



HealthShare Exchange: Supporting COVID-19 Response in the Delaware Valley

Bill Marella, MBA, MMI
Director, Data Analytics and Quality

Elizabeth Scoles, MPH
Project Manager

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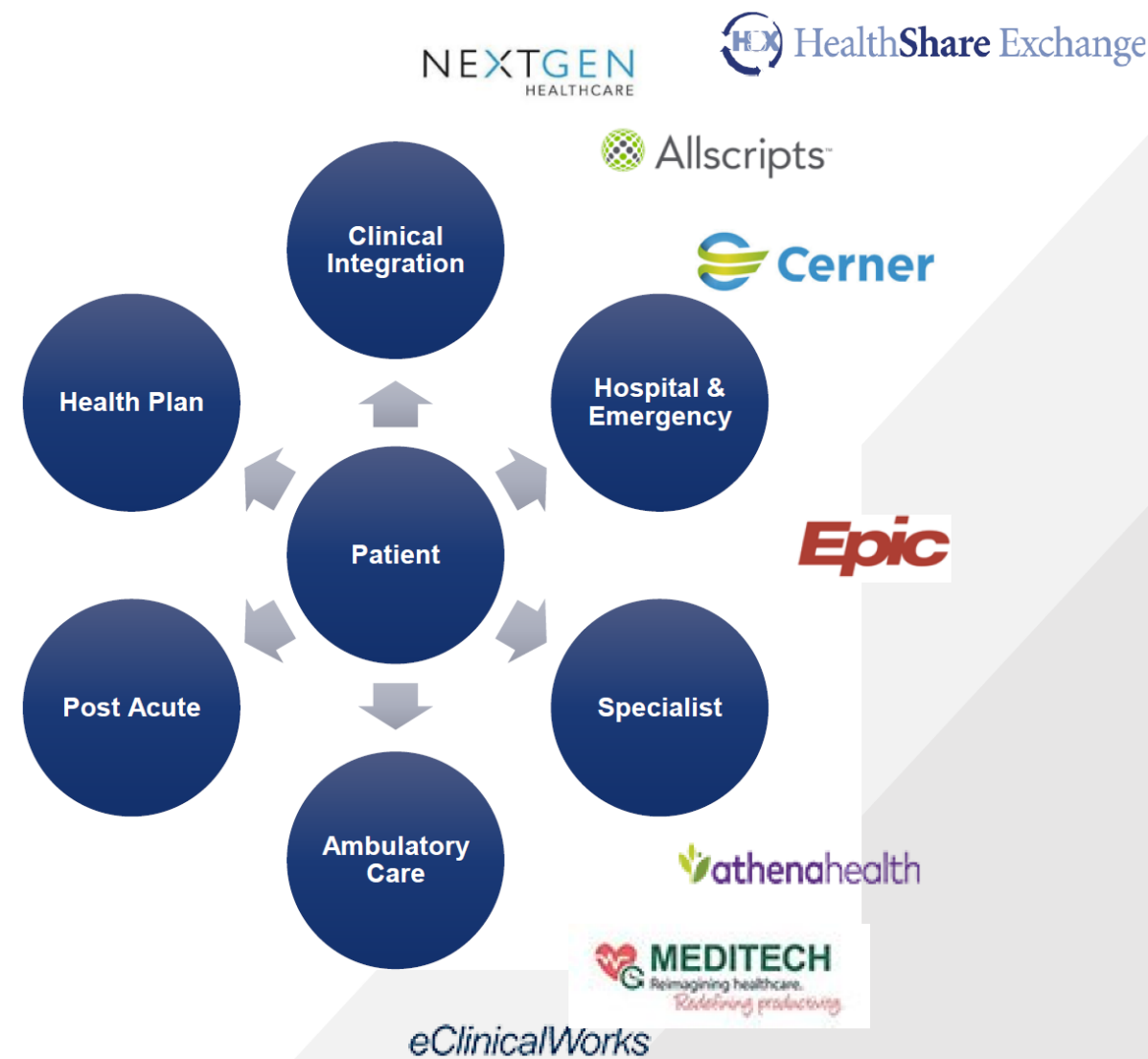
The Office of the National Coordinator for
Health Information Technology



Connecting People

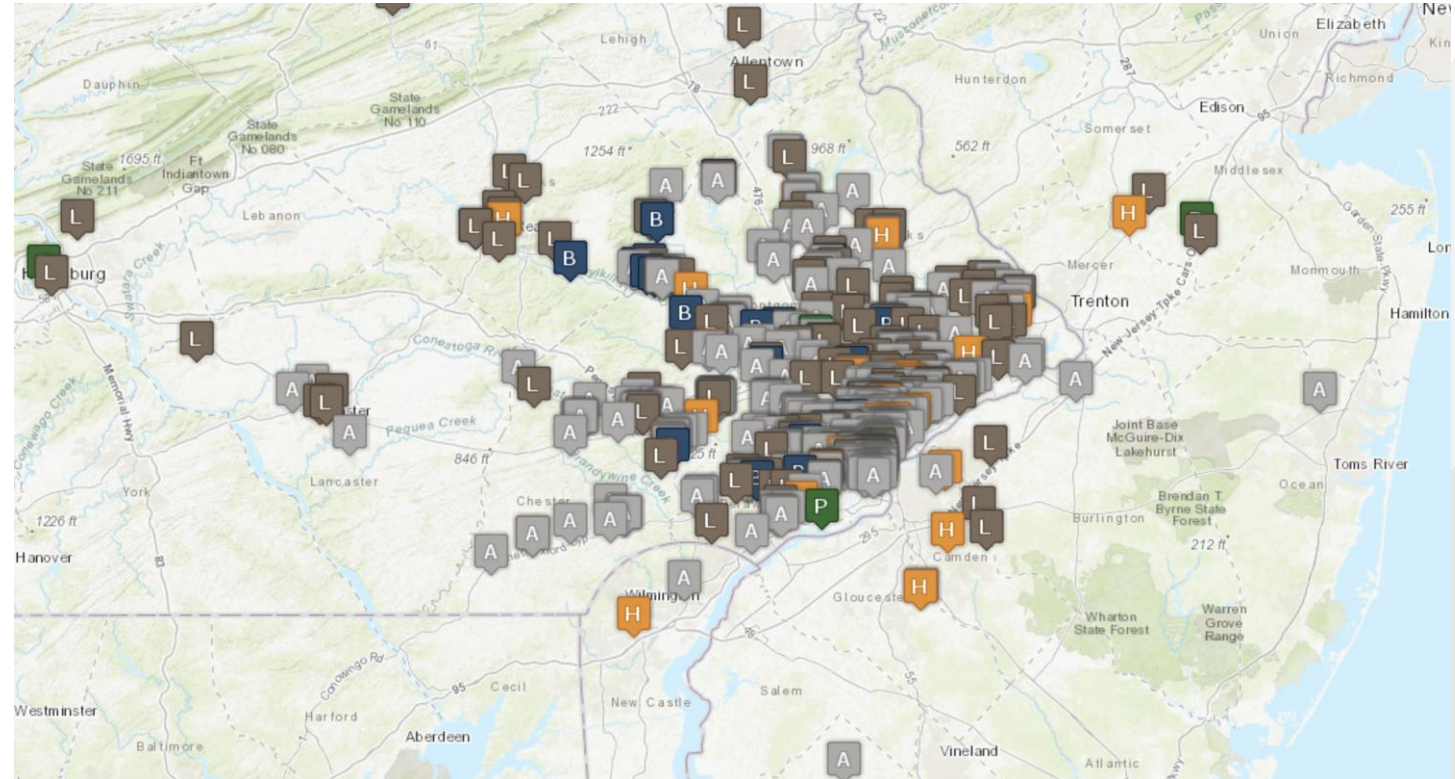


HSX works collaboratively with the healthcare community to make patient records of different providers, EHRs, and health plans available electronically.



Our Network

- **12 million+ patients** in the HSX Clinical Data Repository
- **16,000+ physicians and other practitioners** in the HSX Provider Directory
- **450+ participating organizations:** hospitals, health plans, and other provider organizations



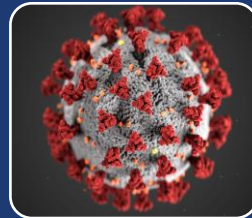
Population Health Case Studies



Diabetes Prevention Collaboratives:
Quality Improvement projects with
ADA, Diabetes Prevention Programs
with JCPH

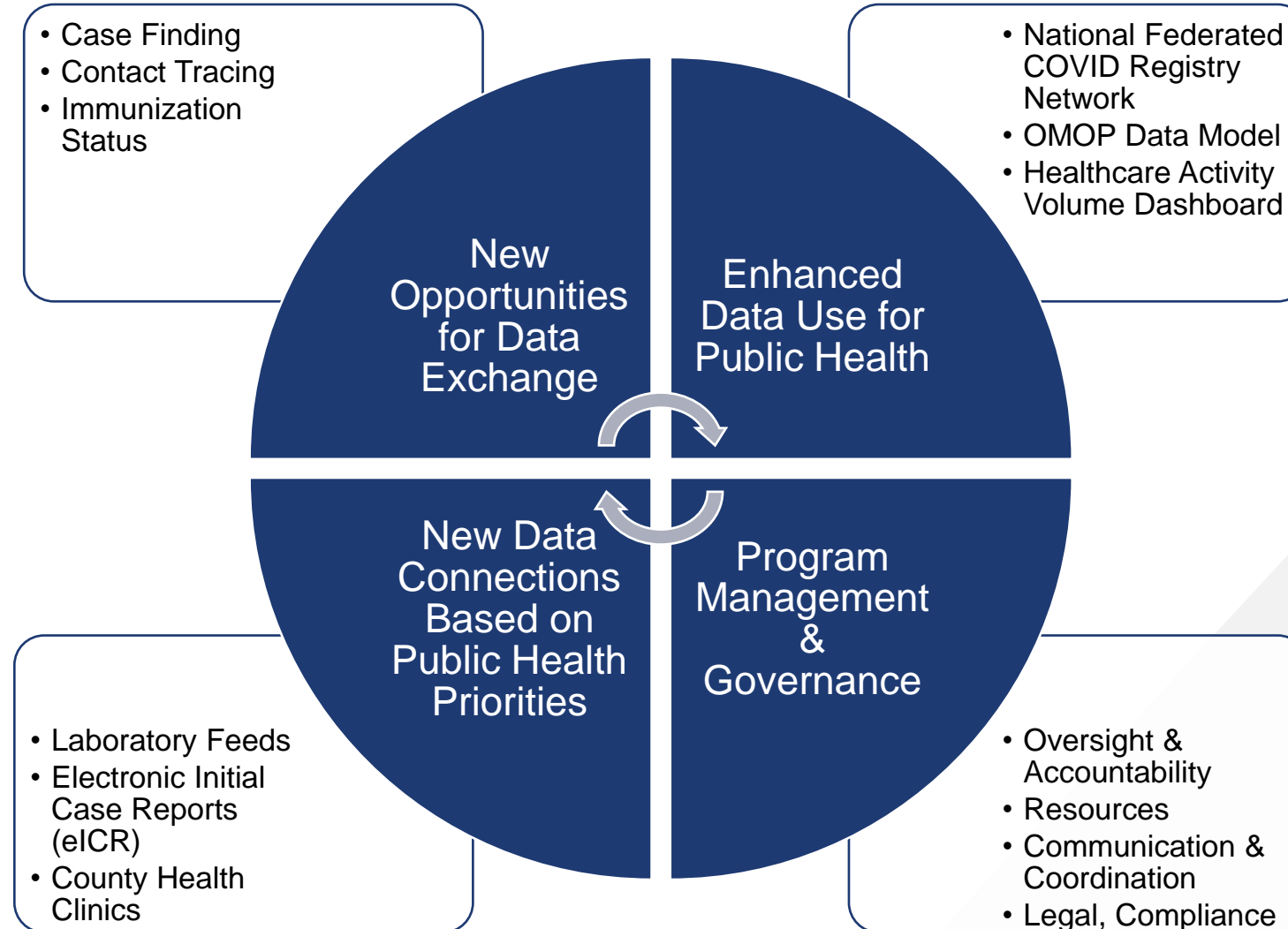


Matching Seniors with Benefit
Programs: identifying patients eligible
for PACE, SNAP, LIHEAP, and others



Delaware Valley COVID-19 Registry:
gaining insight into COVID-19
impact, progression, treatment

STAR HIE Program: Leveraging Health IT Strategies for Delaware Valley Public Health Agencies



New Data Connections

ELR



Electronic
Lab Results

eCR



Electronic
Case
Reports

C-CDAs



Consolidated
Clinical
Document
Architecture

Others

County Health Clinics
State Public Health Labs
POC Test Results

New Data Connections

Category	Organizations	Organizations
Electronic Lab Results (ELR)	Prospect/Crozer (participating) Trinity/St Mary's (participating) Abington/Aria (participating) Main Line Health (participating)	Tower Health/St. Chris (agreed) Holy Redeemer Einstein Medical Center Penn Medicine
Electronic Case Reports (eCR)	Temple (testing) Main Line Health (agreed) Jefferson Health (pending) Penn Medicine (pending)	CHOP Tower Health/St. Chris Einstein Medical Center
C-CDAs	ManorCare (live) Holy Redeemer (in QA) Tower Health (in QA) Penn Medicine (testing)	Prospect/Crozer (testing) Jefferson Northeast (Feb) ACTS Retirement Communities
Others	State Immunization Info Sys (SIIS) County Health Clinics POC Tests	State Public Health Labs Nursing Homes Prime Hospitals

New Data Senders

2021 State Grant – **153 new sites listed**

Nursing Homes/LTC/SNF (41)

- Manor Care (14)
- Genesis (5)
- Other LTC (22)

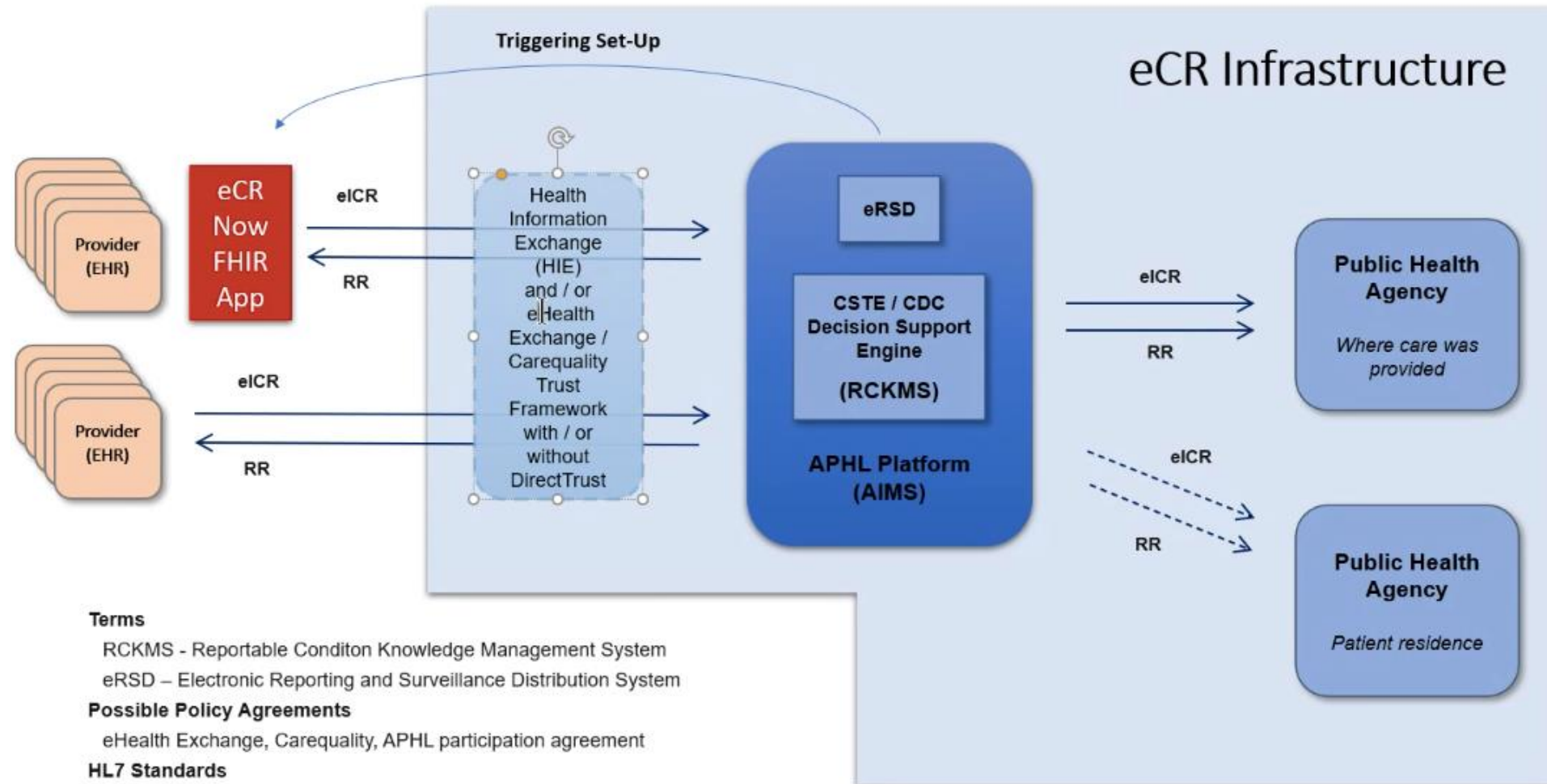
CVS Minute Clinics (21)

Bayada Home Health (12)

Maxim Home Health (6)

Merakey (11)

Electronic Case Reports (eCR)



Terms

- RCKMS - Reportable Condition Knowledge Management System
- eRSD – Electronic Reporting and Surveillance Distribution System

Possible Policy Agreements

- eHealth Exchange, Carequality, APHL participation agreement

HL7 Standards

- eICR - Electronic Initial Case Report CDA v1.1
- RR - Reportability Response CDA v1.0

Immunization Priorities

- Push vaccination status into provider EHRs
- Priority rosters for public health agencies
- Monitor vaccine-related adverse events
- Data for vaccine effectiveness
- Racial disparities in vaccine administration



Immunization Data in HSX

Immunizations
×

Allergies (2)
Immunizations (3)

Vaccine	Administered	Dose	
No data av...			11
Tdap	02/06/2020	0.5 mL	5
Influenza, ...	11/14/2019	0.5 mL	4

Delete
Share
Send to Me

Administered	Dose
02/06/2020	0.5 mL
02/06/2020	0.5 mL
02/06/2020	0.5 mL
02/06/2020	0.5 mL
02/06/2020	0.5 mL

Tdap

11/13/2018

0.5 mL

Immunization

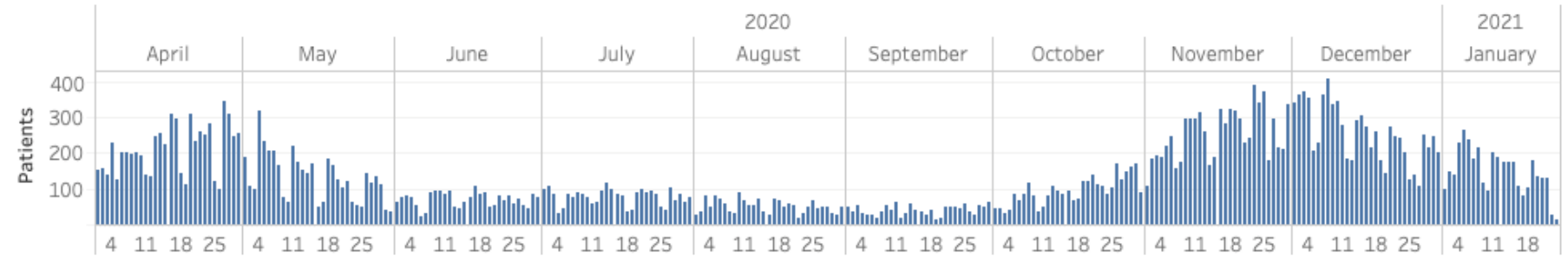
Vaccine	Tdap
Description	tetanus/diphth/pertuss (Tdap) adult/adol
Status	completed
Vaccination Code	115
Code System	2.16.840.1.113883.12.292
Alternate Code	Adacel (Tdap)
Administered	Feb 6, 2020 10:16:00 AM
Dose	0.5 mL
Route	Intramuscular
Lot Number	C5660AA
Manufacturer	sanofi pasteur

Source Information

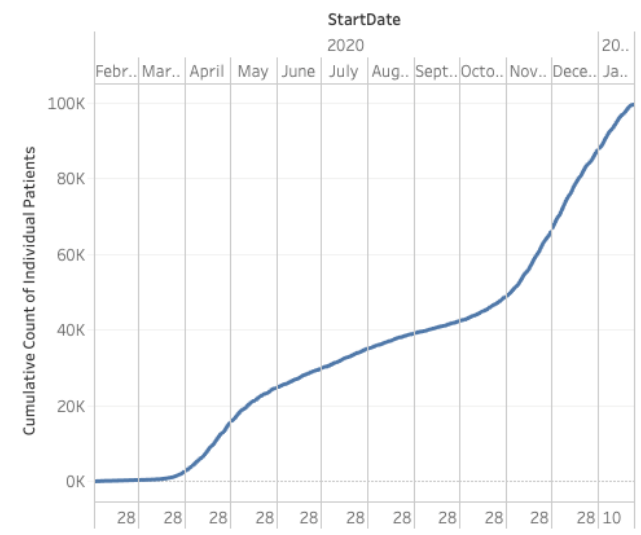
Source	Einstein Non Hospital Facilities
Received On	May 12, 2020 3:53:26 AM

Surveillance Reports

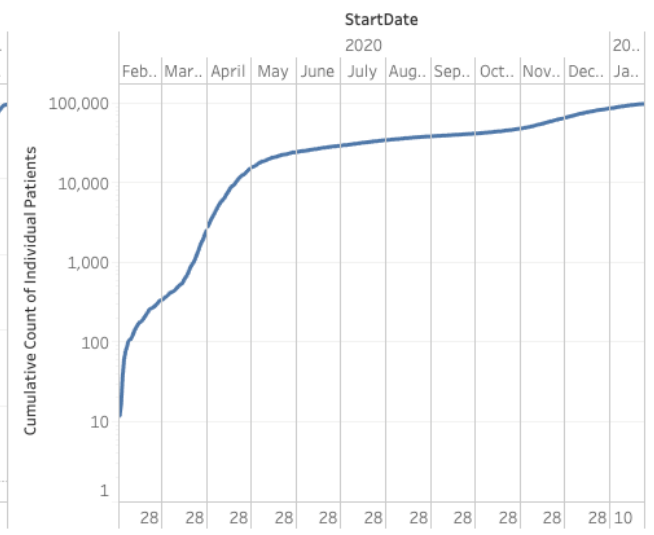
Unique Cases by Day of First Diagnosis



Cumulative COVID-19 Cases by Day of Initial Diagnosis



Cumulative COVID-19 Cases by Day of Initial Diagnosis (LOG Scale)

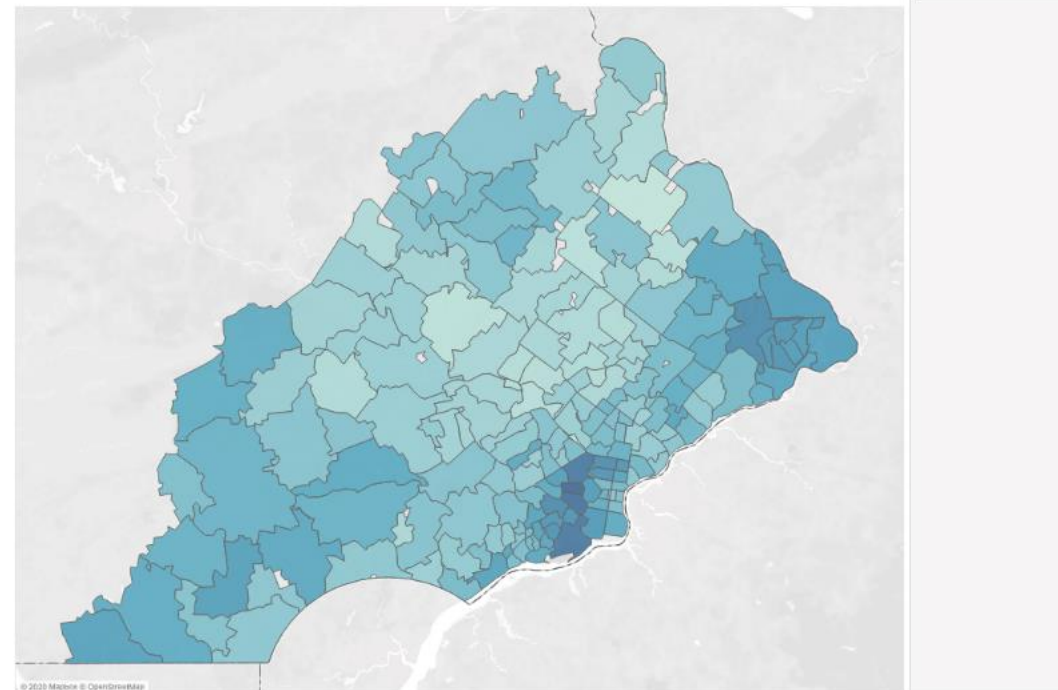


Surveillance Reports

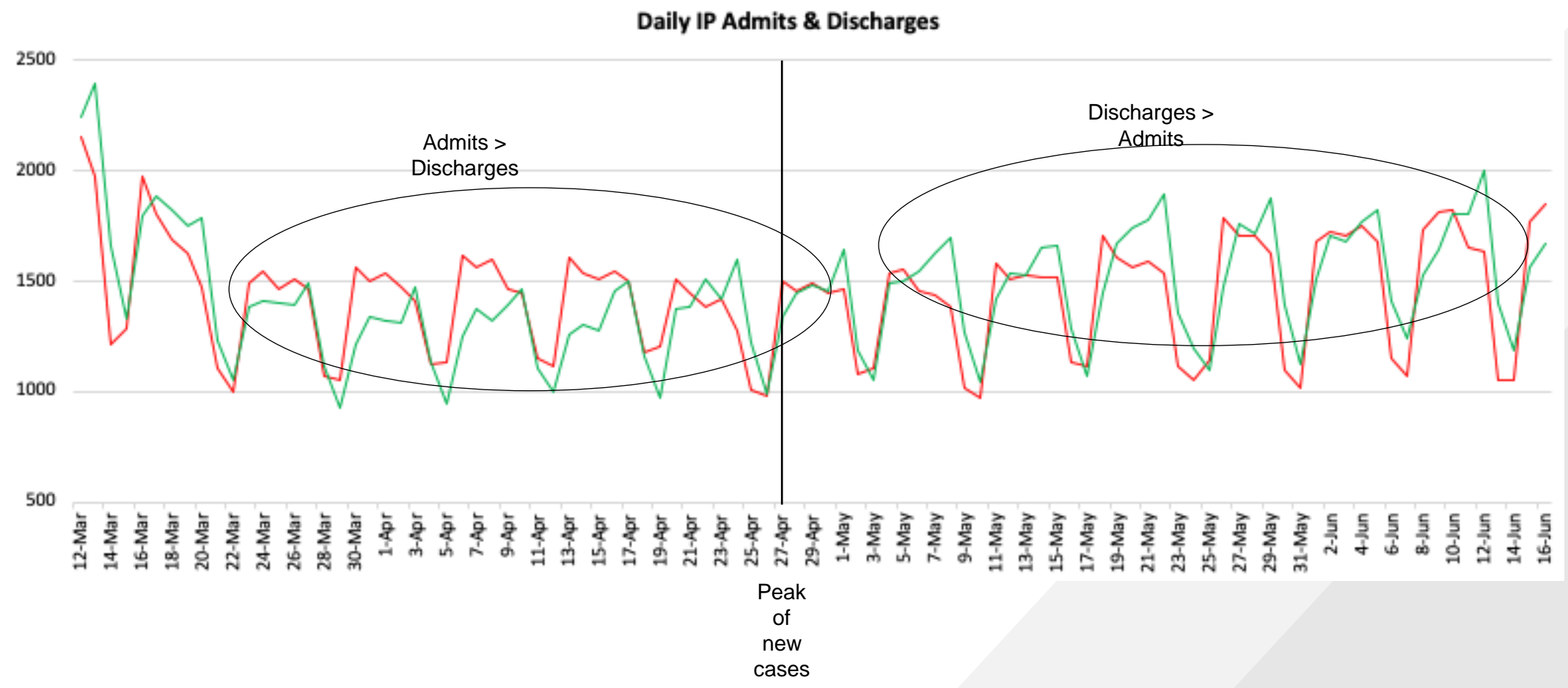
Based on 11,785 patients with COVID diagnoses, compared to patients with 0-2 risk factors, patients with 3+ risks:

- 2x risk of hospitalization (60 v 30%)
- 4x risk of mortality (11.9 v 2.7%)
- Higher mean LOS if hospitalized (5.2d v 4.8)
- All ($p < 0.05$)

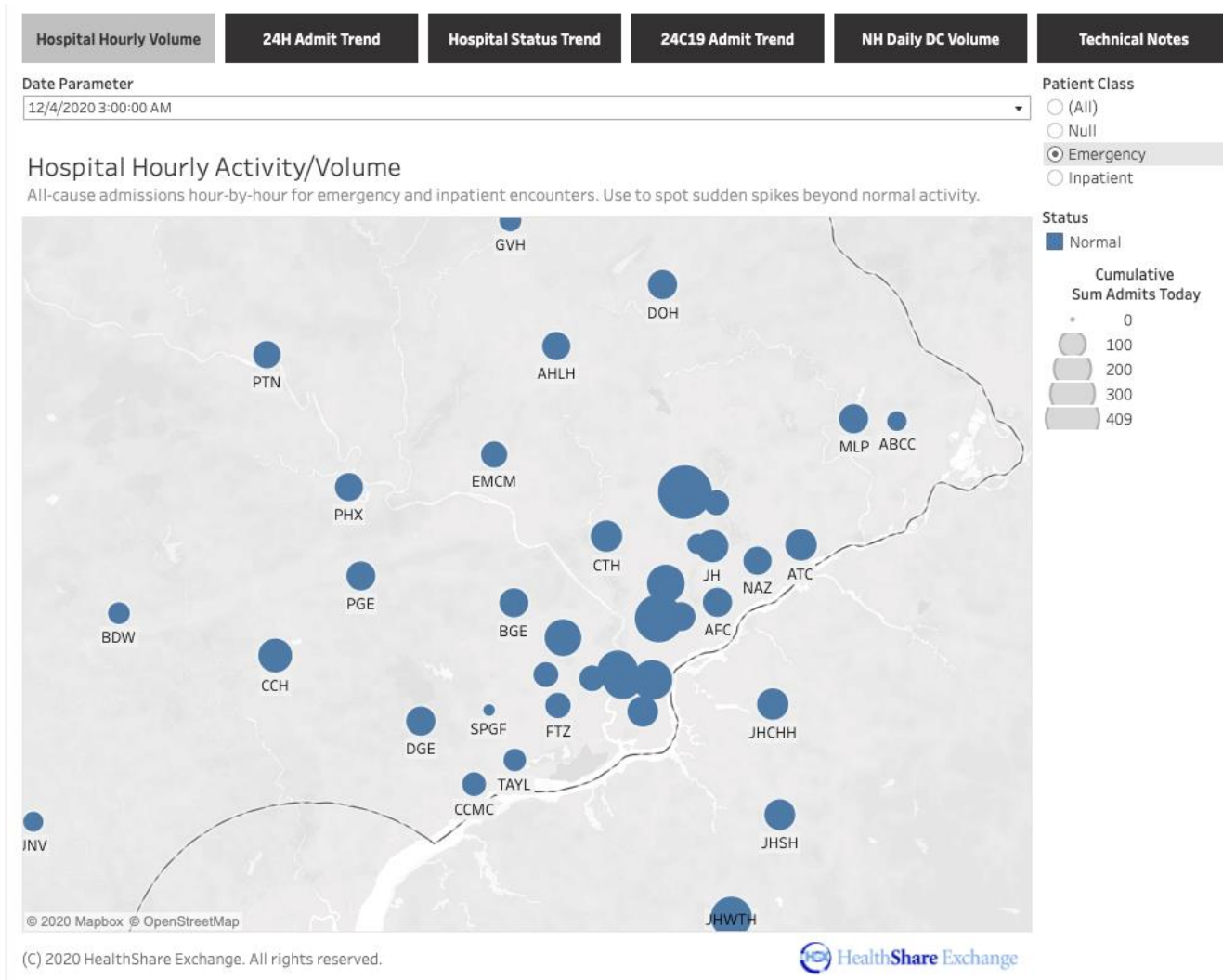
COVID-19 Severity Risk, **Three or More** Risk Factors, Prevalence per 1,000 Adults
Factors increasing risk of poor prognosis if infected



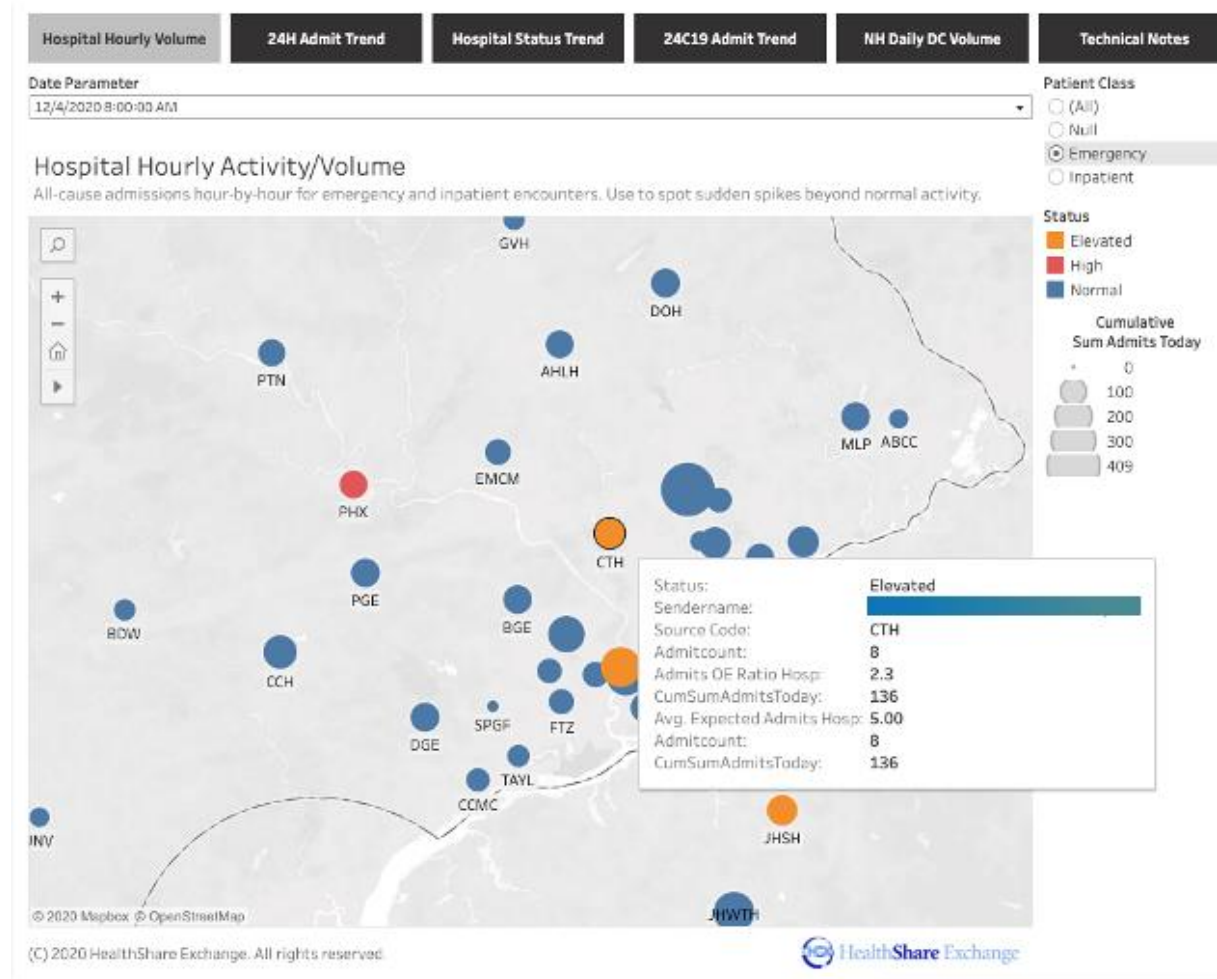
Surveillance Reports



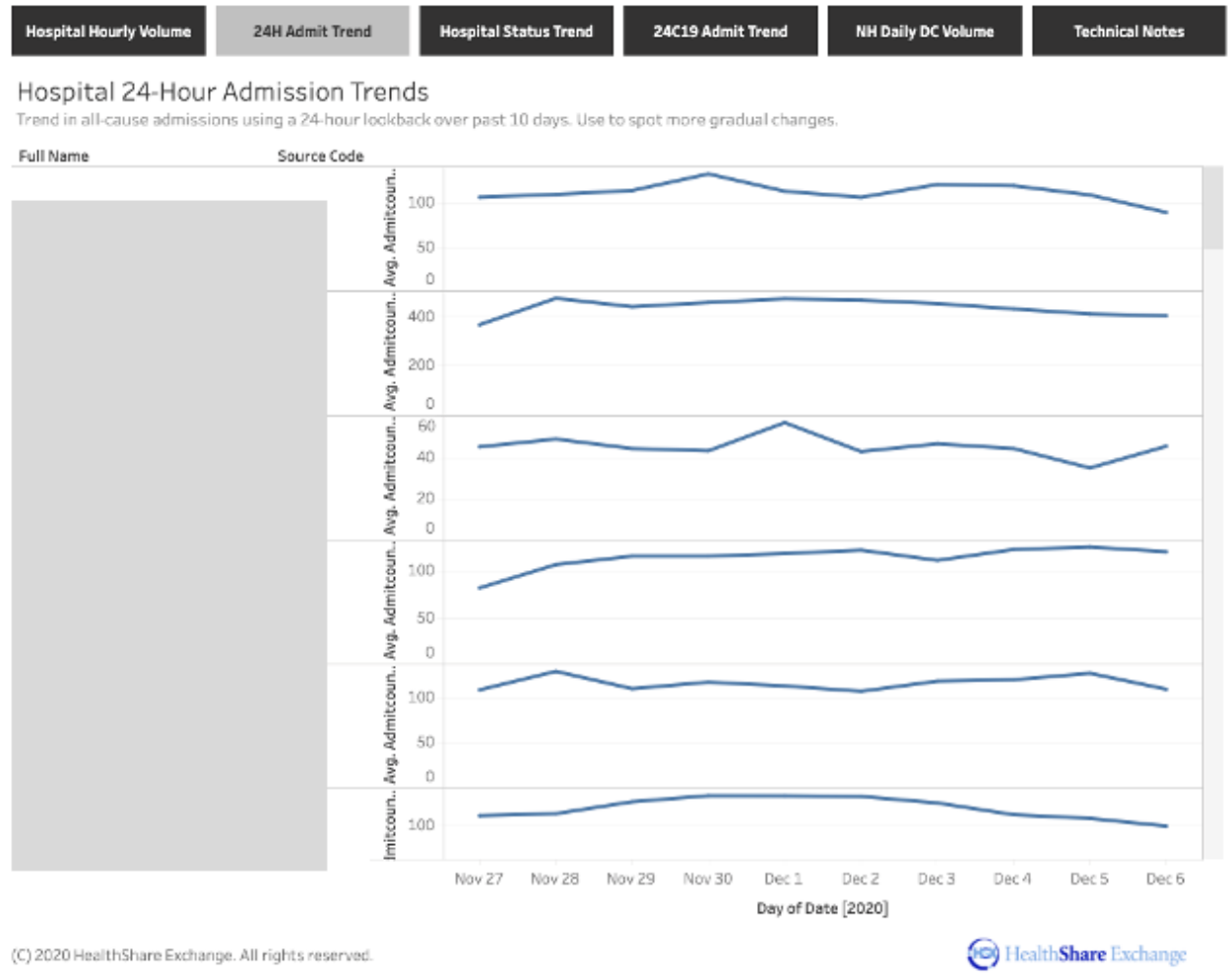
Provider Activity Dashboard



Provider Activity Dashboard



Provider Activity Dashboard



Challenges

- Properly coded data, reliance on vendors
- Delays in coded diagnoses
- Expanding public health access under HIPAA
- Tracking nursing home and other congregate living residents (USCDI)
- Non-traditional sites for testing, vaccination
- Priority for integration with IISs
- Persisting data from eCR

Contact Us

William M. Marella, MBA, MMI

Director, Data Quality and Analytics

Bill.marella@healthshareexchange.org

610-745-7605

Elizabeth Scoles, MPH

Project Manager, Population Health

elizabeth.scoles@healthshareexchange.org

713-203-3021

Thank You!