



Massachusetts Department of Public Health  
Bureau of Infectious Disease and Laboratory Sciences

# ***Partnerships for Care: Integration of HIV Data to Improve Data to Care Activities in Massachusetts***

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# Learning Objectives

At the conclusion of this presentation, the participants will be able to:

- Summarize the P4C program in Massachusetts
- Recognize lessons learned from the process of building Health Information Technology (HIT) and informatics capacity
- Utilize recommendations to other jurisdictions interested in pursuing similar goals

# P4C In Massachusetts

- Increase the number of people living with HIV who know their status
- Identify and locate individuals out of care (OOC) and support their re-engagement back into care
- Develop partnership between clinics and field epidemiologists
- Offer partner services to newly diagnosed individuals
- Leverage support from P4C and HRSA SPNS funding to enhance HIV Care Continuum monitoring and response for PLWHA in Massachusetts

# Novel use of EHR data

Building capacity to enhance use of data from EHR through:

- existing mechanisms for data collection and automated reporting
- surveillance systems to triage data for collection, response, analysis, and application of clinical and surveillance data
- production of patient level HIV care continua



Community Health  
Center EHR



orders

vital signs

ICD10's

meds

lab  
results

ESPnet



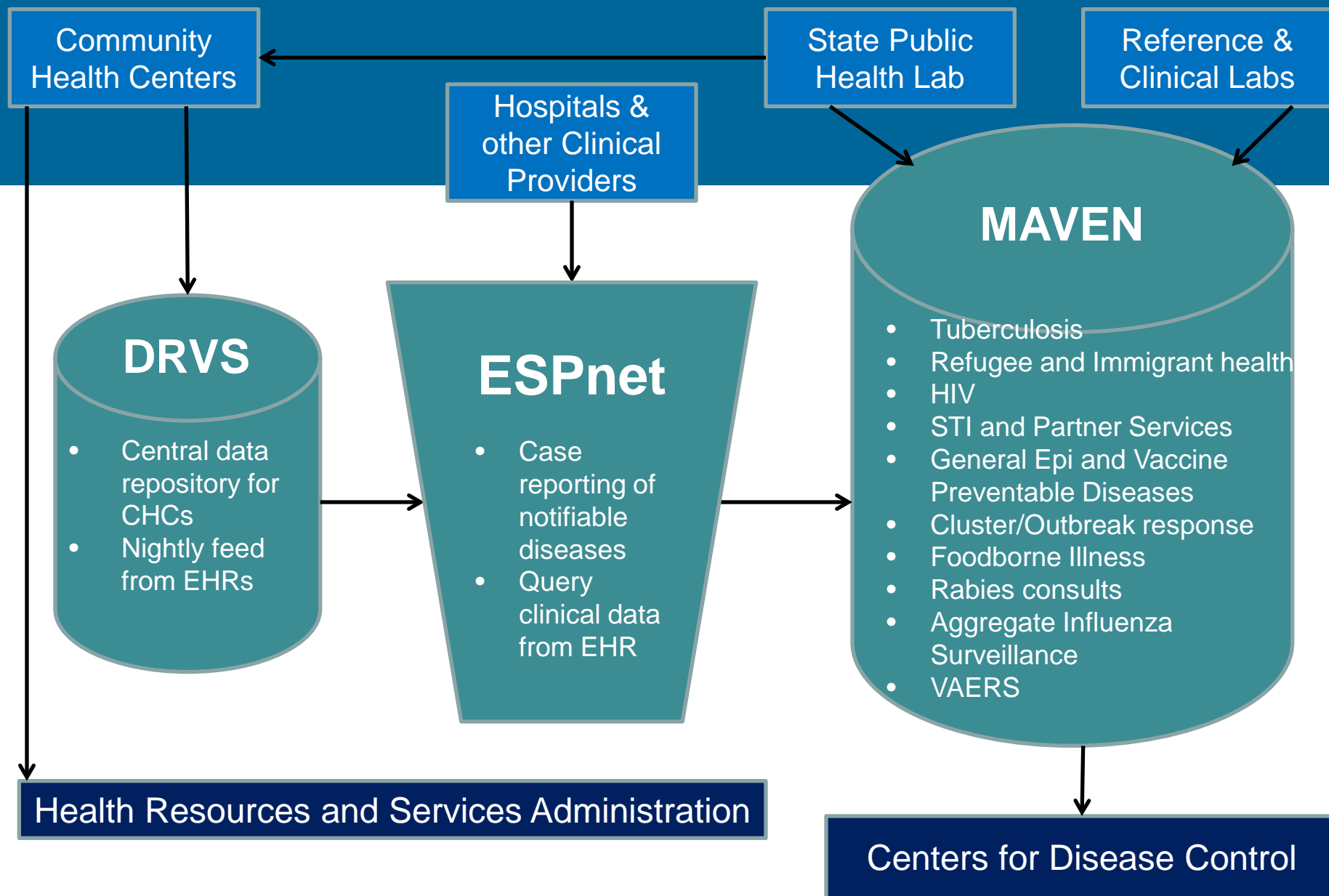
HIV

Acute Hepatitis B

Active Tuberculosis

Health Department







Event Summary

Basic Information	
Event ID:	100027710
Event:	Human Immunodeficiency Virus
Person:	Test Patient Birth Date: 01/01/1987 ( Female )
Investigation Status:	Open
Linked Events/Contacts:	1 linked event(s)/contact(s) (View)
Attachments:	0 attachment(s) (Add)
Notifications:	Event Date: 11/16/2015 Event Status: Suspect Event Type: Report Date <a href="#">Patient Summary</a> <a href="#">Address Summary</a> <a href="#">Link Type Summary</a>

Notes (Add/Edit | Mine)

Edit Event Properties



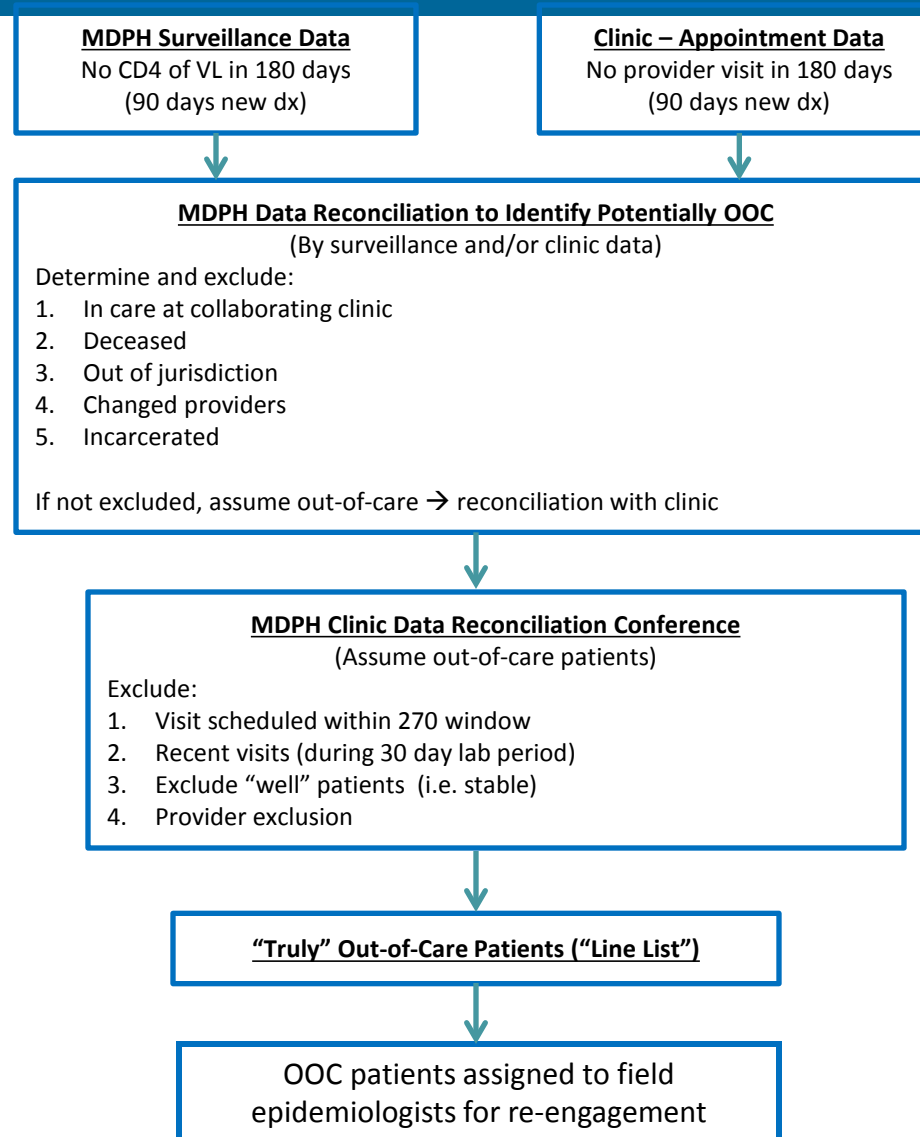
- Event Data
- Lab Results
- Concerns
- Persons
- Tasks
- Event Properties
- Event History Trail

Question Packages	
Question Package	Person
01. Administrative	Event ID
02. Demographic	Test Patient
03. Clinical	Test Patient
04. Field Investigation	Test Patient
05. Risk History	Test Patient
06. Provider/Patient Interaction Log	Test Patient

# Data collected to monitor HIV Care Continuum

HIV CARE CONTINUUM MEASURES	DATA ELEMENTS
HIV positivity rates	Number of unique patients screened for HIV and those with positive HIV test stratified by health center, date, race, sex, age, housing status and insurance type
Diagnosed with HIV	Date of HIV test, type of HIV test, physician reported diagnosis
Linkage to care	Date of diagnosis, date of CD4 and viral load tests, date of HIV medical care visits, date of field epidemiologist engagement, time lapse between diagnosis and linkage to care
Engaged or retained in care	Date of diagnosis, date of CD4 and viral load tests, date of HIV medical care visits, date and outcome of field epidemiologist engagement, methods of retention in care, time lapse between diagnosis and care engagement
Prescribed antiretroviral therapy	Antiretroviral therapy prescriptions and date of prescription
Virally suppressed	Quantitative viral load laboratory results

# P4C Protocol: Identifying Out-of-Care Individuals



# Lessons Learned:

## #1 High variability in data structure within and across EHRs



Risk reduction  
counseling

Housing Status

Country of birth

Income

Health Insurance

HIV risk exposure

A screenshot of a dropdown menu for HIV risk exposure. The menu is open, showing a list of options: MSM, IDU, Sex Partner - HIV+, Sex Partner - IDU, Sex Partner - MSM, Blood product related, Heterosexual contact, and Undetermined. The background is yellow, and the text is black.

Patient reports sex with males and IDU

# Lessons Learned:

## #2 Utilizing clinical visit data to identify HIV care visit

The current 042-044 series of codes has been replaced with a single code, 042, for HIV disease

A new code, V08, has been created for asymptomatic HIV infection.

### 2015 ICD-9-CM Diagnosis Code 042

Code 795.8 has been deleted and a new code, 795.71, Inconclusive serological findings for Human Immunodeficiency Virus {HIV}, has been created.

Use additional code to identify HIV-2 infection (079.53), if present

### 2016 ICD-10-CM Diagnosis Code B20



**Provider A**



**“Primary care  
visit”**



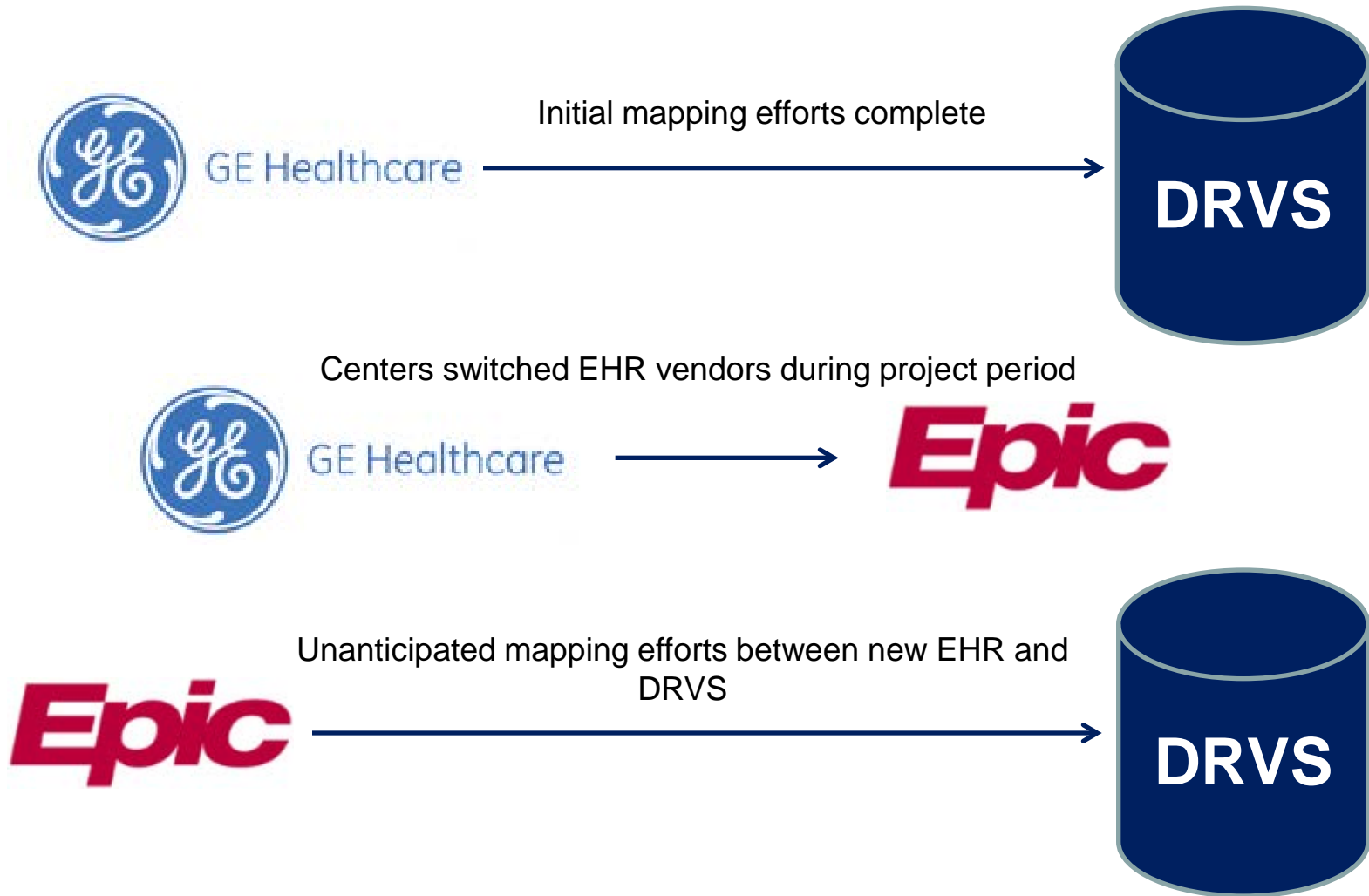
**Provider B**



**“HIV Specialty  
Care Visit**

# Lessons Learned:

## # 3 Unforeseen transition to new EHR vendor



# Recommendations

Clear communication

Start small

Push for standardization

# Summary

## **Novel use of EHR data**

- Massachusetts is enhancing technology to support HIV Care Continuum monitoring and response for PLWHA

## **Lessons learned**

- Where and how data are recorded and consistency of collection is highly variable
- Challenging to use codes to distinguish a primary care visit vs. an HIV care visit
- Anticipate changes in EHRs

## **Recommendations**

- Communication
- Start small
- Push for standardized designs and protocols

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Commonwealth Informatics

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Questions?