Health IT Advisory Council

April 18, 2019

OHS
CONNECTICUT
Office *of* Health Strategy

Agenda

Agenda Item	Time
Welcome and Call to Order	1:00 pm
Public Comment	1:05 pm
Review and Approval of Minutes – March 21, 2019	1:10 pm
Announcements	1:15 pm
Outcomes of Medication Reconciliation Hackathon	1:20 pm
Use Case Factory™ Primer	1:35 pm
Update on SUPPORT Act (HR 6, Section 5042) Planning	1:55 pm
Health Equity Data Analytics Project Update	2:05 pm
Wrap-up and Meeting Adjournment	3:00 pm

Welcome and Call to Order

Public Comment

(2 minutes per commenter)

OHS CONNECTICUT Office of Health Strategy

Review and Approval of:

March 21, 2019 Meeting Minutes

Announcements

Outcomes of Medication Reconciliation Hackathon

Tom Agresta, MD, MBI

OHS CONNECTICUT Office of Health Strategy

Medication Reconciliation Hackathon

Key Points, Lessons Learned & Next Steps

Thomas Agresta MD, MBI
Professor and Director Medical Informatics
Family Medicine – University of Connecticut SOM

Background
Why a MED REC Hackathon?

- Medication Errors are common and many are related to incorrect med lists
- Getting A Correct Medication List is *Complicated*
  - Technology helps and hurts
    - ePrescribing –
      - No more handwritten prescriptions
      - Introduces unintended errors, difficulty with de-prescribing
    - Health Information Exchange
      - Tools to consolidate medication lists from several sources
      - Yet interoperability between systems is limited
      - Information & Cognitive Overload

- New Interoperability guidance from CMS and Office of National Coordinator

- Connecticut has a perfect eco-system to try and introduce creative change

The Office of Health Strategy Medication Reconciliation Hackathon Presented by UConn Health

Date: April 5th & 6th 2019

Attendees: 84

- Prescribing clinicians
- Pharmacists
- Analysts
- Informaticians
- Software engineers
- Developers & programmers
- Students in medicine, pharmacy & engineering
- Patient advocates

UCONN

Intended Outcomes

Clinical & Admin Workgroup

- Define problem further
- Describe Some Functional Requirements
- Describe Components of User interface
- User-Centered Design

Technical

- Interoperability Standards
- FHIR - experience
- Develop simple prototype for each Med Rec scenario
- Meet a few functional requirements
- Gain experience working multidisciplinary teams

Key Points & Lessons Learned

Agreed Common Elements across groups for Med Rec:

- Accessible (2)
- Confidence (2)
- Indication (2)
- Interoperability across sources
- Accountability
- Simple
- Timely
- Relevance

- Interest and buy-in is high
- Limited prior experience using the FHIR protocol to gather data from a multitude of sources.
- Unique opportunity for the HIE Entity to message about the problems / and potential opportunities for solutions about medication reconciliation
- There were no major “ah-hah” moments regarding the best path forward.

Next Steps based on Hackathon work

1. **Publish a White Paper (UConn Health)**

2. **Use Business and Functional Requirements to build a Use Case for Health Information Exchange Medication Management Service (HIE Entity)**

3. **Structure the set of recommendations to help design technical infrastructure (UConn AIMS)**

Reminder: Presentation at AMIA

Acceptance to present at the American Medical Informatics Association (AMIA) Clinical Informatics Conference, May 2, 2019

Promoting medication safety through a multi-stakeholder state group in CT: Improving Deprescribing by use of the CancelRx messaging standard

Use Case Factory™ Primer

Sabina Sitaru

The Use Case Factory™

- A framework modeled after a Michigan best practice
- It creates a standardized process for introducing and maturing different use case offerings of the HIE
- Follows Health IT Advisory Council identified high priority use cases included in the Trust Framework for initial HIE rollout
- The pending IAPD funding request has adequate resources for us to adopt this process framework

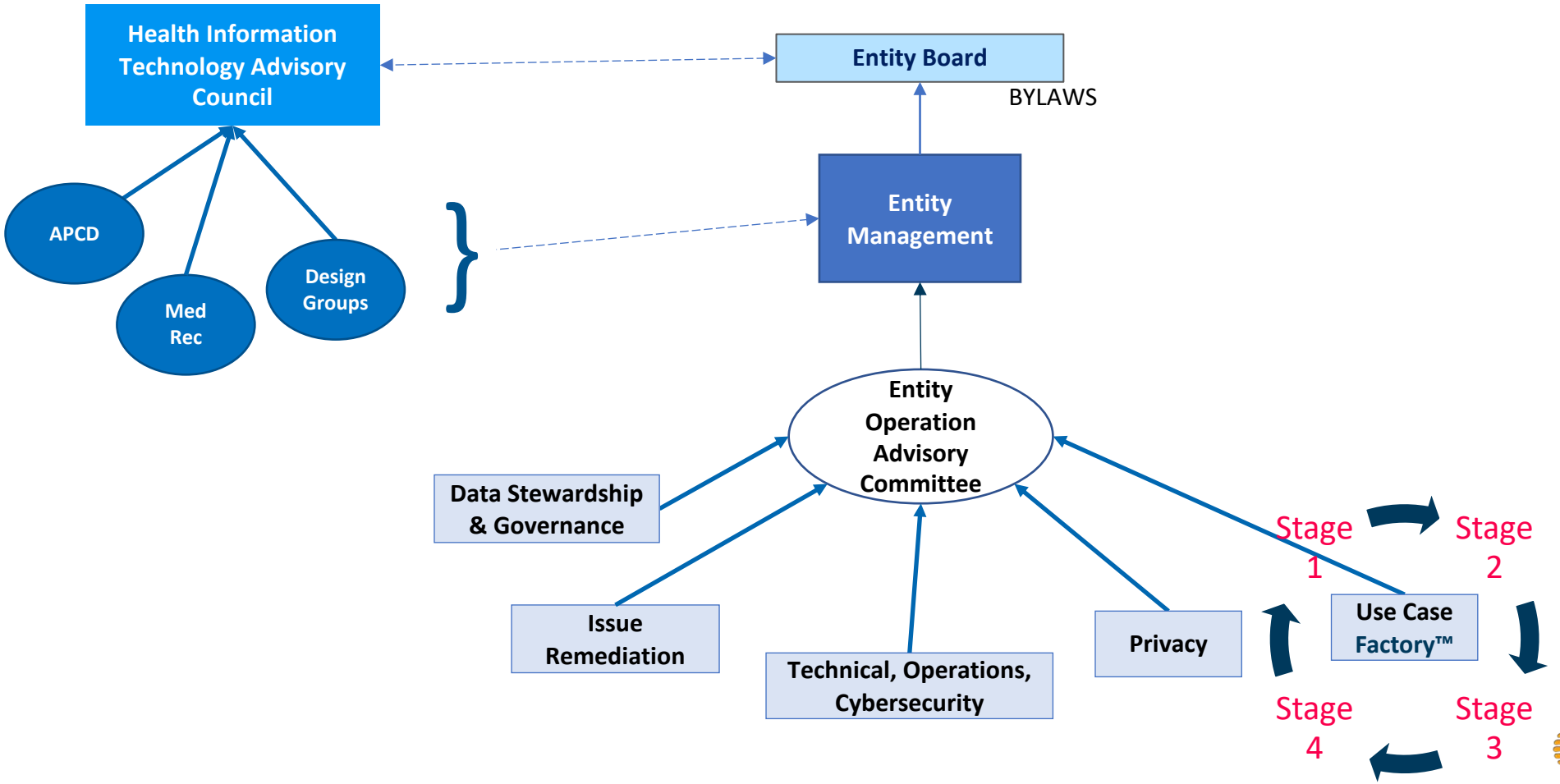
Health IT Advisory Council Identified Priority Use Cases

Wave 1 Use Cases and Associated Tasks	
eCQM	• *Procurement and implementation*
IIS (Submit/Query)	• *Implementation and integration with Public Health Reporting; procurement*
Longitudinal Health Record	• *Leverage eHealth Exchange, CareQuality, and CommonWell* • *Implement core services (e.g. master person index and health provider directory)*
Public Health Reporting	• *Assess potential to leverage/expand AIMS* • *Implement expanded data elements, onboarding, and technical assistance*
Clinical Encounter Alerts	• *Finalize business and functional requirements* • *Procurement / contracting (including leverage existing assets)*
Image Exchange	• *Finalize business and functional requirements*

Wave 2 Use Cases and Associated Tasks	
Medical Reconciliation	• *Implement program for process re-design and supporting technology*
MOLST / Advance Directives	• *Partner with existing MOLST Task Force and Advisory Committee for assessment of technology value-add and the value of a complimentary AD Registry*
Patient Portal	• *Plan for rollout after implement*
Population Health Analytics	• *Plan for rollout after eCQM repo*

Future Use Cases	
Bundle Management	Lab Results Delivery
Care Coordination: Care Plan Sharing	Life Insurance Underwriting
Care Coordination: Referral Management	Medical / Lab Orders
Care Coordination: Transitions of Care	Medical Orders / Order Management
CHA Dose Registry	Opioid Monitoring and Support Services
Disability Determination	Patient-generated Data
eConsult	Research and Clinical Trials
Emergency Department Super-utilizers	Social Determinants of Health
Emergency Medical Services (EMS)	Wounded Warriors
Genomics	

Use Case Governance Model



Uses Cases are:

- Data sharing scenarios with defined purpose, type of data exchanged, and interactions between systems
- Includes business, technical, and legal framework for sharing the data

Use Case Components:

Business Requirements Document

Implementation Guide

Use Case Summary

Use Case Exhibit

Onboarding Documentation

Benefits of Use Case Factory™ Approach

✓Aligns Priorities

- Agile multi-stage gate methodology that enables prioritized and systematic data sharing among stakeholders

✓Promotes Transparency

- Continuous stakeholder input throughout use case lifecycle
- Common trust framework

✓Facilitates Consistency

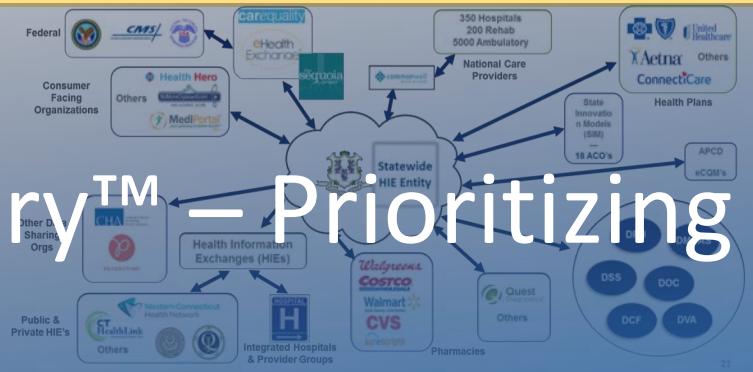
- Standard mechanism to define purpose, requirements, and costs

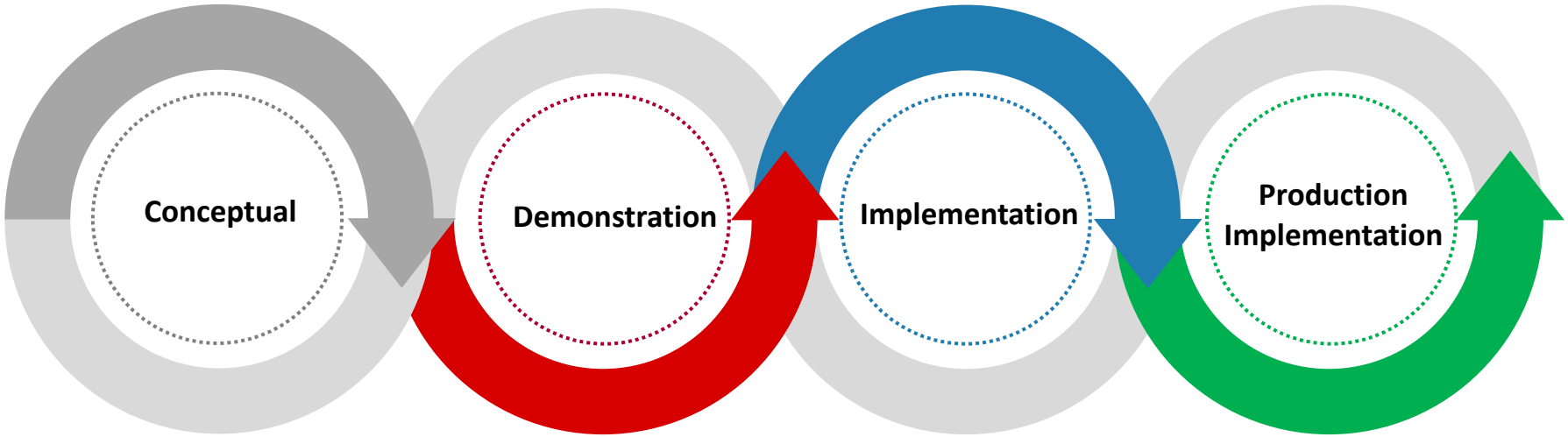
✓Operationalizes Use Cases

- Demonstration projects, test environments, and refinement of logistical, legal, and financial requirements

OHS CONNECTICUT Office *of* Health Strategy

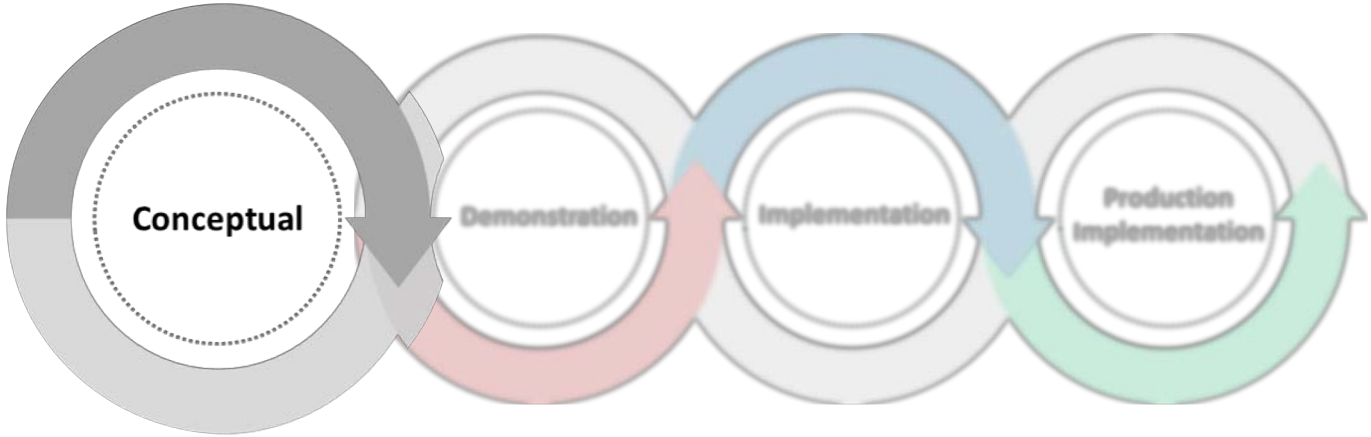
Use Case Factory™ – Prioritizing Interoperability



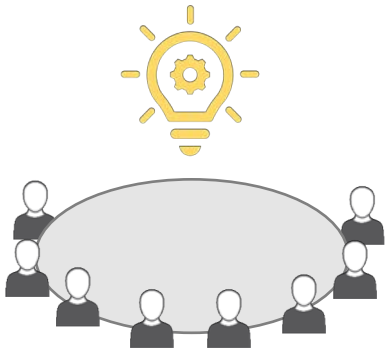


Stage 1	Stage 2	Stage 3	Stage 4
Define concept Evaluation	Demonstration projects Refinement of requirements	Onboarding Conformance reporting	Critical mass adoption Ongoing evaluation

OHS CONNECTICUT Office of Health Strategy



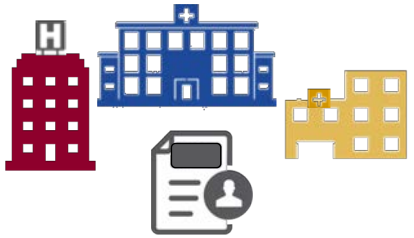
- ✓ *Genomic Medicine*
- ✓ *Medication Reconciliation*



Workshop
identify and prioritize data sharing ideas

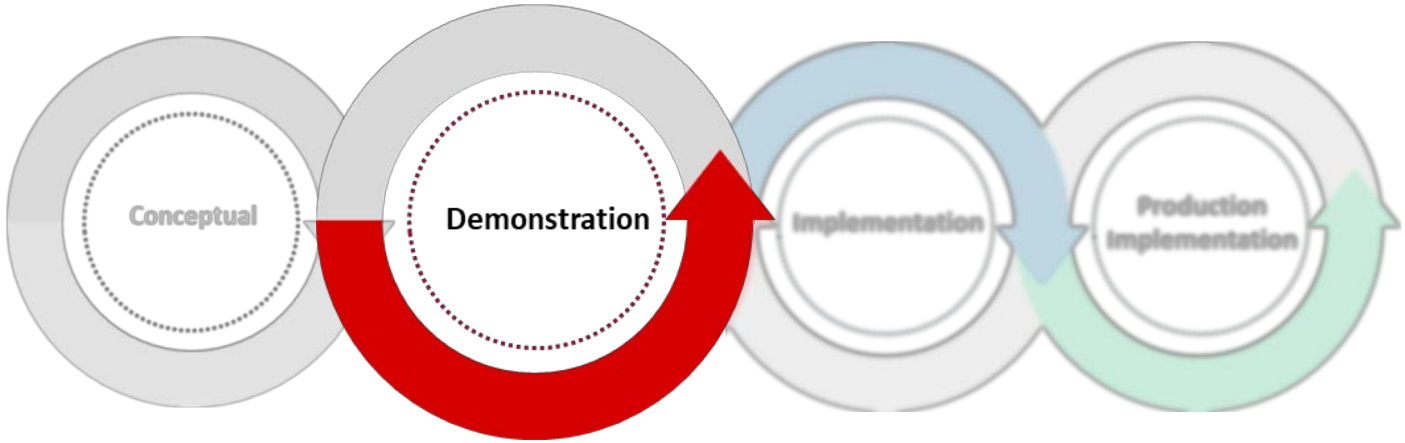
White Paper
frame opportunities and associated issues (legal, financial, etc.)

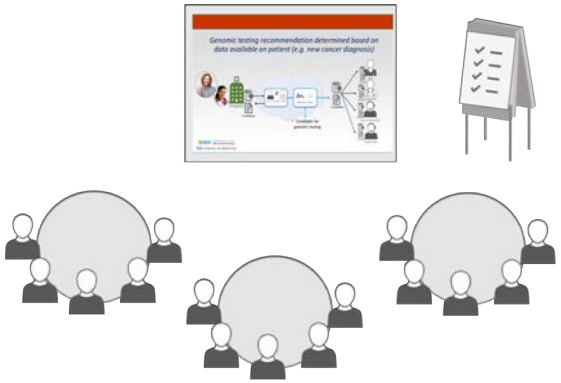
Personas
real but fictious people used for testing and to illustrate value proposition



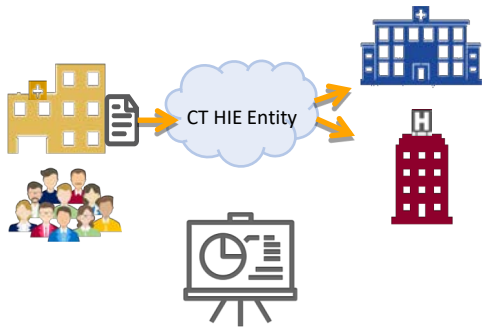
Pilot Identification
agreement among early adopters for testing use case

OHS CONNECTICUT Office of Health Strategy





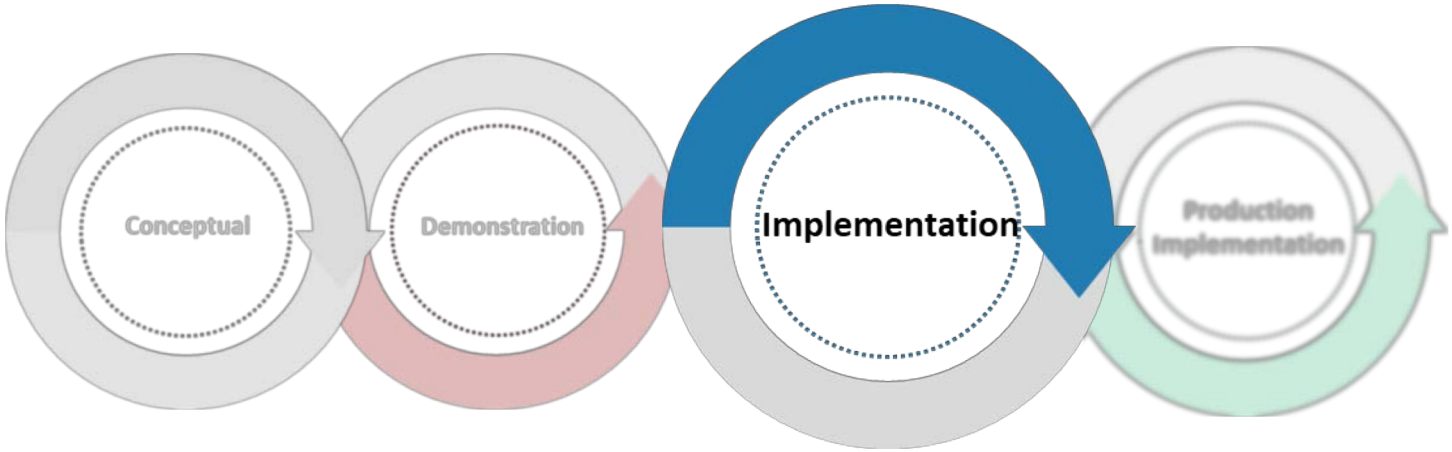
Joint Application Design or Working Group
define requirements and resolve technical issues

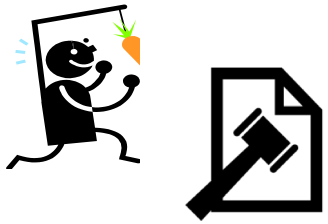


Technical Demonstration and Evaluation
leverage synthetic data to test and demonstrate exchange

Implementation Guide
clarify technical methods to facilitate data sharing

Use Case Exhibit
address data use constraints



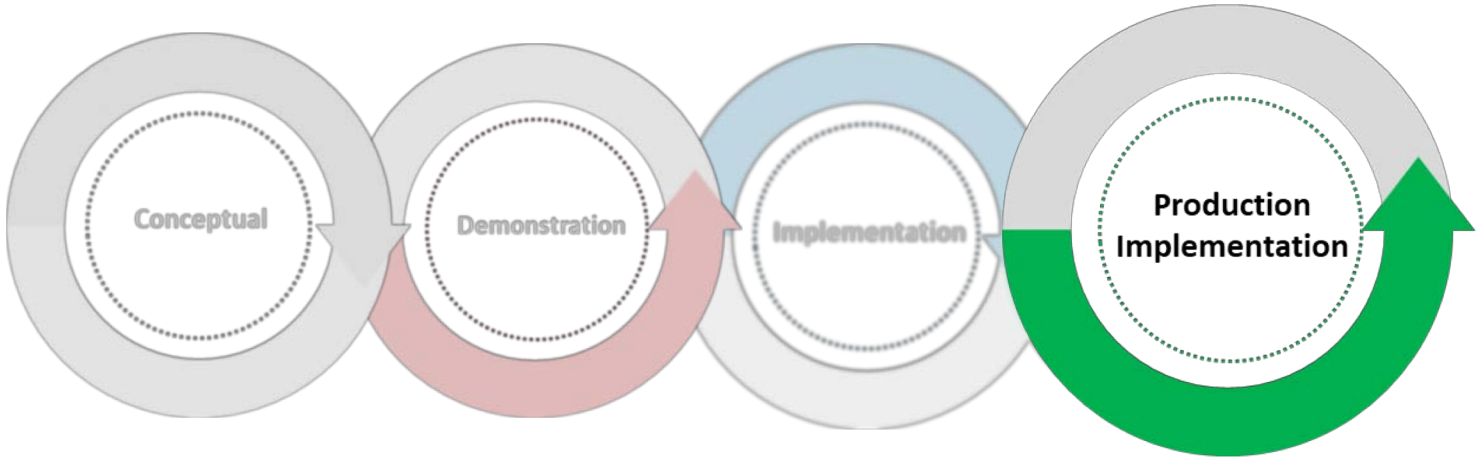


Incentives and Policy Levers
accelerate adoption of use cases

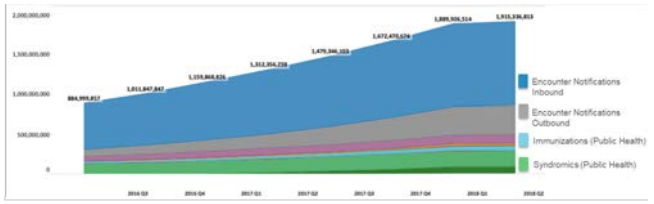
Onboarding Package
explain steps to legally and technically onboard

Conformance Reporting
monitor quality and integrity of data sharing

Value Assessment
illustrate value proposition to use case participants

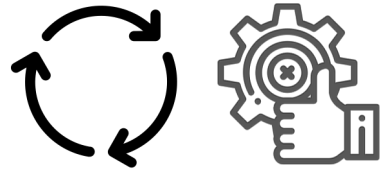


Cost Recovery Mechanism
ensure sustainability of HIE Entity



Utilization Reports
track and visualize participation and progress

Trend Analysis
confirm market needs



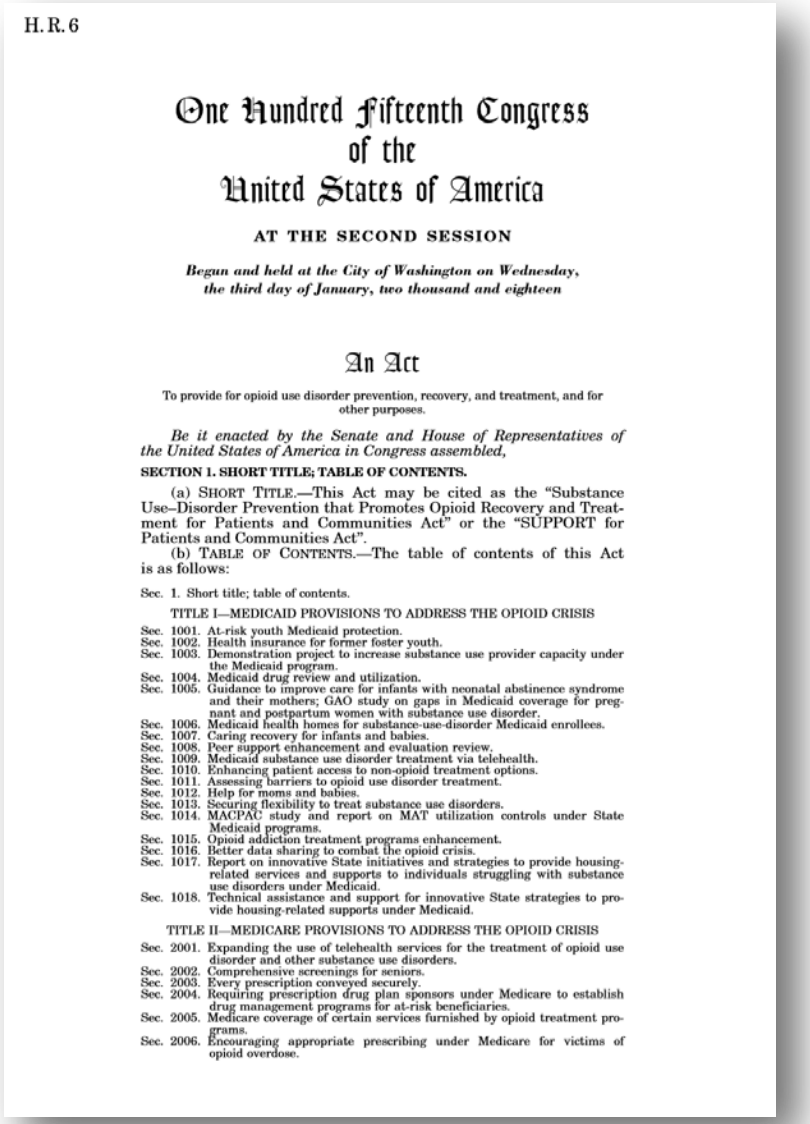
Ongoing Evaluation
assess value and effectiveness

OHS CONNECTICUT Office of Health Strategy

Update on SUPPORT Act (HR 6, Section 5042) Planning

Michael Matthews

H.R.6 – SUPPORT for Patients and Communities Act



H. R. 6

One Hundred Fifteenth Congress
of the
United States of America

AT THE SECOND SESSION

Begun and held at the City of Washington on Wednesday, the third day of January, two thousand and eighteen

An Act

To provide for opioid use disorder prevention, recovery, and treatment, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the "Substance Use–Disorder Prevention that Promotes Opioid Recovery and Treatment for Patients and Communities Act" or the "SUPPORT for Patients and Communities Act".

(b) TABLE OF CONTENTS.—The table of contents of this Act is as follows:

- *Improved access to long-term treatment*
- *Focus on opioid over-prescribing*
- *Tracking synthetic opioids*
- *Expansion of access to medication-assisted treatment*
- *Community support services*
- *Resources for research and education*

DCP
CONNECTICUT DEPARTMENT OF
CONSUMER PROTECTION

OHS
CONNECTICUT
Office *of* Health Strategy

SEC. 5042. MEDICAID PROVIDERS ARE REQUIRED TO NOTE EXPERIENCES IN RECORD SYSTEMS TO HELP IN-NEED PATIENTS.

PDMP Requirements

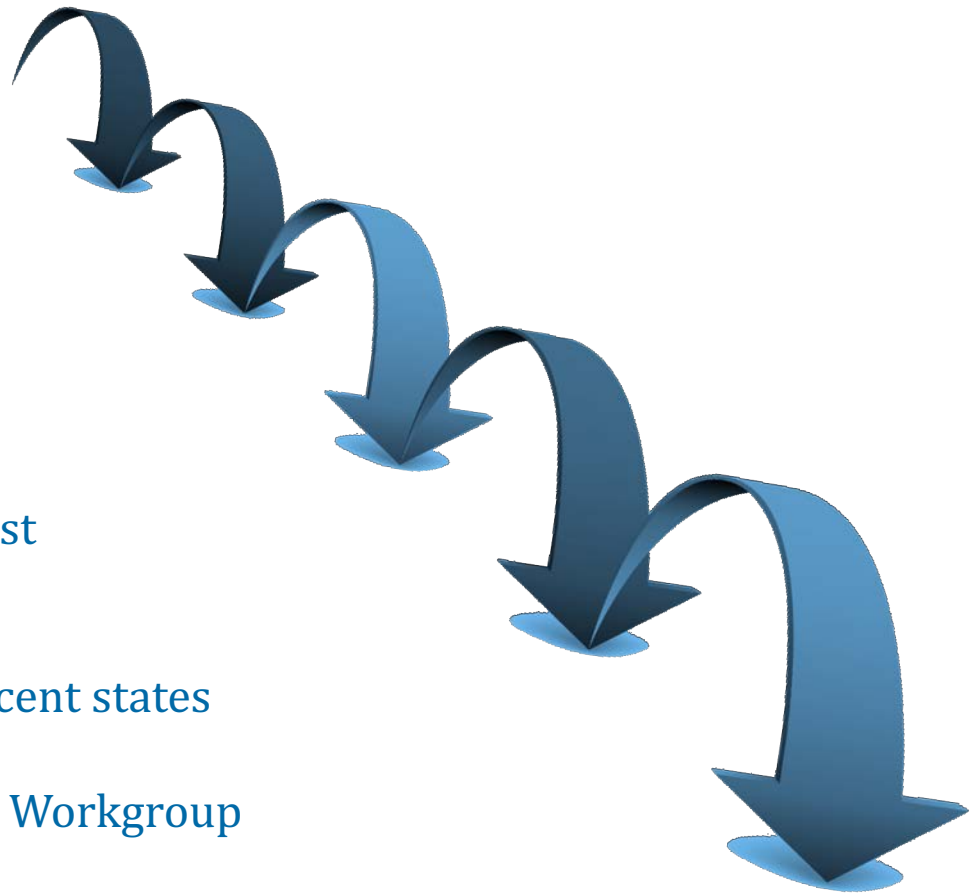
- Integrations of PDMP data into prescribing systems including EHRs
- Systems for the electronic prescription of controlled substances
- Connections of the PDMP to Medicaid
- Interstate data connections to contiguous states
- Systems or enhancements to existing systems which support the reporting, including electronic case reporting
- Medicaid Managed Care connections to the PDMP as optional,
- Persistent access for Medicaid providers to PDMP data in emergencies
- Incorporating other data elements to help inform providers

IAPD Requirements

- State has defined who are covered providers
- State has defined the "timing, manner, and form" under which a covered provider is required to check the PDMP before prescribing an individual a controlled substance.
- For providers who make a good faith effort to check a PDMP but cannot, it is recommended that the state describe what kinds of paper or electronic documentation the state may wish to review to confirm a good faith effort was made
- State's RFPs (if applicable, general sole source guidance still applies), contracts and IAPDs confirms that the system is to be a Qualified PDMP
- State facilitates **integration of PDMP information into electronic workflow of covered providers' prescribing system.**
- State also has described if there is a **data sharing between the PDMP program and the State Medicaid agency**
- State has described if they are choosing to facilitate **access between the PDMP program and any managed care entity.**
- State has described how they are going to ensure **access to PDMP data in the case of natural disasters** and similar situations

Planning Process

- Establish OHS and DCP leadership group
  - Background data gathering
  - Draft of straw man
  - Communication with CMS
- Establish multi-agency planning group
  - Review opportunities
  - Establish priorities
  - Develop recommendations for funding request
- Collaboration with other stakeholders
  - NESCSO for cross-border exchange with adjacent states
  - eHealth Exchange for national opportunities
  - Communication with Med Rec Polypharmacy Workgroup
- Review by Health IT Advisory Council
- Submit funding request to CMS



CONNECTICUT DEPARTMENT OF CONSUMER PROTECTION

OHS CONNECTICUT Office of Health Strategy

Proposed Projects

	Brief Project Description
Enhanced provider workflow	• Fully fund statewide integration for initial setup and per user cost for all users, with per user cost guaranteed for 2 years • Leverage CPMRS platform to provide users with real-time notification of non-fatal overdoses
Enhanced health system connectivity	• Expand Appriss Gateway integration to all health systems in CT. • Implement event-driven notifications to prescribers for ED patients with overdoses of opioids or other controlled medications.
Integration with statewide HIE	• Establish bi-directional exchange with and through Statewide HIE • Enhance patient and provider identity management through collaboration between CPMRS and Statewide HIE • Establish connectivity with eHealth Exchange and PULSE via Statewide HIE
Expansion of interstate exchange	• Continue connectivity expansion to states not currently exchanging with CPMRS • Participate in NESCSO SUPPORT Act planning process • Assess use of RxCheck Hub to support interstate exchange
Administrative process efficiencies	• Enhance patient and provider identity management through collaboration between CPMRS and Statewide HIE, as above • Fund FTEs for HPA I or Processing Technician to conduct administrative/technical support • Establish real-time POS reporting from data submitters to the PMP Clearinghouse, including both prescribed and filled prescriptions for controlled medications
Interoperability with Medicaid	• Establish access to CPMRS by Medicaid Medical Director(s) • Enhance patient and provider identity management through collaboration with CPMRS, Statewide HIE and Medicaid

**Note assessment of expanding CPMRS to include all dispensed medications will be addressed through existing IAPD and MRP planning process*

DCP CONNECTICUT DEPARTMENT OF CONSUMER PROTECTION

OHS CONNECTICUT Office *of* Health Strategy

Proposed Projects (continued)

	Brief Project Description
Support for case management and care coordination	• Establish access to CPMRS by all State agencies authorized to do so • Establish access to CPMRS by VA Medical Center • Establish access to CPMRS by Managed Care Organization Medical Directors • Establish access to CPMRS by Medicaid Medical Director(s), as above
Policy alignment	• Assess and align state-level regulations and policies as needed to support high-value use cases
Other opportunities with state agencies	• **To be discussed**

**Note assessment of expanding CPMRS to include all dispensed medications will be addressed through existing IAPD and MRP planning process*

CONNECTICUT DEPARTMENT OF CONSUMER PROTECTION

OHS CONNECTICUT Office *of* Health Strategy

Next Steps

- Define and refine potential projects
- Funding proposal development
- Discussions with NESCSO
- Integration with Medication Reconciliation Polypharmacy Workgroup strategy and recommendations

Health Equity Data Analytics Project Update

Tekisha Everette, PhD & Mark Abraham

OHS CONNECTICUT Office of Health Strategy

Health Equity Data Analytics Project Update

April 18, 2019

Mark Abraham
DataHaven

Karen Wang
Yale ERIC

Equity Research and Innovation Center
Yale School of Medicine

DataHaven
The Twenty Fifth Year

HEALTH EQUITY SOLUTIONS

CONNECTICUT HEALTH INFORMATION TECHNOLOGY OFFICE

UCONN AIMS
UNIVERSITY OF CONNECTICUT
Analytics & Information Management Solutions

HEDA Project Overview

Health Equity Solutions, Inc. (HES)

- Tekisha Dwan Everette, PhD, Executive Director

DataHaven

- Mark Abraham, Executive Director
- Shaun McGann, Project Coordinator

Yale School of Medicine: ERIC

- Karen Wang, MD, MHS, Instructor
- Marcella Nunez-Smith, MD, MHS, Director
- Tara Rizzo, MPH, Deputy Director

Project Goals:

- Identify vital few (2-4) health equity data elements relevant to health equity issues in Connecticut and advise UConn AIMS on incorporating elements into emerging HIE/CDAS architecture
- Develop proposed use case(s) utilizing health equity data elements to demonstrate potential for driving predictability of and progress towards better patient health outcomes at the population level

HEDA Project Update

- Project deliverable and timeline
- Final health equity data element recommendations
- Process for reaching recommendations:
  - Landscape analysis findings
  - Provider outreach findings
- Proposed future use cases
- Next steps

Deliverable: HEDA Report

- **Section I** – HEDA Project Background and Role of HIEs in Promoting Health Equity
- **Section II** – Results of Landscape Analysis and Provider/Consumer Outreach
- **Section III** – Recommended Health Equity Data Elements for Prioritization in Connecticut's Forthcoming Statewide HIE
- **Section IV** – Putting Recommended Health Equity Data Elements into Action: Recommended Use Cases
- **Section V** – Next Steps

Note – final version HEDA Report expected to be ready for release in June, 2019

Health Equity Data Elements - Recommendations

- Race/Ethnicity
- Address and zip code & corresponding census tract-level neighborhood measures
- Insurance status

Discovery and Analysis:
Process for Reaching Data Recommendations

Components:

- Literature Review
- Landscape Analysis
- CT Provider Outreach
- CT Consumer Outreach*

**Ongoing*

"Statewide Health Data and Analytics" presentation at DataHaven 25th Anniversary Event (Harold Shapiro photo)

Landscape Analysis

Landscape Analysis (National-Level)
Conducted in-depth interviews (n=12) with HIEs and healthcare data/informatics experts from across the U.S. to learn more about current efforts to utilize SDoH in HIEs

- Conducted November 2018 to February 2019
- 60-90 minute, semi-structured, telephone interviews

Interviewees:

- Michigan Health Information Network
- HealthInfoNet (Maine)
- Rochester Regional Health Info Organization
- Michiana Health Information Network (Michigan/Indiana)
- Indiana Health Information Exchange
- San Diego Health Connect
- CRISP (MD/DC)
- Johns Hopkins School of Public Health
- Healthcare Access San Antonio (HASA)
- Strategic HIE Collaborative (SHIEC)
- Data Across Sectors for Health (DASH)
- All In: Data for Community Health

Data Sources

Where do the data come from?

- Healthcare systems
- Community-based health providers (e.g. physician practices, home health, behavioral health, Emergency Medical Services)
- Public health agencies (e.g. health departments, prescription monitoring programs)
- Public and private insurance providers
- Human service agencies (e.g., Dept of Social Services, Housing Authorities, Homeless Services, Disability Services, 2-1-1)
- Publicly available data (e.g. US Census)
- Other sectors (e.g. Dept of Education, Dept of Corrections, Dept of Envi. Protection)

Elements (source)

- Geocoded residential address (EHR, claims)
- Public health/corrections/social service utilization (agencies)
- Insurance status (claims)
- Race/ethnicity, language (EHR, claims, service agencies)

Uses of HIE Data

Who:

- Patient/individual care
- Practice/system level case management (e.g. diabetes registry)
- Population health

How:

- Predictive analytics - using the data to determine who is at risk (e.g. readmissions, adverse outcomes)
- Identify health and human service needs and connect to available resources

Examples of Use Cases

Health Systems

- System receives reports on whether patient participation in disease management clinics resulted in reduction in claims

Providers

- Providers receive residential lead exposure data to inform testing
- Providers and public health agency participate in closed-loop referral system

Community-Based Organizations

- Meals on Wheels receives admission/discharge data so that services are paused while clients are in the hospital

Human Service Agencies

- Dept. of Transportation receives neighborhood-level information on low SES, chronic disease patients to inform where and how often buses should be running

Academic Partners

- Researchers receive infant mortality data to examine disparities

Opportunities and Challenges

Drivers

- Alignment with reimbursement models (e.g. quality and costs targets that must be met for reimbursement)
- Alignment with identified health need

Data Challenges

- Completeness of data
- Accuracy of data (“quantity over quality”)
- Access to data

Operational Challenges

- Institutional commitment
- Staff training and turnover
- No standardized practices (e.g. workflow, incorporation of patient report)
- Privacy and confidentiality

“Health equity is completely based on our ability to understand and operationalize the race, ethnicity, social isolation, and language data in our communities.”

-HIE Director of Population Health

Provider Outreach

Targeted outreach with goal of gathering information regarding:

- EHRs in use and their potential for interoperability and data sharing
- SDoH data elements collected and mechanisms used to collect (EHR, information referral system, additional SDoH screener, etc.)
- Ability of provider to extract and analyze SDoH data
- Value of SDoH data to provider (potential value propositions of HIE)

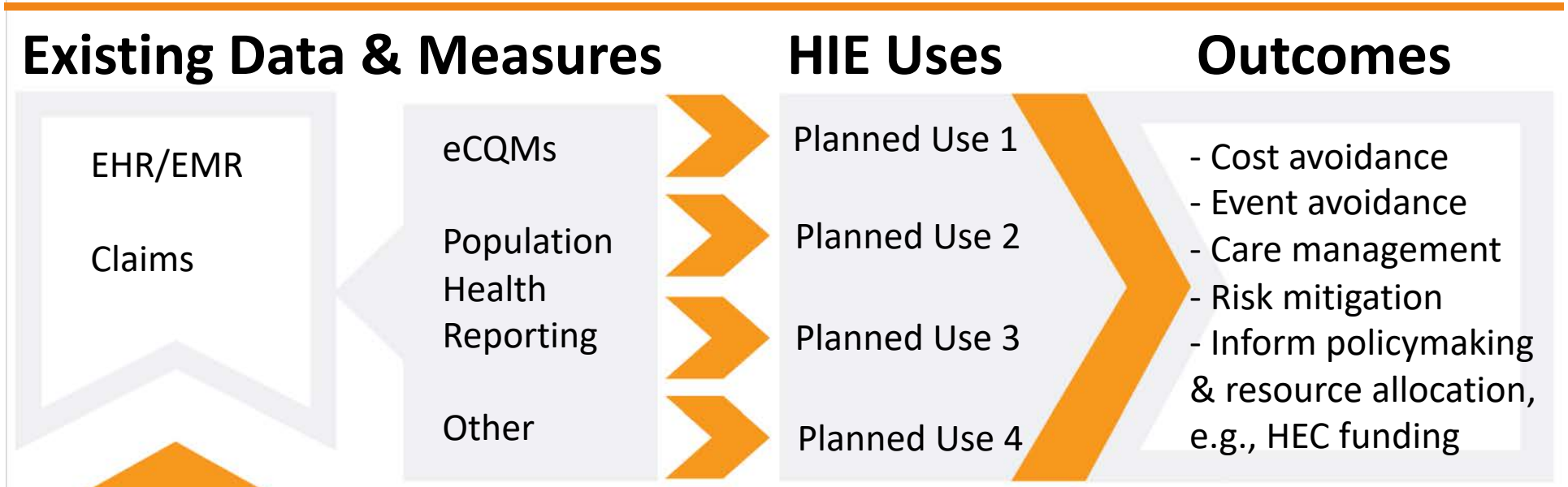
Interviewees:

- Charter Oak Health Center
- Community Health Center Inc.
- Community Health and Wellness Center of Greater Torrington
- Griffin Health
- Hartford HealthCare
- Northeast Medical Group
- Pequot Health
- UConn Health
- Value Care Alliance
- Yale New Haven Health

Provider Outreach – Lessons Learned

- Interest in SDoH is high among providers
- Large degree of variation in collection and use of SDoH data by providers
- Most providers are collecting some basic SDoH data elements, but use of these data elements is inconsistent
- Utility of SDoH data elements in clinical context has yet to be established
- Value of SDoH integration in HIE: giving providers access to numerous "touch points" of patients – **HIEs have key role to play in providing a more holistic picture of an individual beyond just their medical history**
- Short-term value at population/health system management level; potential long-term value at provider level (think statewide information referral system)
- Data curation and workflow optimization are critical – "data overload" and "EHR burnout" are common

Health Equity Data Use Cases



Added Health Equity Data

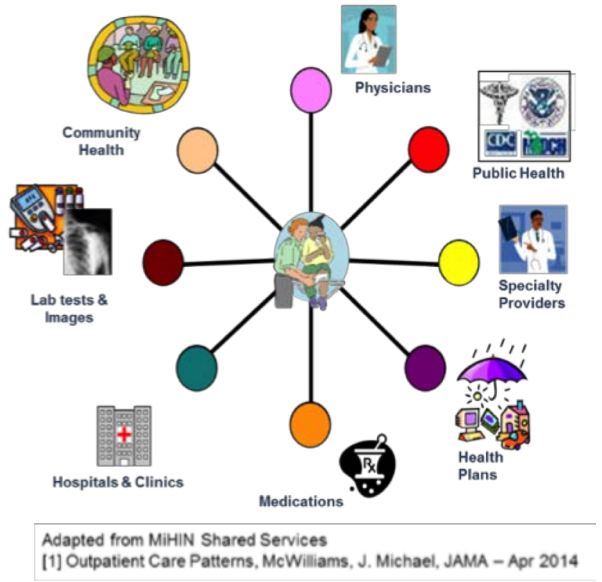
-Race/Ethnicity
-Neighborhood
-Insurance Status
-Others in future

Preliminary Proposed Use Cases using Health Equity Data integrated within the HIE:

- Asthma Progression & Treatment Effectiveness
- Cardiovascular Disease Progression & Treatment Effectiveness
- Opioid Use Progression and Treatment Effectiveness

Next Steps (*May to Sept. 2019)*

- Work with UConn AIMS to test completeness and accuracy of recommended health equity data elements, and posit proxy sources or additional data sources if needed
- Work with OHS and HITO to refine, establish, and socialize potential use cases
- Determine feasibility of incorporating an aggregator or risk indicator index rooted in health equity



Key Considerations:

- What are the specific problems we're trying to solve?
- How much time/effort would it take to acquire the needed data?
- What data sources will HIE have access to? (legal side - data sharing agreements)
- Alignment with existing community/state/federal programs, initiatives, and resources

Questions?

Mark Abraham
Executive Director, DataHaven
info@ctdatahaven.org

Karen Wang
Yale School of Medicine: Equity Research
& Innovation Center (ERIC)
karen.wang@yale.edu

Tekisha Dwan Everette
Executive Director, Health Equity Solutions
teverette@hesct.org

Wrap up and Next Steps

Contacts

Health Information Technology Office:
Allan Hackney, allan.hackney@ct.gov

Health IT Office Website:
https://portal.ct.gov/OHS/Services/Health-Information-Technology

CT Health and Information Services, Inc. (pending):
Sabina Sitaru, sabina.sitaru.CTHIE@gmail.com

CT Health Information Exchange Website:
Coming Soon!