## Making Your Investment In Clinical Data Count



### **Presented By:**

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We are a network of health care professionals addressing the challenges posed by the emerging landscape of value-based care and government health care reform.

### **OUR MISSION**

Our mission is to provide a community for like-minded professionals to come together for networking, education, and industry collaboration to stay ahead and advance their careers.

## ONE ASSOCIATION THREE COMMUNITIES



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## **ASK YOUR QUESTIONS IN OUR DISCUSSION BOARD**

## Today's Discussion

Clinical Data: Why Now?

Challenges to Effective Use of Clinical Data

Best Practices for Clinical Data Integration

Case Study

Audience Q&A









Gaurav Kumar Sr. Director Product Management Ciox Health



Paulo Pinho VP and Medical Director of Innovation Diameter Health

## **POLL – more value**

How mature is your organization's utilization of clinical data?

- Simple, acquire data for single use case
- Effective, our program is up and running for multiple use cases
- Mature, we have an enterprise approach
- Other

## Clinical Data: Why Now?



## Digital data acquisition is enabling a shift in member data sourcing

← PRESENT STATE	FUTURE STATE
<b>MANUAL RETRIEVAL</b> Fax, Mail, Onsite, Portal, Copy Services PDF Document	
<b>MEMBERS TARGETED</b> Retrieving medical records for sub-set of the entire member populations based on prioritization (high risk, gap in care, etc.)	
<b>PROVIDER TARGETED</b> Collection of medical record from a specific pre-selected provider office	
USE CASE SPECIFIC Only retrieving partial clinical information based on the requested use case (for example, clinical notes, face-to-face visits for RA)	
<b>RETROSPECTIVE</b> Retrieving medical records from previous year date of service	Data retrieval of medical current post visit in the current year

## Digital data acquisition is enabling a shift in member data sourcing



## Clinical Data's Potential

- Rich in health details
- Timely
- Valuable for all stakeholders
- Available in high volumes



## POLL

For deployment of structured clinical data (CCDA/FHIR), what is the primary use case in your organization?

- Risk Adjustment
- HEDIS and Quality Reporting
- Care Management
- Population Health
- Medical Review/Utilization Management
- Social Determinants of Health
- Other

## Use Cases – Risk Adjustment and Beyond

- Risk Adjustment
- HEDIS/Quality
- Gaps in Care
- Care Management
- Population Health
- SDOH/Health Equity



## Challenges to Effective Use of Clinical Data

Volume: Billions of encounters Velocity: Data doubles every 73 days Fragmentation: Multiple sites of care





hemoglobin A1c HbA1c HGB A1C HGBA1c A1c Hb A1c results [Other] hemoglobin A1c %A1c glycated hemoglobin (A1C) hemoglobin A1c% Result [other] aic glycohemoglobin (A1C) A1c Level glycohgb (A1C) HbA1c (Ref Range: 4.2-6.3) A1c w/EAG hemoglobin aic % A1c H.A1C HGB A1C:HGB A1c glycohemoglobin A1C% gly.hemoglobin A1c % hemoglobin A1c glycohemoglobin (A1C) hemoglobin A1c: HbA1c HGB/A1C glycosylated HGB A1C3% ha1cb HA1C Hemoglobin A1c

ga1cg A1c % HA1C/glycated hemoglobin HGB A1c hplc Hb A1C% Control A1C hemoglobin glycol HGB A1C HbA1C - controlled diabetic A1C3 glycos HGB A1C glycohemoglobing A1C hemoglobin A1C POC hemoglobin A1C%

LOINC 4548-4 HbA1c %

### 41% of HbA1c results

in a given sample did not use LOINC. There were 50+ different uncoded, textual mappings.





## Diameter Health Research Shows Need for Upcycling Data

Upcycle multi-source, multi-format clinical data to increase standardization and interoperability of data

RISE



Results based on study performed across cohort of multi-source data spanning 14 EMR systems and >500K clinical documents.

#### 2 primary care office visits - April 2019



### AGE

PAST MEDICAL HISTORY

#### **MEDICATIONS**

#### 68 years old

1. Hypertension

2. Hyperlipidemia

3. Episodic low back pain

4. Posterior wall Myocardial Infarction

5. Acute Bronchitis

Aspirin 81 mg tablet – 1 PO QD Amlodipine 10 mg/ Atorvastatin 20 mg tablet– 1 PO QD Meloxicam 15 mg tablet – 1 PO QD Cyclobenzaprine 10 mg tablet – 1 PO Qhs Acetaminophen 325/ Oxycodone hydrochloride 5 mg tablet – 1 PO Q8h PRN

Nitroglycerin 0.4mg sublingual tablet SL PRN chest pain Metoprolol Tartrate 50 mg tablet - ½ PO BID Famotidine 20 mg tablet - 1 PO Qhs Clopidogrel 75 mg tablet - 1 PO QD Zithromax Z-pack - use as directed Benzonatate 100 mg PO TID

Inpatient Hospital Stay – April 2021





MEDICATIONS

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Metoprolol Tartrate 50 mg tablet - 1/2 PO BID

Famotidine 20 mg tablet - 1 PO Qhs

Clopidogrel 75 mg tablet – 1 PO QD

Zithromax Z-pack – use as directed

Benzonatate 100 mg PO TID

#### Urgent Care Visit – June 2021





#### MEDICATIONS

Hypertension
Hyperlipidemia
Episodic low back pain
Posterior wall Myocardial Infarction

5. Acute Bronchitis

68 years old

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Benzonatate 100 mg PO TID

All Encounters



4. Posterior wall Myocardial Infarction Aspirin 81 mg tablet - 1 PO QD Amlodipine 10 mg/ Atorvastatin 20 mg tablet- 1 PO QD Meloxicam 15 mg tablet - 1 PO QD Cyclobenzaprine 10 mg tablet - 1 PO Qhs Acetaminophen 325/ Oxycodone hydrochloride 5 mg tablet -Nitroglycerin 0.4mg sublingual tablet SL PRN chest pain Metoprolol Tartrate 50 mg tablet - 1/2 PO BID Famotidine 20 mg tablet – 1 PO Qhs Clopidogrel 75 mg tablet - 1 PO QD Zithromax Z-pack – use as directed Benzonatate 100 mg PO TID

## Best Practices for Clinical Data Integration



## Data Harmonization -Differentiation & Value

• The Ciox Data Harmonization capability for digital charts allows you to **retrieve once and use multiple times.** 

• Plug organized and clean CCD content into **multiple use** cases ranging from risk adjustment to analytics.

- Chart content that is normalized, deduplicated and summarized
- Best in industry scalability and speed
- Automated ingestion of **multi-source**, **multi-format clinical data**
- Consolidated longitudinal data view at a per member level
- Flexible data output options to support each use case





## **Ciox Data Utilities™ helps unlock the potential of this data**

The expansion of digital data acquisition increases the need for data normalization, summarization and <u>augmentation with member specific data</u>.





## **Ciox** Data Utilities<sup>™</sup>- Social Determinant Insights

Augment harmonized chart data with member & population level socioeconomic factors.



RISF

Email Addresses

## Unlock data acquisition for CMS Advance Notice on SDOH

### Harmonized data enables chart level socioeconomic data capture.

### **Data Collection**

•Stratification and outreach data from Social Determinant Insights

- •Self reported member data from targeted screenings
- •Z Code capture from charts (NLP) and claims data

### **Data Reporting**

- •Chart coding coders can assign Z Codes based on data collected;
- •Z Code capture based on chart stratification
- •Assign codes based on self reported member data
- •Assign/validate codes from NLP extracts and unstructured notes
- •Package data for CMS reporting from coding output

### **Unlock Use Cases**

- Inform member screening touchpoints
- •Provider engagement and education (Z Code capture at POC)
- •Risk Adjustment suspecting analytics



### RISE





# THANK YOU

