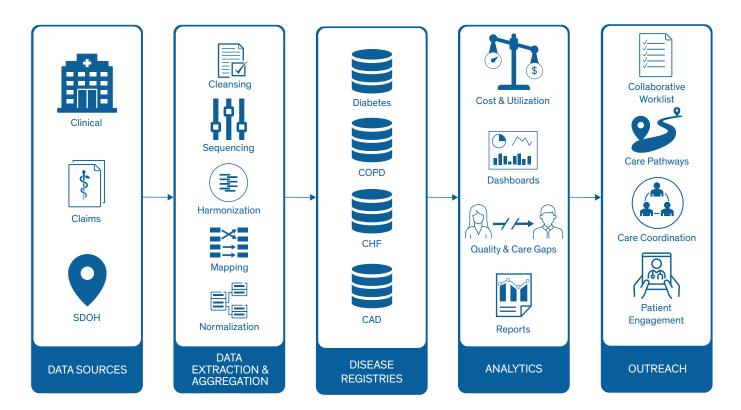
# Population Health Management & Care Coordination Custom Solution Engineering

# **Project Charter**

Population health management and care coordination point-of-care workflow optimization capabilities through point-of-care-integrated patient identity management, cohort stratification, event notifications, and clinical dashboards.

### **Use Cases Fulfilled**

Aggregation and normalization of the data from multiple clinical systems. Integration to the point of care for chronic condition gaps, member risks, and screenings. Intervention worklist to facilitate care coordination.



# **Custom Solution Details**



# Technologies and languages leveraged

AngularJS, Java, groovy, MongoDB, SQL, FHIR, C#, SAML, Elasticsearch, Redis, Apache Kafka, Spring Boot, Spring Batch, Spring Cloud Data Flow, & MySQL.



# **Functionality**

- Delivered providers and clinics a central location for quality screening and attestation.
- Java project exposed APIs, making calls to APIs for FHIR resources like patient, coverage, and practitioner.
- Aggregated payer data to enable new marketplace for telehealth and patient access use cases.
- Self-serve data filtering, dashboards of population count for patient problems that are active or resolved.



## **Data Sets**

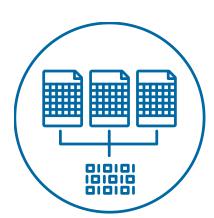
- Problems
- Insurance coverage
- Demographics
- Providers & Groups
- Risk Gaps
- Quality Gaps

# **Custom Solution Details**



## **Data Sources**

- MongoDB
- Unity/JSON
- Zip files containing pipe-delimited text files
- Third party healthcare analytics platform for Chronic Conditions and risk related data
- Third party system for value-based care providing quality measure information
- Client's proprietary data lake with organization, demographic, and coverage information.



### **Data Transformation**

- De-duplicating patient, provider, location, and provider group information
- Mapping Data fields from various CDO's to the desired target mapping (E.g. MRN is unique ID for one CDO, EMR GUID might be the unique identifier for another CDO)
- Aggregation of data from several sources requiring distinct matching algorithms per organization to provide a single cohesive patient record.



# **User Interface Components**

- Gap dashboard
  - Screenings, chronic conditions, quality measures
- Members dashboard
- Member search
- Member record
  - iFrame of external tool
  - Active gaps for member
  - History of user activity
  - Save and continue/save and submit



# **User Interface Components (continued)**

- Print page capability
- Export to csv capability for dashboard results
- Document management integration for filing evidence for patient problems
- Virus scan for document upload
- Type-ahead search
- Predictive search
- Deep linking of patient records (link from anywhere in application to patient's record in application)
- User preferences storage and configuration
- Individual CDO's configuration options and user provisioning in an admin application



# **Data Security & authentication**

OAuth, Fortify security scans (OWASP, CWE/SANS, etc), java keystores (jks), internal user registration, POST requests for sensitive data

# Your vision, our solution engineering

Galen's solution engineering team provides custom development services to assist organizations in the augmentation, extension, and seamless integration of their applications.

From full-service custom solution development, to strengthening your existing operations and teams, Galen has the resources to deliver modern, high quality solutions to meet your business needs.

Contact us at sales@galenhealthcare.com to get started.