2021 QI Residency

January 14, 2022
Tamara Stepanek, RN, MSN

Objectives:

- Translate population health promotion and continuum of care activities

- Defend resource needs to leadership to improve quality

- Distinguish quality initiatives impacting reimbursement

What does a Health Information Exchange do?

- Supports Coordination of Care
- Improve Patient Care
- Ease Burden on Providers and Quality Professionals
- Create Healthier Communities

Noun or a Verb?

Four Levels of Interoperability (Data Level)

- **Foundational (Level 1):** Establishes the inter-connectivity requirements needed for one system or application to securely communicate data to and receive data from another

- **Structural (Level 2):** Defines the format, syntax and organization of data exchange including at the data field level for interpretation

- **Semantic (Level 3):** Provides for common underlying models and codification of the data including the use of data elements with standardized definitions from publicly available value sets and coding vocabularies, providing shared understanding and meaning to the user

- **Organizational (Level 4):** Includes governance, policy, social, legal and organizational considerations to facilitate the secure, seamless and timely communication and use of data both within and between organizations, entities and individuals. These components enable shared consent, trust and integrated end-user processes and workflows

(Healthcare Information and Management Systems Society (HIMSS))
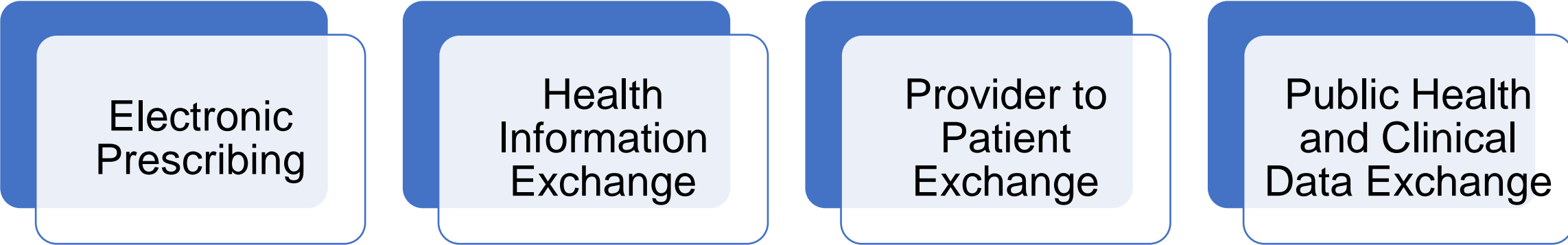
Lessons from Covid

Ideal Transitions and Coordination of Care

Federal Policies supporting Interoperability

- (2004) Office of the National Coordinator for Health Information Technology (ONC) Standards

- (2009) Health Information Technology for Economic and Clinical Health (HITECH) Act

- (2016) 21st Century Cures Act

Hospital Interoperability 2021

Electronic Prescribing

Health Information Exchange

Provider to Patient Exchange

Public Health and Clinical Data Exchange

Initial Funding Goals for Health Information Exchanges to where we are today

1 Create and implement up-to-date privacy and security requirements for HIE

2 Coordinate with Medicaid and state public health programs to establish an integrated approach

3 Monitor and track meaningful use (Now Promoting Interoperability) HIE capabilities in their state

4 Set strategy to meet gaps in HIE capabilities

5 Ensure consistency with national standards

Population Health Tools offerings by an HIE

Health Information Exchange (HIE)

- Clinical records: vitals, labs, imaging, & reports
- Event notification
- Secure messaging

Social Determinants of Health (SDOH)

- Closed-loop referrals
- Resource directory

Collaborative & Foundation

- Academics & research

Public Health

- Electronic Lab Reporting
- Syndromic surveillance
- COVID-19 dashboards & contact tracing

Analytics & Population Health

- NCQA Certified Quality Measures (QCDR, eCQM, MIPS, HEDIS)
- Utilization & quality dashboards

Prescription Drug Monitoring Program (PDMP)

- Medication history
- Controlled substance tracking

The Clinical Viewer

COMMUNITY DATA POINTS

COMMUNITY

- Government/Federal
- County Health Departments
- eHealth Exchange

- Medicaid & Medicare
- Commercial Payers

- SDOH
- Corrections
- Shelters
- Food Bank
- Foster Care
- Residential
- Community Health/ Community Care

Health Data Utility

HEALTHCARE

- Acute Care Hospitals
- Critical Access Hospitals
- Academic Medical Centers
- Community Hospitals
- Surgical & Specialty Hospitals

- Primary Care Clinics
- Specialty Care Clinics
- EMS
- Urgent Care

- FQHCs
- Imaging Centers
- Pharmacy
- Laboratory Hub
- Dialysis
- Chiropractic
- Dental
- Ophthalmology
- Physical Therapy
- Podiatry
- Behavioral Health
- Home Health Agencies

Four Levels of Interoperability

- **Foundational (Level 1): Establishes the inter-connectivity requirements needed for one system or application to securely communicate data to and receive data from another**

- **Structural (Level 2):** Defines the format, syntax and organization of data exchange including at the data field level for interpretation

- **Semantic (Level 3):** Provides for common underlying models and codification of the data including the use of data elements with standardized definitions from publicly available value sets and coding vocabularies, providing shared understanding and meaning to the user

- **Organizational (Level 4):** Includes governance, policy, social, legal and organizational considerations to facilitate the secure, seamless and timely communication and use of data both within and between organizations, entities and individuals. These components enable shared consent, trust and integrated end-user processes and workflows

(Healthcare Information and Management Systems Society (HIMSS))

Tools to build the HIE

The Foundation

HL7 V2

- ADT - Admissions/Discharge/Transfer
- LAB - Laboratory Feed
- RAD - Radiology Feed
- TRN - Transcription Feed (reports, dictations, etc.)

HL7 V3 CCDA

- Continuity of Care Documents

```
MSH|^~\&|MESA_ADT|XYZ_ADMITTING|iFW|ZYX_HOSPITAL|||ADT^A04|103102|P|2.4|||||||||

EVN||200007010800|||||200007010800

PID|||583295^^^ADT1||DOE^JANE||19610615|M-||2106-3|123 MAIN STREET^^GREENSBORO^NC^27401-1020|GL|(919)379-1212|(919)271-3434~(919)277-3114||S||PATID12345001^2^M10|123456789|9-87654^NC

NK1|1|BATES^RONALD^L|SPO|||||20011105

PV1||E|||||||5101^NELL^FREDERICK^P^^DR|||||||||||V1295^^^ADT1|||||||||||||||||||||||||||||200007010800|||||||||

PV2|||^ABDOMINAL PAIN

OBX|1|HD|SR Instance UID||1.123456.2.2000.31.2.1||||||F|||||||

AL1|1||^PENICILLIN||PRODUCES HIVES~RASH

AL1|2||^CAT DANDER

DG1|001|I9|1550|MAL NEO LIVER, PRIMARY|19880501103005|F||

PR1|2234|M11|111^CODE151|COMMON PROCEDURES|198809081123

ROL|45^RECORDER^ROLE MASTER LIST|AD|CP|KATE^SMITH^ELLEN|199505011201

GT1|1122|1519|BILL^GATES^A

IN1|001|A357|1234|BCMD||||||132987

IN2|ID1551001|SSN12345678
```

Four Levels of Interoperability

- **Foundational (Level 1):** Establishes the inter-connectivity requirements needed for one system or application to securely communicate data to and receive data from another

- **Structural (Level 2):** Defines the format, syntax and organization of data exchange including at the data field level for interpretation

- **Semantic (Level 3):** Provides for common underlying models and codification of the data including the use of data elements with standardized definitions from publicly available value sets and coding vocabularies, providing shared understanding and meaning to the user

- **Organizational (Level 4):** Includes governance, policy, social, legal and organizational considerations to facilitate the secure, seamless and timely communication and use of data both within and between organizations, entities and individuals. These components enable shared consent, trust and integrated end-user processes and workflows

(Healthcare Information and Management Systems Society (HIMSS))

USCDI v2
(U.S. Core Data for Interoperability)

- Assessment and plan of treatment
- Care Team members
- Clinical Notes
- Goals
- Health concerns
- Immunizations
- Laboratory
- Medications
- Patient Demographics
- Problems
- Procedures
- Provenance
- Smoking Status
- Unique device identifier
- Vital signs

Four Levels of Interoperability

- **Foundational (Level 1):** Establishes the inter-connectivity requirements needed for one system or application to securely communicate data to and receive data from another

- **Structural (Level 2):** Defines the format, syntax and organization of data exchange including at the data field level for interpretation

- **Semantic (Level 3):** Provides for common underlying models and codification of the data including the use of data elements with standardized definitions from publicly available value sets and coding vocabularies, providing shared understanding and meaning to the user

- **Organizational (Level 4):** Includes governance, policy, social, legal and organizational considerations to facilitate the secure, seamless and timely communication and use of data both within and between organizations, entities and individuals. These components enable shared consent, trust and integrated end-user processes and workflows

(Healthcare Information and Management Systems Society (HIMSS))

Clinical Viewer

Demographics

Encounters

				MME Alert Last 7-days		Multiple Provider Alert Last 180-days		Opioid/Benzo Overlap Last 45-days				
ZZZTESTPT, EIGHTZ				Average daily MME: 127		Pharmacies: 4		Yes				
03/02/1944 - 77 Yrs - Female				# days daily MME over 90: 7		Prescribers: 4						
				Highest daily MME: 140								

Awaiting results from: **PDMP (Done), XCADocuments (Done)**   Refresh

		Admission	Visit Description	Reason for Visit	Discharge Destination	Start Date	End Date	Treating Care Provider	Care Provider	Facility	Location
∨	Chartbook										
	Encounters	Emergency Emergency		HEADACHE, VOMITING	Home or Self Care	10/31/2021	10/31/2021	Thomas F Cheatle	⋮	Nebraska Methodist Health System	Jeannie Edmundson Hospital
⟩	Demographics										
⟩	Conditions	Elective Outpatient		CHRONIC THORACIC BACK PAIN	Home or Self Care	09/01/2021	11/30/2021	Andrew E Huff	⋮	Nebraska Methodist Health System	Jeannie Edmundson Hospital
	Allergies										
⟩	Medications	Outpatient	PC EST ACUTE			08/03/2021		MICHAEL W GUZMAN	⋮	Catholic Health Initiatives	VVMC
	Documents										
	Diagnostic Studies	Elective Outpatient		CERCVICALGIA	Home or Self Care	07/30/2021	07/30/2021	Andrew E Huff	⋮	Nebraska Methodist Health System	Jeannie Edmundson Hospital
	Lab Results										
	Vital Signs										
	Immunizations	Elective Inpatient		FORMER SMOKER		06/24/2021		Kevin N Sheppard	⋮	Nebraska Methodist Health System	Jeannie Edmundson Hospital

Diagnosis

Allergies

ZZZTESTPT, **EIGHTZ**
03/02/1944 - 77 Yrs - Female

MME Alert Last 7-days
Average daily MME: 127
 # days daily MME over 90: 7
Highest daily MME: 140

Multiple Provider Alert Last 180-days
Pharmacies: 4
Prescribers: 4

Opioid/Benzo Overlap Last 45-days
Yes

Chartbook						
Allergies						
Category	Allergen	Reaction	Severity	Onset	Status	Facility
DRUG INGREDI	CEPHALEXIN	Rash	High	10/04/2019	Active	Nebraska Medicine
DRUG INGREDI	CEPHALEXIN	Rash	High	10/04/2019	Active	Nebraska Medicine
DRUG INGREDI	CEPHALEXIN	Rash	High	10/04/2019	Active	Mary Lanning Healthcare
DRUG INGREDI	FUROSEMIDE	See Comments		05/12/2016	Active	Nebraska Medicine
DRUG INGREDI	GLUTEN	Itching		09/22/2015	Active	Nebraska Medicine
DRUG INGREDI	FUROSEMIDE	See Comments		05/12/2016	Active	Nebraska Medicine
DRUG INGREDI	GABAPENTIN	Rash	High	09/07/2015	Active	Nebraska Medicine
DRUG INGREDI	FUROSEMIDE	See Comments		05/12/2016	Active	Mary Lanning Healthcare
DRUG INGREDI	LATEX	ItchingRash	High	08/27/2015	Active	Nebraska Medicine
DRUG INGREDI	GLUTEN	Itching		09/22/2015	Active	Nebraska Medicine
DRUG INGREDI	POLLEN EXTRACTS	Abnormal beh		10/03/2013	Active	Nebraska Medicine
DRUG INGREDI	GLUTEN	Itching		09/22/2015	Active	Mary Lanning Healthcare
DRUG INGREDI	PENICILLIN	Diarrhea and		06/25/2010	Active	Nebraska Medicine
DRUG INGREDI	GABAPENTIN	Rash	High	09/07/2015	Active	Mary Lanning Healthcare

Chartbook left menu:
- Encounters
- Demographics
- Conditions
- Allergies
- Medications
- Documents
- Diagnostic Studies
- Lab Results
- Vital Signs
- Immunizations

Documents

Chartbook

- Encounters
- Demographics
- Conditions
- Allergies
- Medications
- **Documents**

Documents

⊟ Documents   ☰ Date, Activity Time

Some documents are unable to be launched in the browser, therefore leverage the local device to display. Follow your organization's technical safeguard protocols.

Doc Type	Document	Source	Facility	Entered Location	Date	Details	Episode No
TH	Physical Therapy Evaluation and Treatment Acute	MD Liz Rodriguez	Regional West Medical Center	Regional West Medical Center	10/07/2021 13:25	⋮	7338832
HP	Pre Hospital Care Report		EMS ImageTrend	Valley Ambulance Services, Inc.	10/05/2021 08:45	⋮	2628493-20211005

Clinician

Doc Type   Pre Hospital Care Report

Document   Pre Hospital Care Report

External Id

Status   Available for patient care

Notes   Pre-Hospital Patient Care Report Summary

Valley Ambulance Services, Inc.
EMS Unit Call Sign: Valley
Incident Date/Time: 10/05/2021 08:45 AM
Destination Arrival Time: 10/05/2021 09:00 AM
Destination Patient Transfer of Care Time: 10/05/2021 09:00 AM
Unit En Route Date/Time: 10/05/2021 08:46 AM
Unit Arrived on Scene Date/Time: 10/05/2021 08:49 AM
Unit Left Scene Date/Time: 10/05/2021 08:59 AM
Unit Back in Service Date/Time: 10/05/2021 09:00 AM
Call Number: 9fac52b6d14641c3b14ec72c30dbbc2f
Crew Member ID: 4857, 2797

Incident Number: 45593

Gender: F
Initial Patient Acuity: Lower Acuity (Green)
Advance Directives: None

Primary Impression: Altered mental status, unspecified
Secondary Impression: Altered mental status, unspecified
Complaint Reported By Dispatch: Stroke/CVA
Patient Chief Complaint:
ALTERED MENTAL STATUS Duration:30 Minutes
Destination: Regional West Med.Ctr. - Hospital

Medical History:
 ICD-10 Code: I48.91, I10
 Description: Unspecified atrial fibrillation, Essential (primary) hypertension

Procedures And Treatments:
 Procedure: Not Recorded

Patient Vitals:

 Date And Time: 10/05/2021 08:59 AM
 BP: SBP (Systolic Blood Pressure) - 155, DBP (Diastolic Blood Pressure) - 84
 Pulse: 55, SAO2: 94
 Resp: 19, Resp Effort: Normal
 ECG: Not Recorded
 Responsiveness: Alert
 Glasgow Scores: Eye - 3, Verbal - 4, Motor - , Total Score -

Exams:

Date And Time: 10/05/2021 08:51 AM
 Skin: Normal, Dry, Warm
 Head: Deformity, (Exam Finding Not Present) , Pain, (Exam Finding Not Present)
 Neck: Tracheal Deviation-Left, (Exam Finding Not Present) , Tracheal Deviation-Right, (Exam Finding Not Present) , JVD, (Exam Finding Not Present) , Deformity, (Exam Finding Not Present) , Pain, (Exam Finding Not Present)
 Face: Deformity, (Exam Finding Not Present) , Pain, (Exam Finding Not Present)
 Pelvis: Deformity, (Exam Finding Not Present) , Pain, (Exam Finding Not Present)
 Abdomen:
  Abdominal Assessment Finding Location - Generalized
  Abdomen Assessment - Pain, (Exam Finding Not Present) , Deformity, (Exam Finding Not Present)
 Back And Spine:
  Back and Spine Assessment Finding Location - Back-General
  Back and Spine Assessment - Pain, (Exam Finding Not Present) , Deformity, (Exam Finding Not Present) , Pain with Range of Motion, (Exam Finding Not Present)
 Extremity:
  Extremity Assessment Finding Location - Ankle-Left
  Extremity Assessment - Deformity, (Exam Finding Not Present) , Edema, (Exam Finding Not Present) , Motor Function-Normal, Pain, (Exam Finding Not Present) , Pulse-Normal, Sensation-Normal
  Extremity Assessment Finding Location - Ankle-Right
  Extremity Assessment - Deformity, (Exam Finding Not Present) , Edema, (Exam Finding Not Present) , Motor Function-Normal, Pain, (Exam Finding Not Present) , Pulse-Normal, Sensation-Normal
  Extremity Assessment Finding Location - Foot-Dorsal-Left
  Extremity Assessment - Deformity, (Exam Finding Not Present) , Edema, (Exam Finding Not Present) , Motor Function-Normal, Pain, (Exam Finding Not Present) , Sensation-Normal
  Extremity Assessment Finding Location - Foot-Dorsal-Right
  Extremity Assessment - Deformity, (Exam Finding Not Present) , Edema, (Exam Finding Not Present) , Motor Function-Normal, Pain, (Exam Finding Not Present) , Sensation-Normal
  Extremity Assessment Finding Location - Arm-Upper-Left
  Extremity Assessment - Deformity, (Exam Finding Not Present) , Edema, (Exam Finding Not Present) , Motor Function-Normal, Pain, (Exam Finding Not Present) , Sensation-Normal
  Extremity Assessment Finding Location - Arm-Upper-Right
  Extremity Assessment - Deformity, (Exam Finding Not Present) , Edema, (Exam Finding Not Present) , Motor Function-Normal, Pain, (Exam Finding Not Present) , Sensation-Normal
  Extremity Assessment Finding Location - Hip-Left
  Extremity Assessment - Deformity, (Exam Finding Not Present) , Edema, (Exam Finding Not Present) , Motor Function-Normal, Pain, (Exam Finding Not Present) , Sensation-Normal
  Extremity Assessment Finding Location - Hip-Right
  Extremity Assessment - Deformity, (Exam Finding Not Present) , Edema, (Exam Finding Not Present) , Motor Function-Normal, Pain, (Exam Finding Not Present) , Sensation-Normal
  Extremity Assessment Finding Location - Leg-Upper-Left
  Extremity Assessment - Deformity, (Exam Finding Not Present) , Edema, (Exam Finding Not Present) , Motor Function-Normal, Pain, (Exam Finding Not Present) , Sensation-Normal
  Extremity Assessment Finding Location - Leg-Upper-Right
  Extremity Assessment - Deformity, (Exam Finding Not Present) , Edema, (Exam Finding Not Present) , Motor Function-Normal, Pain, (Exam Finding Not Present) , Sensation-Normal
  Extremity Assessment Finding Location - Leg-Lower-Left
  Extremity Assessment - Deformity, (Exam Finding Not Present) , Edema, (Exam Finding Not Present) , Motor Function-Normal, Pain, (Exam Finding Not Present) , Sensation-Normal
  Extremity Assessment Finding Location - Leg-Lower-Right

Extremity Assessment - Deformity, (Exam Finding Not Present) , Edema, (Exam Finding Not Present) , Motor Function-Normal, Pain, (Exam Finding Not Present) , Sensation-Normal, Pulse-Normal
Mental Assessment: Confused
Neuro Assessment: Strength-Normal, Strength-Symmetric, Speech Normal, Speech Slurring, (Exam Finding Not Present)

Injury Information:
 Trauma Center Criteria: Not Recorded
 Injury Risk Factor: Not Recorded
Narrative:
VALLEY DISPATCHED FOR A FEMALE, POSS. STROKE.
UPON ARRIVAL OF LOCAL CARE FACILITY, PT IS NOTED TO BE SITTING IN HER WHEELCHAIR, PT IS NOTED TO BE SITTING IN THE UPRIGHT POSITION, PT IS NOTED TO BE PINK, WARM AND DRY. PT IS NOTED TO BE CONFUSED.
PT RN STATED THAT THE PT IS NOTED TO BE CONFUSED, AND THAT SHE HAS BEEN SINCE THE RN STARTED HER SHIFT THIS AM. RN STATED THAT WHEN SHE LEFT LAST NIGHT AT 1800 THE PT WAS NORMAL PER HER BASELINE.
PT WAS NOTED TO NOT BE RESPONDING TO VERBAL STIMULI, PT WAS UNABLE TO FOLLOW COMMANDS, RN STATED THAT THE PT IS USUALLY ABLE TO FOLLOW COMMANDS, AND IS ABLE TO COMMUNICATE. PT WAS NOT RESPONDING TO ANY QUESTIONS. PT WAS NOTED TO HAVE INTERFERENCE THAT WAS AUDIBLE ORIGINATING FROM HER HEARING AIDS. PT HEARING AIDS WERE REMOVED, PT HEARING AIDS WERE NOTED TO BE SCREECHING, AND HEARING AIDS REMAINED IN PT POSSESSION. PT WAS ASSISTED TO HER FEET X2, AND PLACED ON EMS STRETCHER, PT IS NOTED TO BE IN POSITION OF COMFORT, PT IS PLACED IN THE FOWLERS POSITION. PT WAS TAKEN TO THE AMBULANCE WHERE BASELINE VITALS WERE OBTAINED, THERE WAS NO TRAUMA NOTED TO THE PT, PT PUPILS WERE NOTED TO BE PEARL. PT WAS TRANSPORTED TO RWMC FOR FURTHER EVALUATION OF SYMPTOMS, PT STATUS REMAINED UNCHANGED THROUGHOUT TRANSPORT. PT CARE AND REPORT WAS HANDED OVER TO RN IN RM 4. PT SIGNATURE WAS OBTAINED FROM THE PT RN DUE TO PT MENTAL STATUS.
MAYSE-NRP

This is an abbreviated summary of the original pre-hospital patient care report documented by emergency medical services. For clinical decision making please refer to the official patient care report.

Activity Date	10/05/2021		Activity Time	08:45
Transcription Date	10/05/2021		Transcription Time	15:24
Authorization Date			Authorization Time	
Last Update Date	10/05/2021		Last Update Time	15:25

Last Update User Hospital   IMAGETREND

Diagnostics

ZZZTESTPT, **EIGHTZ**
03/02/1944 - 77 Yrs - Female

MME Alert Last 7-days
Average daily MME: 127
days daily MME over 90: 7
Highest daily MME: 140

Multiple Provider Alert Last 180-days
Pharmacies: 4
Prescribers: 4

Opioid/Benzo Overlap Last 45-days
Yes

Chartbook	
Encounters	
> Demographics	
> Conditions	
Allergies	
> Medications	
Documents	
Diagnostic Studies	
Lab Results	
Vital Signs	
Immunizations	

Diagnostic Studies

Collection Date

Some documents are unable to be launched in the browser, therefore leverage the local device to display. Follow your organization's technical safeguard protocols.

Study	Document Link	Report	Status	Collection Date	Facility	Location	Episode No
CT CHEST		Report	Final	09/19/2018 05:11	Great Plains Health	Great Plains Health	156979070

Diagnostic Report Detail

ZZZTESTPT, **EIGHTZ**
03/02/1944 - 77 Yrs - Female

MME Alert Last 7-days
Average daily MME: 127
days daily MME over 90: 7
Highest daily MME: 140

Multiple Provider Alert Last 180-days
Pharmacies: 4
Prescribers: 4

Opioid/Benzo Overlap Last 45-days
Yes

CT CHEST   (219_t2)

Order Details

Specimen Collection Date   09/19/2018

Specimen Collection Time   05:11

Ordering Clinician   MOLINA-PALLETE, GUIDO (2752_t179)

Last Update Date

Last Update Time

Result Status   Final

Filler Number   5855786

Receiving Location   Great Plains Health

Age at Time of Test   74 Years

Result

EXAM: CT CHEST
INDICATION: painChest wall pain
COMPARISON: None.
TECHNIQUE: Downtime test

FINDINGS: Downtime test
THORAX: Downtime test

ABDOMEN: Downtime test

IMPRESSION: Downtime test

Lab Studies

Lab Reports

ZZZTESTPT, **EIGHTZ** 03/02/1944 - 77 Yrs - Female	**MME Alert Last 7-days** **Average daily MME: 127** **# days daily MME over 90: 7** **Highest daily MME: 140**	**Multiple Provider Alert Last 180-days** **Pharmacies: 4** **Prescribers: 4**	**Opioid/Benzo Overlap Last 45-days** **Yes**

Order Start Date 09/02/2021   Order Details   Cumulative

Order Start Time 08:00   Result Date

Ordering Clinician FEY, PAUL (35871)   Result Time

Specimen UCLN   Result Status Corrected

Specimen Collection Date 09/02/2021   Placer ID

Specimen Collection Time 08:00   Last Update Date

Specimen Received Date 09/02/2021   Last Update Time

Specimen Received Time 12:37   Age at Time of Test 77 Years

Test Item	Flag	Value	Units	Reference Range	Test Item Status	Comments	Sensitivities	Message Flag	Observation Time	Performed At
SPECIMEN SOURCE XXX		Urine Clean Catch			Final				09/02/2021	Nebraska Medicine
ANNOTATION COMMENT IMP		None			Final				09/02/2021	Nebraska Medicine
MICROORGANISM/AGENT XXX		Enterococcus faecalis			Corrected			Abnormal	09/02/2021	Nebraska Medicine
Report Status		09/02/2021 Final			Final				09/02/2021	Nebraska Medicine
ORGANISM		Enterococcus faecalis			Final	Enterococcus faecalis			09/02/2021	MICROBIOLOGY
BACTERIAL SUSC PNL ISLT MIC		MIC			Final				09/02/2021	MICROBIOLOGY
AMPICILLIN SUSC ISLT		<=2			Final		S		09/02/2021	MICROBIOLOGY
VANCOMYCIN ISLT MIC		<=0.25			Final		S		09/02/2021	MICROBIOLOGY
DAPTOMYCIN ISLT MIC		<=0.25			Final		S		09/02/2021	MICROBIOLOGY

Medication History

The Value

Longitudinal Clinical Information

Smooth Transitions of Care

Time and Cost Savings

Safety

Key to Clinician Adoption

Interoperable,
Frictionless Experience

Questions?

Prescription Drug Monitoring Program

Percent Change in Reported 12 Month-ending Count of Drug Overdose Deaths, by Jurisdiction: December 2019 to December 2020

Nebraska
Reported cases, December 2020: **209**
Reported cases, December 2019: **146**
Percent change: 43.2
* Underreported due to incomplete data.

New York City

District of Columbia

Percent Change for United States

29.6 ▲

Legend for Percent Change in Drug Overdose Deaths Between 12-Month Ending Periods

-15.9   63.6

Ahmad FB, Rossen LM, Sutton P. Provisional drug overdose death counts. National Center for Health Statistics. 2021. PROVISIONAL DATA AS AVAILABLE 7/4/2021

Nebraska Drug-Related Overdose Deaths
2016 - 2020

Opioid-Related Overdose Deaths by Year

43% of all OD

* 2020 provisional data

Benzodiazepine-Related Overdose Deaths by Year

22% of all OD

Source: Nebraska DHHS
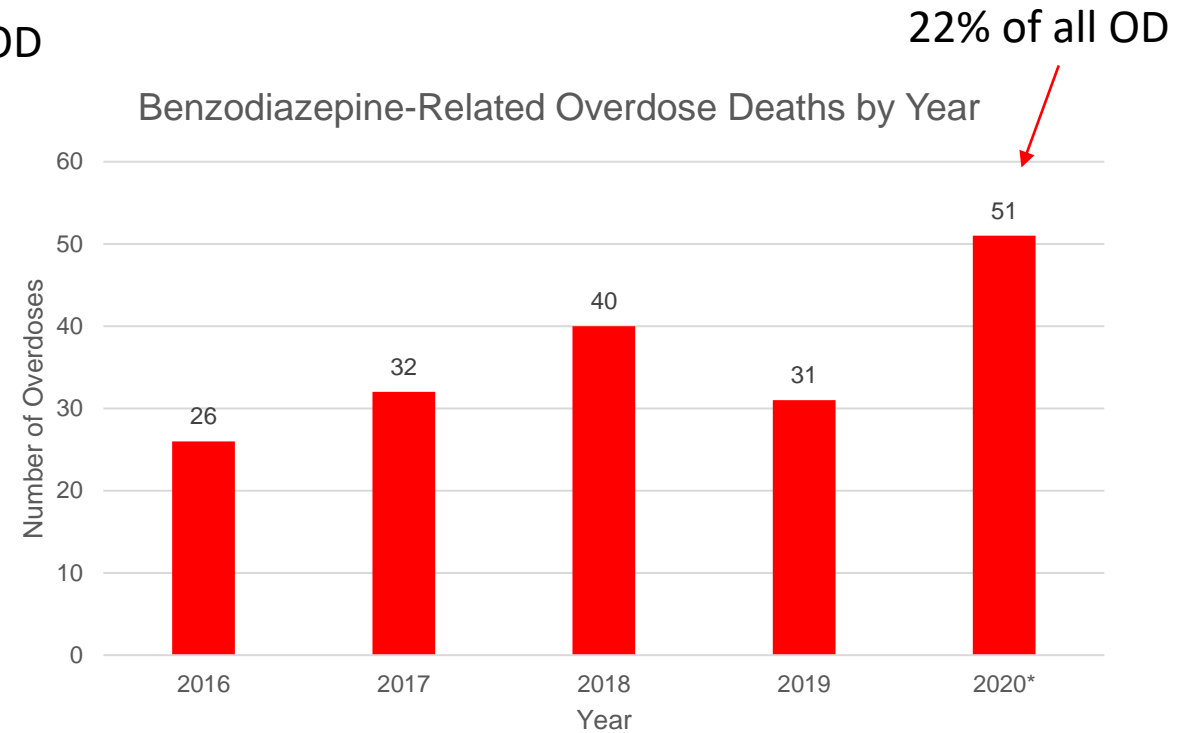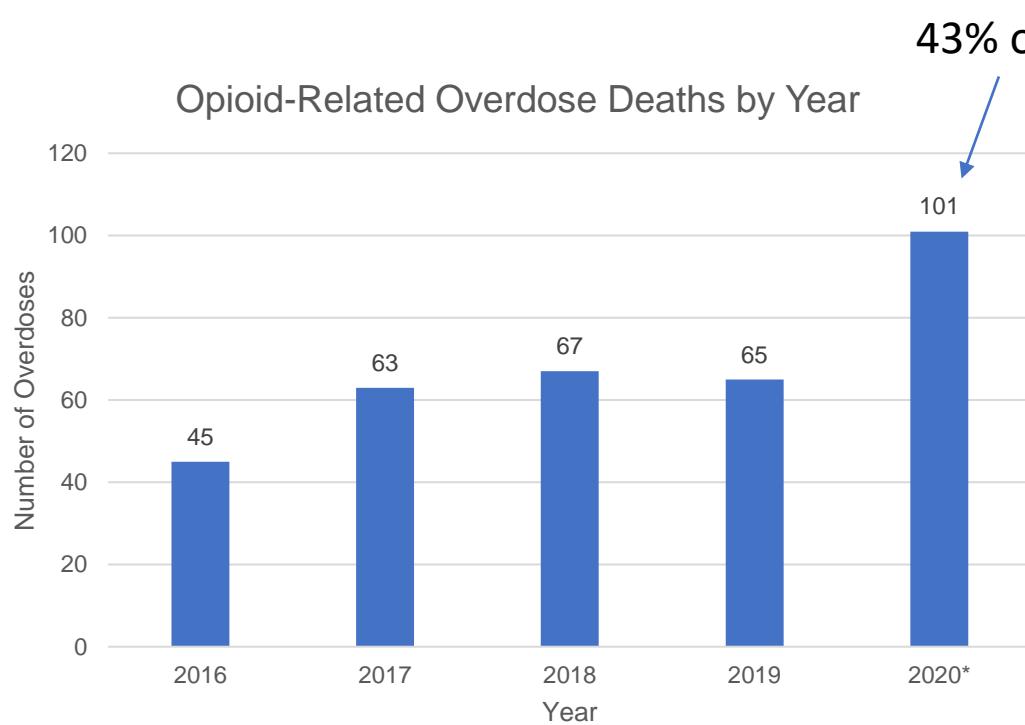
**Combatting the opioid crisis:
Multi-faceted approach**

Prevention

Education

Treatment/
recovery

Identification/
monitoring

Drugs Monitored by PDMP

Updated July 2019

Schedules II-V Only (15)

Schedules II-V and Drugs of Concern (26)

Schedules II-IV Only (9)

Schedules II-IV and Drugs of Concern (2)

All Prescription Drugs (1)

PDMP TTAC
Prescription Drug Monitoring Program Training and Technical Assistance Center

* Missouri has not enacted state legislation to establish a PDMP

NATIONAL DRUG CONTROL STRATEGY

A Report by the
Office of National Drug Control Policy

JANUARY 2019

Special Communication | April 19, 2016

CDC Guideline for Prescribing Opioids for Chronic Pain—United States, 2016

FREE

Deborah Dowell, MD, MPH[1]; Tamara M. Haegerich, PhD[1]; Roger Chou, MD[1]

[1]Division of Unintentional Injury Prevention, National Center for Injury Prevention and Control, Centers for Disease Control and Prevention, Atlanta, Georgia

JAMA. 2016;315(15):1624-1645. doi:10.1001/jama.2016.1464.

ABSTRACT

Importance Primary care clinicians find managing chronic pain challenging. Evidence of long-term efficacy of opioids for chronic pain is limited. Opioid use is associated with serious risks, including opioid use disorder and overdose.

Objective To provide recommendations about opioid prescribing for primary care clinicians treating adult patients with chronic pain outside of active cancer treatment, palliative care, and end-of-life care.

Process The Centers for Disease Control and Prevention (CDC) updated a 2014 systematic review on effectiveness and risks of opioids and conducted a supplemental review on benefits and harms, values and preferences, and costs. CDC used the Grading of Recommendations Assessment, Development, and Evaluation (GRADE) framework to assess evidence type and determine the recommendation category.

A NATIONAL GOVERNORS ASSOCIATION TOOLKIT

NGA

State Strategies to Improve the Use of Prescription Drug Monitoring Programs to Address Opioid and other Substance Use Disorders

PAIN MANAGEMENT

BEST PRACTICES

PAIN MANAGEMENT BEST PRACTICES
INTER-AGENCY TASK FORCE REPORT

Updates, Gaps, Inconsistencies, and Recommendations

FINAL REPORT

PDMP Expansion

- A Prescription Drug Monitoring Program (PDMP) is a <mark>proven means to increase accountability in opioid prescribing practices</mark> and prevent patients from receiving opioids and other controlled medications that may have <mark>adverse interactions</mark> with opioids from multiple providers.

- In some states where PDMP checking is optional, providers report <mark>difficulty using their PDMP due to lack of integration</mark> with electronic health records (EHR) which interrupts workflow and can result in decreased use.

- Providers also cite <mark>lack of interstate data-sharing</mark> and concerns <mark>about patient confidentiality as reasons not to use the PDMP</mark>. In those cases where states' integration services are made available, <mark>the service can be costly</mark>.

NATIONAL DRUG CONTROL STRATEGY

A Report by the
Office of National Drug Control Policy

JANUARY 2019

e-Prescribing Measure

Who Reports information to PDMPs?

Pharmacies

- In-state
- Mail order

Nebraska VA

Physicians

With a pharmacy license

Veterinarians

(Controlled substances only)

PDMP

Highlights

- Dispensers must submit data
- All dispensed drugs reported on at least a daily basis
- Providers and pharmacists can:
  - Access PDMP patient reports
  - Authorize delegates
- Alignment with federal policy (SUPPORT Act)
- Patient safety tool

Functionality

- Delegate management
- Enhanced reporting
- Share PDMP data with other states
- Clinical workflow integration

What needs to be reported to the PDMP?

- **Patient**: name, address, gender, DOB, phone, identifier
- **Pharmacy**: name, address, DEA/NPI
- **Prescription**: date issued, date filled, name of drug (NDC), strength, quantity, payment type
- **Prescriber:** name, DEA/NPI

Accessing PDMP Data in Nebraska

Prescribers

Pharmacists

Delegates

-Nurses

-Pharmacy technicians

Law enforcement
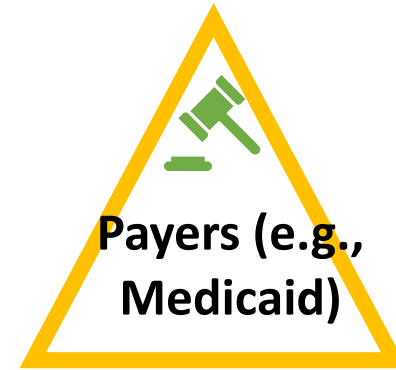
Payers (e.g., Medicaid)

Reporting all dispensed prescriptions

Required reporting as of Jan. 1, 2018

Comprehensive medication history

Patient safety tool

- Allows clinicians to make better informed decisions
- Identify potential drug interactions, allergies and medications from multiple prescribers and pharmacies
- Provides a valuable resource for unprecedented emergencies
- Tool for medication reconciliation

Patient queries

Patient query – CS/non-CS split view

Patient queries – clinical safety alerts

Patient query – combined view
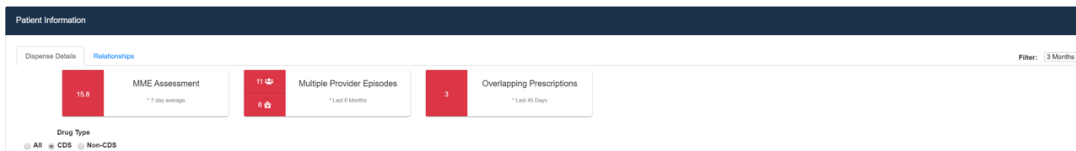
Dispenses

Combined View | Split View

Controlled Substance Dispenses

Expand All ⌄	Species	RxGov Patient ID	Date Filled ▲	...	...ys ...pply	Refill Number	Refills Authorized	State	Source Method	Payment Type
➕ 4	👤	2639318	11/06/2021			0	0	Nebraska	---	Commercial Insurance
➕ 4	👤	2639318	11/05/2021			0	0	Nebraska	---	Commercial Insurance
➕ 4	👤	2639318	11/05/2021			0	0	Nebraska	---	Private Pay (Cash, Charge, Credit Card)
➕ 4	👤	2639318	11/05/2021			0	0	Nebraska	---	Commercial Insurance
➕ 4	👤	2639318	11/05/2021			0	0	Nebraska	---	Private Pay (Cash, Charge, Credit Card)
➕ 4	👤	2639318	11/03/2021			0	0	Nebraska	---	Private Pay (Cash, Charge, Credit Card)
➕ 4	👤	2639318	11/02/2021	Sulfate ER) 30 MG TBCR	Hawkeye 9991115265	Broadway, Council Bluffs, IA, 51503, 7125599932, Pottawattamie	0	0	Nebraska	---	Commercial Insurance

Dispense Details

Drug Name:
Morphine Sulfate (Morphine Sulfate) 30 MG TABS

Date Written:
11/5/21

Date Filled:
11/5/21

Date Sold:
11/5/21

Quantity Dispensed
17 Each

Days Supplied:
17

Refill Number:
0

Refills Authorized:
0

Payment Type:
Commercial Insurance

Prescriber:
zzCrusher, zzBeverly

Prescriber DEA:
ZZ1234563

Prescriber Organizations:

Dispenser:
Test Pharmacy

Dispenser DEA:
ZT3456781

Dispenser Address:
12300 W Dodge Rd

Dispenser City:
Omaha

Dispenser State:
NE

Dispenser Zip:
68154

Dispenser County:
DOUGLAS

Dispenser Phone:
4025599999

Patient First Name:
Eight

Patient Last Name:
Zzztestpt

Patient Middle Name:

Patient DOB:
03/02/1990

Patient Gender:
F

Patient Address:
8 TestingPatient Road

Patient City:
North Platte

Patient State:
NE

Patient Zip:
69101

Patient County:
lincoln

Patient Phone Number:

Patient Identifier Type:

Patient Identifier Value:

The Challenges of a Health Information Exchange

- Quality, Quality, Quality

- Interoperability standards and consistency

- Creating a frictionless experience (SSO/Workflow Integration, Smart on FHIR experience)
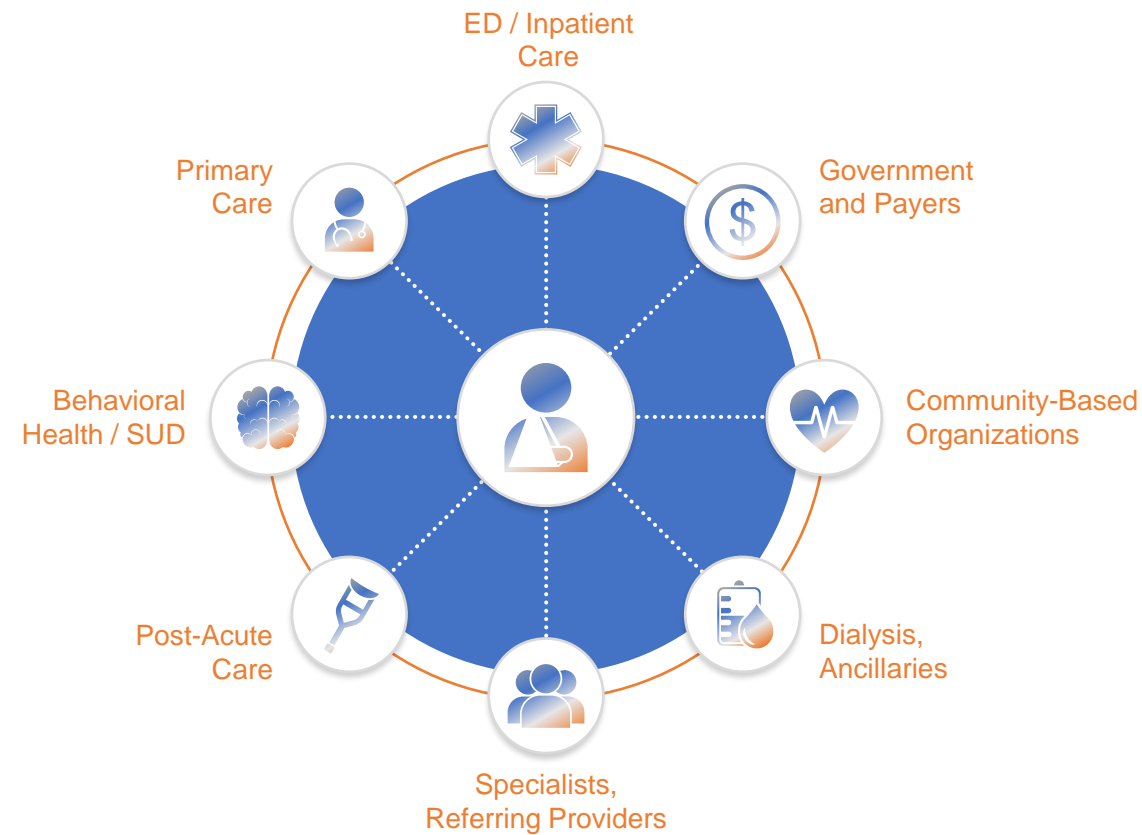
Questions?

Health Data Utility Tool:
Event Notification

What is Event Notification?

Event Notification is a patient identification and tracking solution that gets the right information to the right person at the point of care.

Four Levels of Interoperability

- **Foundational (Level 1):** Establishes the inter-connectivity requirements needed for one system or application to securely communicate data to and receive data from another

- **Structural (Level 2):** Defines the format, syntax and organization of data exchange including at the data field level for interpretation

- **Semantic (Level 3):** Provides for common underlying models and codification of the data including the use of data elements with standardized definitions from publicly available value sets and coding vocabularies, providing shared understanding and meaning to the user

- **Organizational (Level 4):** Includes governance, policy, social, legal and organizational considerations to facilitate the secure, seamless and timely communication and use of data both within and between organizations, entities and individuals. These components enable shared consent, trust and integrated end-user processes and workflows

(Healthcare Information and Management Systems Society (HIMSS))

Conditions of Participation (CAH/ACH)

Patient Presents at Hospital ED or IP

EHR Sends Patient Data to Event Notification Platform

Primary Care Physician Notification via Direct Message on file associated with NPI

Immediate

Basic demographic information and triage details about the encounter are entered into the hospital's EHR

Less than two (2) minutes

Identification of the patient and cross-references the new encounter information with prior care records from all entities

CoP

Conditions of Participation notification

EDO – Emergency Department Optimization (ED)

Patient Presents at Hospital ED

EHR Sends Patient Data to Event Notification Platform

ED Notification of High Risk Issues
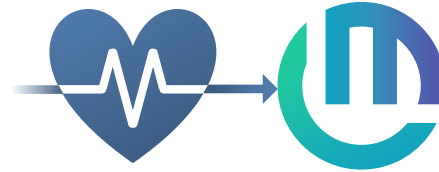

Immediate

Basic demographic information and triage details about the encounter are entered into the hospital's EHR

Less than two (2) minutes

Identification of the patient and cross-references the new encounter information with prior care records from all entities

Risk Notification

Notification is made back to the ED via secure email, Fax or integration with EHR Trackboard of high risk issues/behaviors
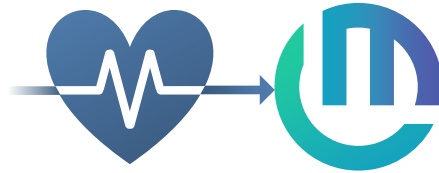
Ambulatory Clinic Case Management Notifications

Patient Presents at Hospital ED

EHR Sends Patient Data to Event Notification Platform

Staff Notified if Encounter Meets Criteria

Immediate

Basic demographic information and triage details about the encounter are entered into the hospital's EHR

Less than two (2) minutes

Identification of the patient and cross-references the new encounter information with prior care records from all entities

Ongoing

Notifications contain relevant, actionable information about the patient, allowing the provider to positively influence patient care outcomes
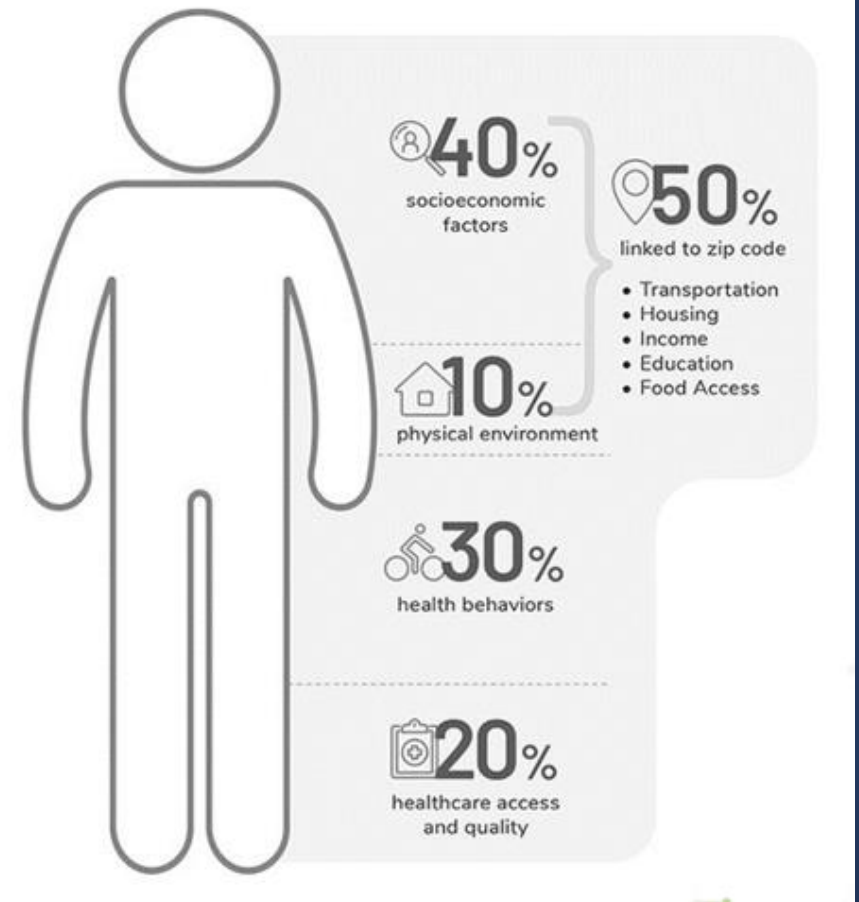
Questions?

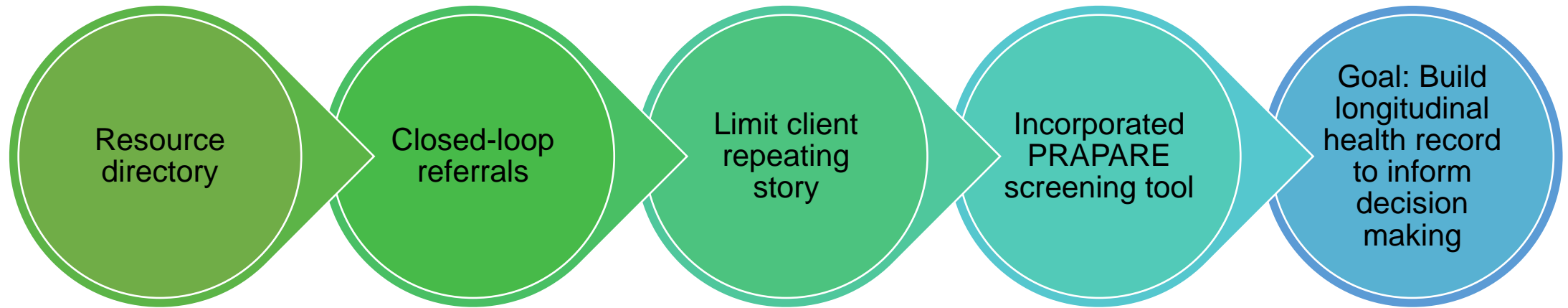# Health Data Utility Tool: Social Determinate of Health Screening and Referral

The Focus on Social Determinants

- 80% of health is determined by what happens outside of traditional healthcare (RWJF)

- National movement towards value-based care

Improving Outcomes through Proper Referral Channels

Resource directory → Closed-loop referrals → Limit client repeating story → Incorporated PRAPARE screening tool → Goal: Build longitudinal health record to inform decision making

Questions?

- tstepanek@CyncHealth.org

- https://calendly.com/cynchealth_tamarastepanek