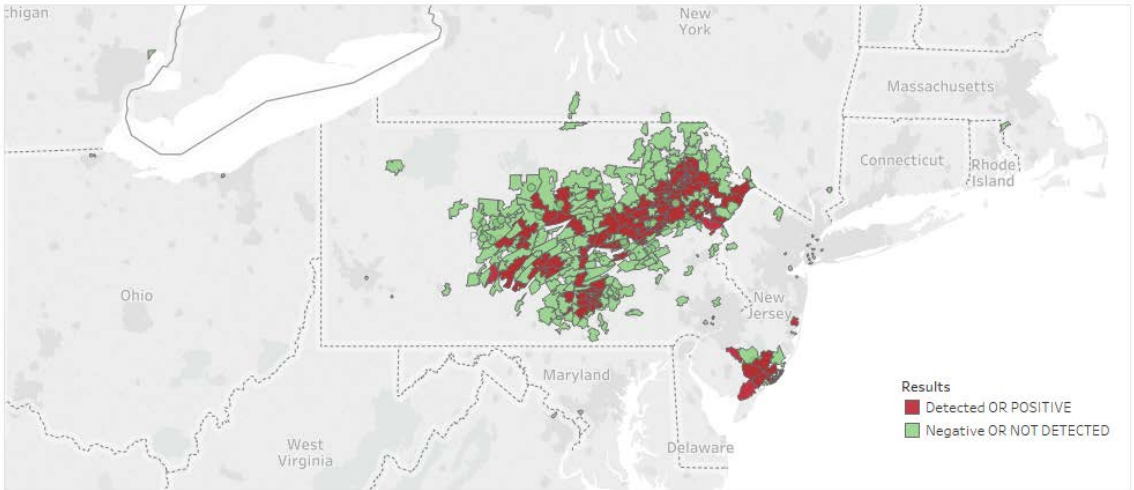
- KeyHIE created a digital dashboard tracking lab results and exposure by PA county for COVID-19 Surveillance. This dashboard is used by Geisinger to allocate resources during the pandemic.

KeyHIE COVID-19 Dashboards

KeyHIE - COVID-19 Surveillance *(Visuals do not represent Positive Cases)*

Distribution By Count

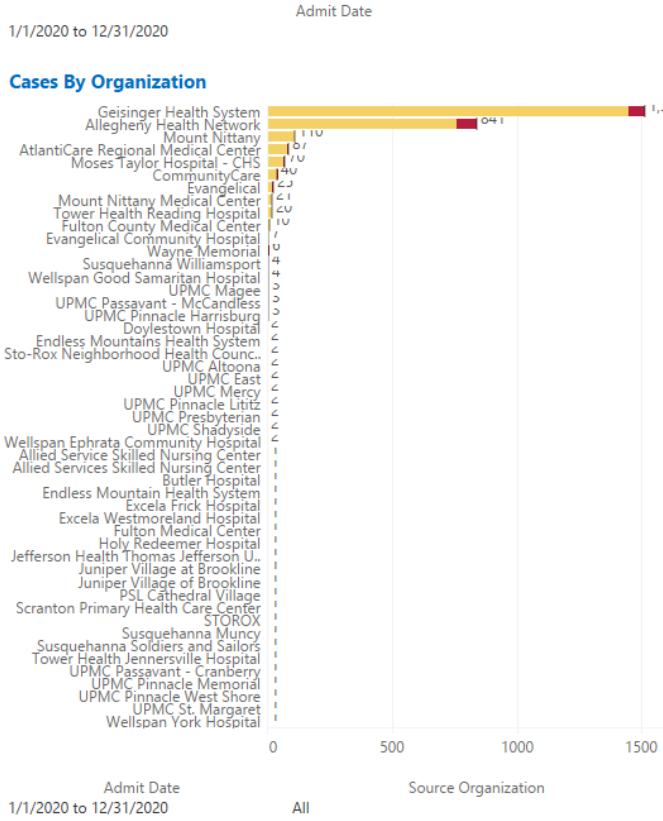| County	Confirmed Exposure	Possible Exposure	Grand Total
Grand Total	**163**	**2,625**	**2,788**
Allegheny County	61	278	339
Luzerne County	19	378	397
Lackawanna County	18	181	199
Unknown	18	784	802
Washington County	11	44	55
Cumberland County	7	39	46
Westmoreland County	5	51	56
Wayne County	4	15	19
Mifflin County	4	58	62
Union County	2	28	30
Snyder County	2	13	15
Erie County	2	318	320
Dauphin County	2	24	26
Columbia County	2	71	73
Butler County	2	27	29
York County	1	8	9
Perry County	1	13	14
Juniata County	1	22	23
Beaver County	1	9	10
Wyoming County		21	21
Warren County		3	3
Tioga County		2	2
Susquehanna County		13	13
Sullivan County		8	8
Shelby County		1	1
Schuylkill County		72	72
San Diego County		1	1
San Bernardino County		1	1
Queens County		2	2
Prince William County		1	1
Pinellas County		1	1
Pike County		6	6
Philadelphia County		3	3
Northumberland County		60	60
New York County		2	2
New Castle County		1	1
Montour County		21	21
Montgomery County		1	1
Monroe County		77	77
Mercer County		5	5
Lycoming County		74	74
Lebanon County		5	5

Admit Date
1/1/2020 to 12/31/2020

Cases By Organization

Admit Date
1/1/2020 to 12/31/2020   All

Source Organization

Confirmed vs Possible Exposure
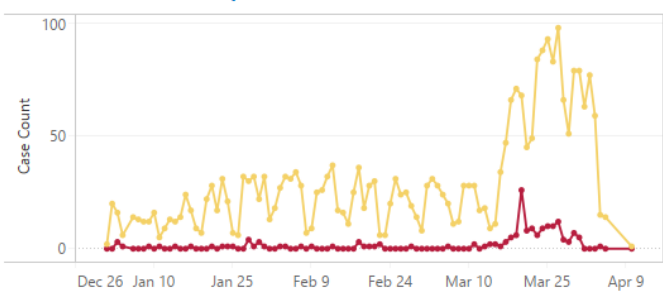
- KeyHIE Implemented notifications from KeyHIE to AtlantiCare and other Participants for COVID-19-related diagnoses and test results.

KeyHIE COVID-19 Dashboard

KeyHIE continues to provide an Executive Summary of the KeyHIE COVID-19 Dashboard to the PA Department of Health. Please see the attached sample:

KeyHIE COVID-19 Summary

KeyHIE COVID-19 Dashboard

Covid-19 Surveillance

Covid Diagnosis by Encounter	Results Performed	Positive Results	Negative Results
19,148	88,253	9,896	79,588
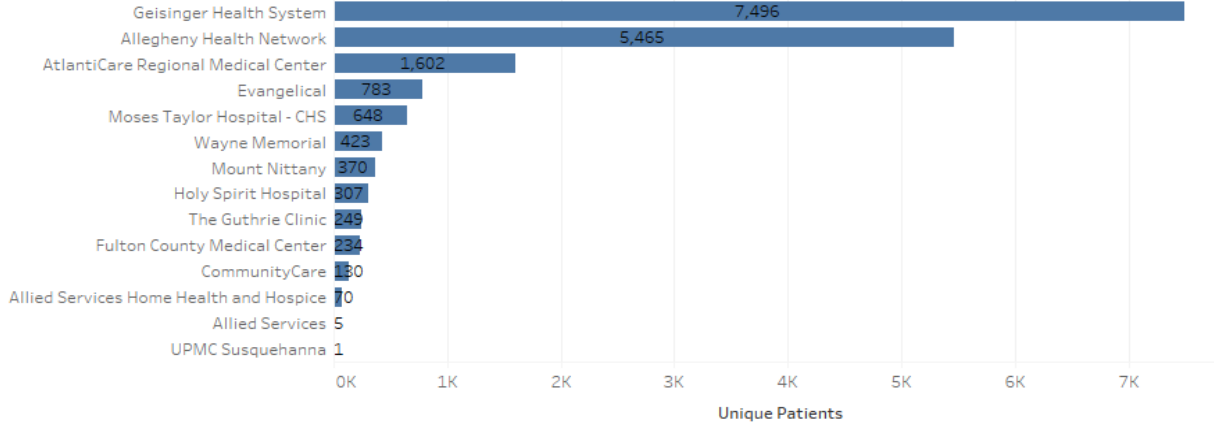
Covid admissions by Race

- 110 — 1.46%
- 19 — 0.25%
- 1 — 0.01%
- 6,151 — 81.63%
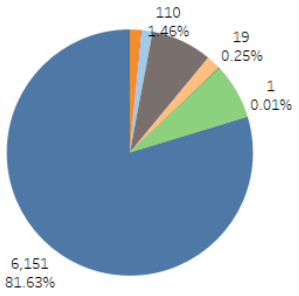
Race
- Null
- Asian
- Hispanic Or Lati..
- Other Race
- W..
- American India..
- Black Or African..
- Native Hawaiia..
- Unknown (legac..

Covid admissions by Ethnicity

- 22 — 0.29%
- 488 — 6.48%
- 1,650 — 21.90%
- 2,524 — 33.50%
- 3,087 — 40.97%
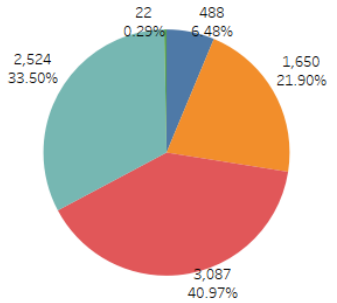
Ethnicity
- Hispanic Or Lati..
- Other
- White
- Not Hispanic Or..
- Unknown

Covid Patients by Results

- 11.21% — 9,896 Positive
- 90.18% — 79,588 Negative
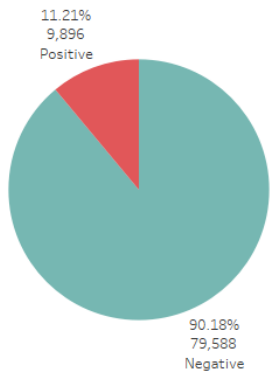
Result
- Negative
- Positive

Covid Patient Count by Gender

- U — 0.0% 0.0%
- Male — 43.7%
- Female — 56.3%
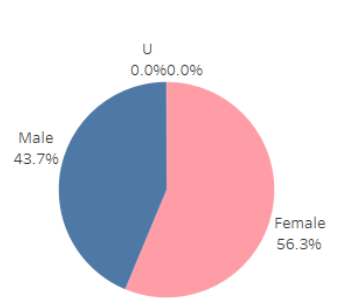
Gender
- Null
- Female
- Male

KeyHIE COVID-19 Reporting

Connection to PA DOH Electronic Lab Reporting Registry & PA National Electronic Disease Surveillance System

Allegheny Health Network

EMR

1) Sends Reportable COVID-19 Lab Results

6) ACK/NACK

KeyHIE

Rhapsody Integration Engine

2) Forwards Reportable COVID-19 Results

5) ACK/NACK

Commonwealth of PA

Public Health Gateway

Electronic Lab Reporting (ELR) Registry

3) Forwards Results

4) ACK/NACK

Forwards Results

PA-NEDSS
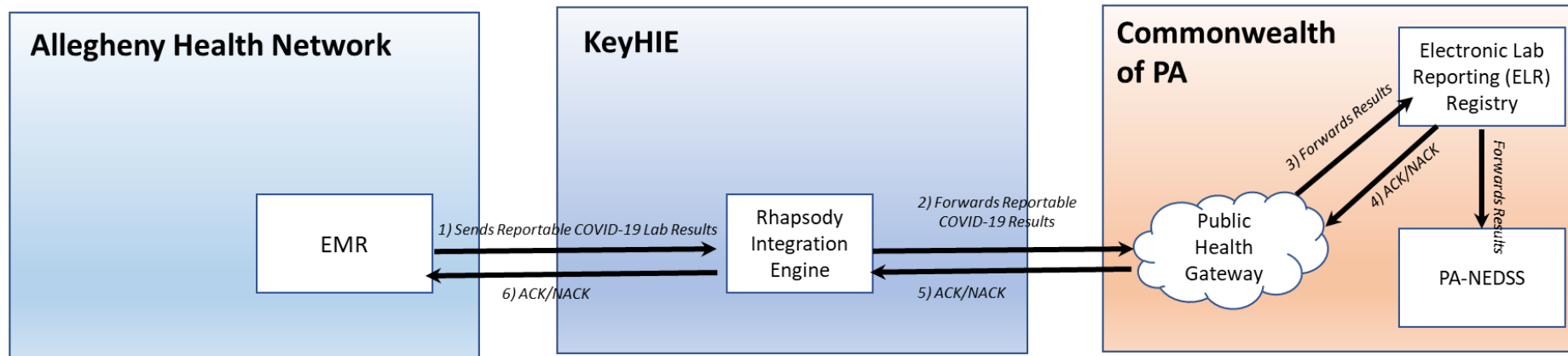
Contact Us:

WWW.KEYHIE.ORG   KEYHIEADMIN@KEYHIE.ORG   (570) 214-9438

KeyHIE
Keystone Health Information Exchange®

Martin Ciccocioppo, MBA MHA

Director

Pennsylvania eHealth Partnership Program

Office of Medical Assistance Programs

Pennsylvania Department of Human Services

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Summary: Overview

Hospitals Leading in HIT and HIE

The single most important measure of HIT advancement is the Electronic Health Record (EHR) adoption rate, or the percentage of a defined provider group that is actively utilizing an EHR. Pennsylvania's inpatient hospitals have led the way, increasing from 89% using EHRs in 2010 to 98% by 2016. In recent years, hospitals have been doing more with their EHR systems -- increasing electronic documentation and order entry, and succeeding in making dramatic increases in telehealth, medication tracking, and patient monitoring. Hospitals have also succeeded in expanding their electronic exchange of patient information. However, challenges remain. Hospitals say their top challenge with health information exchange (HIE) is lack of an EHR in practices with which they want to exchange information.

Office-based Practices Advancing

Office-based healthcare practices have lagged behind hospitals in EHR adoption, but there has been significant progress in the last ten years. These practices were the focal point of OMAP's 2020 HIT "environmental scan" which was conducted via an in-depth survey. The practices surveyed were not limited to physical health physician practices. Instead, OMAP cast a wide net – including practices of dentists, psychologists, psychiatrists, chiropractors, therapists (physical, occupational, respiratory), and optometrists, as well as facilities like labs, imaging centers, pharmacies, and nursing homes. To reach the goal of a complete medical record for each patient, treatment information from the full spectrum of providers needs to be shared.

Summary: Statewide Survey

Survey Response

OMAP received valid surveys from 2,370 unique practices representing (employing) 23,185 individual practitioners. The surveys included 31 from nursing home organizations representing a total of 199 campuses. Although 60% of the surveys came from solo practitioners, the 40% that were from group practices account for 94% of all individual practitioners represented.

Each healthcare practice was assigned to one of eleven high-level "Care Areas" based on its provider type. Traditional medical physical health categories (primary, pediatric, and specialty combined) accounted for about a third (34.5%) of the surveys and two-thirds (65.7%) of the practitioners represented. Behavioral health (20.5%), dental (15.3%), rehabilitation (9.0%) and chiropractic care (8.9%) accounted for over half the surveys (53.7%) but less than a third (30.2%) of practitioners.

EHR Adoption Varies Considerably

The 2020 survey, like the last one conducted by OMAP (2016), reveals very different EHR and HIE rates depending on the type of practice. Group practices have a higher EHR adoption rate than solo practices. Among group practices, the ones with the most practitioners, as well as those owned by a hospital or healthcare system, have a higher adoption rate than small practices and those independently owned. Physical health physician practices have a high adoption rate while behavior health practices have a much lower rate. Practices of provider types included in the Medicaid Promoting Interoperability (PI) Program's definition of "Eligible Professionals" (EP) have a higher EHR adoption rate than others, due (at least in part) to the federal grants that have been awarded through the PI program over the last decade to qualifying EPs to help them acquire and implement EHR systems. ("Eligible Professionals" include physicians, nurse practitioners, certified nurse-midwives, dentists, and physician assistants.)

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Progress Over Ten Years

The 2020 provider survey indicates that EHR adoption for office-based EP-type practices (a mix of group and solo practices) was 68%, up from 58% in 2010. (The true increase is likely greater because the 2010 survey sample was very small and composed of a much different provider type mix, leading to an adoption rate that might be overstated.) However, this average practice adoption rate of 68% is somewhat misleading. Those practices that use EHRs employ 96% of all practitioners represented by the EP-type practices that answered the survey.

Many – but not all -- EHRs are ONC-certified, meaning that they meet the Office of the National Coordinator for Health Information Technology's "meaningful use" standards. Nearly 58% of surveyed EP-type practices, representing 94.3% of individual practitioners, use ONC-certified EHRs. An additional 10% (representing 1.7% of providers) use a non-certified EHR, for a total of 67.6% of practices and 96% of practitioners using an EHR of some sort.

When non-EP-type practices are included, overall EHR usage by practitioners employed is still very high. In fact, 85.8% of the 23,187 individual practitioners represented by the 2,370 valid surveys received in 2020 are employed by practices using certified EHRs, and another 6.7% of them are using non-certified EHRs, for a total of 92.5% of office-based practitioners using EHRs.

Summary: EHR Adoption

EHR Adoption by Care Area

Certified EHR adoption varies significantly among different categories of office-based practices, with medical diagnostic services reporting the highest rate (100%), followed by long-term care facilities (82%), pediatric care (80%), specialty medical care (79%), and primary medical care (78%). The provider categories least likely to have adopted certified EHRs are behavioral health (21%), dental care (21%), pharmacies (32%), rehabilitation care (physical therapists, etc.) (38%), and chiropractic care (45%.) However, almost 24% of rehabilitation care practices, 22% of behavioral health care practices, 22% of dental practices, 17% of pharmacies, 16% of long-term care facilities, and 9% of chiropractors are using non-certified EHRs.

Physicians' EHR Usage

Based on its 2020 survey, OMAP estimates that 78% of office-based physician practices in Pennsylvania are using EHRs. These practices account for 98% of the individual practitioners represented by all office-based physician surveys, which compares favorably to the national rate of 86% reported by the ONC (based on 2017 data – the most recent available).

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EHR Adoption in EP-type Practices vs. Others

Most of the provider types eligible for the Medicaid and/or Medicare PI programs are, as suspected, those with the highest rates of EHR adoption, while those with the lowest rates – notably behavioral health and long-term care, have not had the opportunity for federal incentive funds through these programs.

As seen in the graph below, about 58% of Medicaid EP-type practices are using certified EHRs, while only about 40% of other surveyed types of practices are doing so.

However, for both groups, the practices using certified EHRs are larger, and account for a much larger percentage of individual practitioners – 68% of non-EP type, and 94% of EP-type practitioners.

Certified EHR Adoption: EP-Type Providers vs. Non-EP-Type Providers (2020)
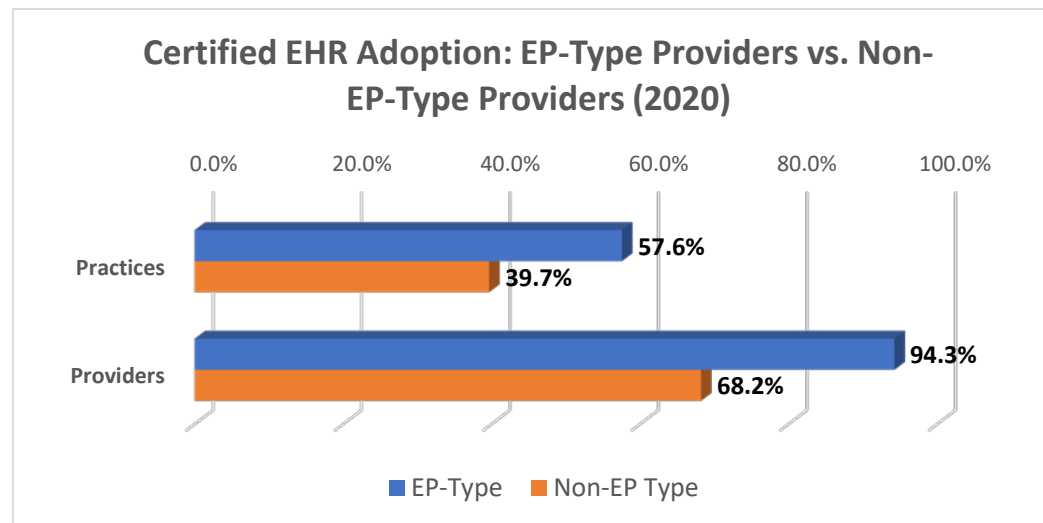
Summary: Barriers

Barriers to Adopting EHRs

For practices that have not adopted an EHR system, cost ("lack of capital resources to invest in EHR") is the biggest concern by far. The next-biggest reason is from practitioners who plan to retire soon and believe they will not see return on their investment. Many others are not convinced that EHR usage will result in benefits to them or their patients, and a number cite concerns that EHR implementation will overtax their staff, disrupt their business processes, or compromise patient privacy and/or security.

Growing EHR Satisfaction

As EHR systems have become more refined, evidence suggests greater user satisfaction. Practices that have been using an EHR were asked to indicate the top 3 barriers to maximizing EHR usage and optimization in their organization, but more practices (31%) responded that they are not experiencing any such barriers than those citing a particular barrier. Additionally, only 7% of practices (employing just 3% of practitioners) plan to switch EHR systems within the next 18 months, and the top reason provided was that the practice was merging with another. In 2016, 11% of practices, employing 12% of practitioners, planned to switch EHR systems.

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EHR Features and Usage

Practices report that the features built into EHRs have not changed much between 2010 and 2020, but more practices have access to public health reporting from within their EHRs (27% vs. 12% in 2010.) Practices are also using that functionality more. In 2010, only 11% said they used the public health reporting function most or all of the time. In 2020, the number almost quintupled to 52%. More practices are also using their EHR to view imaging results. Eighty percent are doing so most or all of the time in 2020, compared to 47% in 2010.

Usage of prescription features in general increased significantly between 2016 and 2020. In particular, E-prescribing of controlled substances has increased dramatically since 2016. Nearly half (46%) of EP-type practices (employing 72% of EP-type practitioners) said they e-prescribed these drugs in "all or most" cases in 2020, as compared to just 7% four years prior. Virtually all (98%) of the practitioners employed by these practices are using a certified product to e-prescribe controlled substances.

Health Information Exchange (HIE)

Overall, electronic exchange of patient information for office-based practices still takes second-place to use of traditional (manual) methods, but most practitioners are employed by group practices that are employing HIE most or all the time.

Electronic methods for sending, receiving, or querying patient data (usually via EHR) ranges from a low of 22% for radiology images to a high of 39% for medication history. Faxing remains the single most dominant method, ranging from 31% to 48%, with its greatest use related to summaries of care, radiology reports and lab results. Pennsylvania's Health Information Organizations (HIOs) were used by 2.2% to 3.1% for these functions, representing a slight increase from 2016.

EP-type practices are much more likely to send patient data electronically to facilities outside of their organizations, especially to pharmacies and labs.

The percentage of EP-type practices with the capability to send patient data electronically to other facilities has increased dramatically since the 2010 provider HIT survey was conducted. The percentage able to send data to a hospital emergency department or radiology/imaging center has tripled, and roughly twice as many can send data to a pharmacy, other outpatient practice, or hospital emergency department. The portion able to send data to a lab has increased from about a third to about half.

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Health Information Exchange (HIE) (continued)

More than 40% of practices have the capability to receive patient data from labs and pharmacies, but less than a quarter of them receive it electronically most or all the time. Only about a third of practices can receive data electronically from long-term and post-acute providers and behavioral health practices, with just 4% and 3% receiving such data always or nearly always, respectively. receiving from radiology/imaging centers, physical health outpatient practices, and hospitals.

EP-type practices report more capability (40% to 60%) than non-EP types (27% to 34%) to receive patient data electronically from the specified source types, and more usage (up to 35% receiving data this way most or all the time, vs. up to 18%.)

Among the respondents that use electronic methods to send information to other providers or health organizations, the most popular method is to use Direct secure messaging from within their EHR. HIOs are rarely used. For others, the most-used methods are fax, mail, and email. Among hospitals, nearly 59% reported in 2015 that their primary inpatient EHR is used to exchange patient health information, and in 2018, 54% of Pennsylvania hospitals indicated that the exchange of information across different vendor platforms was their most difficult challenge.

Both the 2016 and 2020 surveys reveal that practices most frequently receive patient data electronically from labs, pharmacies, radiology/imaging centers, and hospitals (other than the ED), and least frequently from long-term care/post-acute care providers and behavioral health practices. The percentage of practices receiving data electronically "always or nearly always" did not increase in 2020 vs. 2016.

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Health Information Exchange (HIE) (continued)

Hospitals report a higher degree of HIE than office-based practices. As of 2015, depending on the type of data (patient demographics, lab results, medication history, radiology reports, and clinical care record), 74% to 77% of hospitals could exchange it electronically with other hospitals inside their health system, and 58% to 69% could exchange it electronically with hospitals outside their health system. More hospitals (82% to 89%) were able to exchange patient data electronically with ambulatory providers in their own health system and outside (70% to 82%.) (More recent data for PA hospitals is not available.)

Health Information Organizations

Most practices (87%) are not participating with any HIO, but the 13% that do account for 63% of the practitioners represented, indicating that large practices are more likely to use an HIO. Over half (56%) of practices indicate that they are using their EHR vendor's HIE rather than an HIO. Among those which are using a state-certified HIO, HSX and KeyHIE are the most popular.

Office-based practices that are not using the services of an HIO indicate that the number one reason is that they are not familiar with HIO services. Cost concerns and lack of staff expertise using health IT are the number two and three obstacles, respectively. Meanwhile, HIO usage among hospitals is much more common, with 54% actively exchanging data in at least one HIO/HIE (as of 2015). Fourteen percent indicate that there is no HIO operational in their area.

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Internet service availability and adequacy

When the first EHR systems were being implemented, the availability and quality (sufficient bandwidth) of internet service was an issue for some areas of Pennsylvania, particularly in rural counties. Now, virtually every practice has access to internet service, though a few still think they do not need it, and some would like to have more bandwidth ("speed") or better reliability.

Most practices (84%) indicated their offices' internet bandwidth is sufficient for their needs, compared to just 44% in 2010. Three percent of practices have no internet connection in their offices. Of these practices, 58% said they have no need for the internet; 7% (down from 16% in 2016) felt the cost of internet service is too high; and two practices said there is no internet supplier at their location.

Among the 214 practices (representing 1,377 practitioners) that reported why their offices' internet services are slow, 40% said faster service is not available at their locations and 37% indicated it is because the cost for faster service is too high.

Summary: Telemedicine

Telemedicine

Since the 2016 environmental scan, there has been a huge increase in the percentage of practices offering telemedicine. The COVID-19 pandemic is believed to be a major driver of the growth. In 2016, only 7% of EP-type provider practices (representing 49% of practitioners in surveyed EP-type practices) had adopted HIT for telemedicine. By 2020, this increased seven-fold to 50% of EP-type practices, representing 93% of practitioners. Non-EP-type practices also experienced seven-fold growth over 2016, and these practices represent 75% of the non-EP-type practitioners.

Eight percent of the practices not offering telemedicine plan to add it within a year. This is twice the rate noted in 2016. Of the practices not offering telemedicine, 45% do not see a need to provide it, 30% are unsure of the value/benefit, and 22% have cost concerns. Additionally, 22% have concerns about reimbursement for telemedicine services. (It should be noted that some of the surveyed provider types, such as chiropractors and acupuncturists, are not suitable for providing treatment via telemedicine, and their responses are included in the results shown above.)

Summary: Patient Engagement

Patient Engagement via HIT

In the 2010 survey, only 22% of (EP-type) practices provided information to patients electronically. The 2020 survey indicates that rate has almost doubled in ten years to 41% – and 74% of EP-type practitioners are employed by those practices. More EP-type practices (59%, employing 26% of practitioners) still use a manual process. Still, EP-type practices are far more likely than non-EP types to use certified HIT to share data with patients (38% vs. 16%.) Most (78%) non-EP-type practices employ a manual process, and only a fifth use HIT (16% certified and 6% non-certified.)

Overall, about 39% of all surveyed practices offer an online patient portal, and 73% of individual providers work at these practices. However, there is a stark difference between EP-type and non-EP-type practices. Seventy-three percent of EP-type practices (up from 58% in 2016) offer a patient portal (representing 95% of providers in surveyed EP-type practices), but only a quarter of the non-EP-type practices offer a portal.

Of the practices that offer an online patient portal, 88% indicated their portal is integrated into their EHR system. Three-quarters of practices offering a patient portal also offer an "app" that enables patients to access their online patient portal via a mobile device (smartphone, tablet, etc.) to access the portal. This is up from 59% in 2016 – an increase of 16 percentage points in four years, perhaps aided by the standardization of FHIR 4 for APIs.

More than a quarter of practices are using certified HIT to send patient reminders, to provide patients access to their medical information, and for secure messaging capability. But overall, most patient engagement activities are still performed most often by means of a manual process.

Summary: Key Take-aways

Key Take-aways

- Adoption of HIT/E by Pennsylvania's healthcare providers has increased significantly since 2010, with inpatient hospitals leading the way. Among office-based providers, physical health physicians are the leaders in EHR usage and HIE, while other categories of care, especially behavioral health are trailing.

- Legacy modes of communication between providers (particularly faxing) continue to have a stronghold among office-based providers, but electronic exchange is increasing as compatibility issues are addressed, and as more providers become comfortable with it. HIO/HIE participation by Pennsylvania's hospitals is much greater than among office-based providers.

NOTE: The Executive Summary and the results of the Environmental Scan can be found on the Promoting Interoperability Program home page.

Advisory Board Vice Chair Nominations

Pennsylvania eHealth Partnership Advisory Board Bylaws

Section 4. Vice Chairperson.
The Advisory Board members shall annually elect, by a majority vote of the members, a vice chairperson from among the appointed members of the Advisory Board, who shall serve as acting Chairperson in the absence of the Chairperson or if there is a vacancy in said Chairpersonship.

Nominations for Vice Chairperson are open.

Vice Chairperson election to be held during the November 5, 2021 Advisory Board for Calendar Year 2022.

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Next Advisory Board Meeting

Friday, November 5, 2021 – via Teams from 10 a.m. - 12 noon

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Public Comment

- Name of submitter for written comment submission acknowledged by chair

- Verbal comment (3 minutes per commenter)

For further information:

http://dhs.pa.gov/ehealth

PA eHealth Partnership Advisory Board:

https://www.dhs.pa.gov/providers/Providers/Pages/Health%20Information%20Technology/eHealth-Advisory-Board.aspx

P3N HIO Certification Package:

https://www.dhs.pa.gov/providers/Providers/Pages/Health%20Information%20Technology/HIO-Connection.aspx

P3N Certified Health Information Organizations (HIO) Information:

https://www.dhs.pa.gov/providers/Providers/Documents/Choose%20your%20HIO.pdf

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