



# Patient Insight Demo

Longitudinal Visualization of Patient Data

John Scott  
[jscott64@jhu.edu](mailto:jscott64@jhu.edu)



# DEMO AGENDA

- 1 View Composition
- 2 Data Aggregation
- 3 CoE Show Cases



# Patient Insight: View Composition

- ✓ Patient Insight instance defined by a patient cohort
- ✓ Template and configuration driven
- ✓ Has set of curated views pertinent to a clinical context
- ✓ Views are composed of panels
- ✓ Panels are composed of longitudinal metrics
- ✓ Unified by common X-Axis



# Basic Template



 **Patient Information** Name: "Katherine Johnson" EMRN: EXXXXXXXXX DOB: 02/26/1971 Race: Black or African American Sex: Female  

 Prediction 

 Summary 

Chart View: Creatinine 

Medications 

Patient Events 

Creatinine 



# Patient Insight: Data Aggregation

- ✓ Heterogeneous data
  - ✓ Clinical Data from EMR
  - ✓ Custom data
  - ✓ Calculated values
- ✓ Multiple sources, batch and on demand
- ✓ Aggregated into unified series



# Aggregated Series



Patient Information Name: "Ibn Batutta" EMRN: EXXXXXXXXX DOB: 09/08/1992 Ethnic Group: Not Hispanic First Race: Black Sex: Female

Cohort Filter

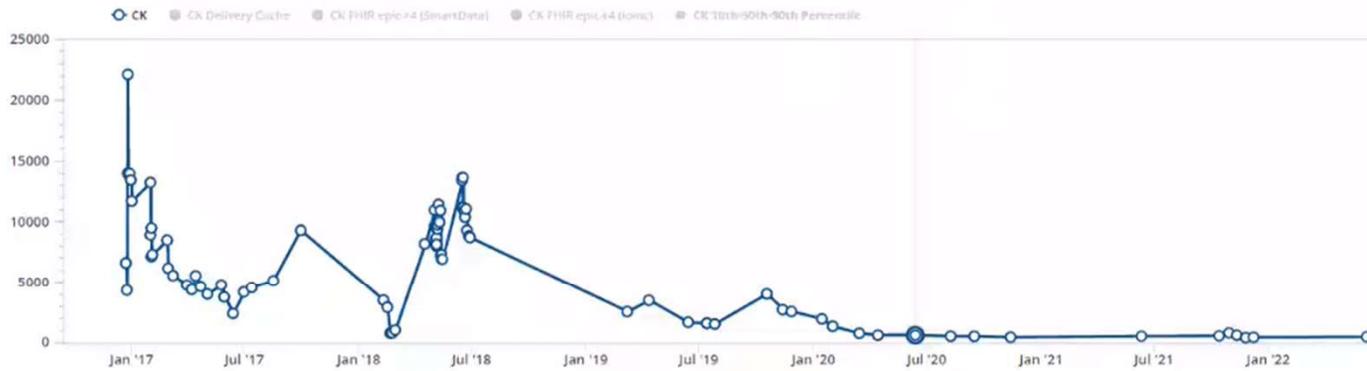
Match Patient

Summary

Chart View: Myositis CK (fhir)

Medications - No Data Found

Lab CK (fhir)



# Patient Insight: Data Transformation

- ✓ Filtering cleaning and shaping of data for display
- ✓ Harmonization of disparate data
- ✓ Derived values calculated from raw data
  
- ✓ ETL: Extract Transform and Load for batch data
- ✓ ELT: Extract Load and Transform for dynamic data



# CoE Showcase



Patient Information Name: "Jane Goodall" EMRN: EXXXXXXXXX DOB: 09/07/1986

Summary

Chart View: All MS Charts

Medications

Dosage Unavailable



Patient Events

Relapse MRI: no lesions MRI: new lesions



PDDS (Patient Determined Disease Steps)



**Thank You**

