Agenda

• Clearsense Overview
• DISCOVER Overview
• DISCOVER Ongoing Support
• DISCOVER Demo
Clearsense will be providing Banner with an enterprise data platform

**DATA SOURCES**
- **Streaming**
  - HIE
  - Sensors
  - Devices
  - Monitors
  - IoT Logs
- **Clinical & Operational**
  - EHR
  - ERP
  - RCM
  - SCM
  - PHM
  - Others
- **Other/Scientific**
  - Images
  - Biologics
  - Documents
  - Study Sets
- **External**
  - Benchmarks
  - Claims
  - Patient-Reported
  - Reference & Public Data

**INGEST**
- Source data format in its entirety

**TRANSFORM**
- Process of providing data normalization, transformation, extraction, analytics, etc.

**DATA LAYER**
- Hadoop-based data layer with configurable logical data zones, accessible via SQL, R, Python, and other common languages
  - Raw Zone
  - Curated Zone
  - Enriched Zone
  - EDW & Marts
  - Lakes & Pools
  - User Views

**CONNECT**
- ODBC, JDBC, Odata, JSON, CSV, XML, HL7/FHIR, REST API, SOAP Web Services

**VISTA**
- Source of truth management for providers and locations

**ADVANCED ANALYTICS SUITE**
- AWARE Streaming Analytics
- VISUALIZE Data Visualizations
- DISCOVER OMOP-Based Data Mining
- CITIZEN DATA SCIENCE Automated feature selection & model optimization
- DATA SCIENCE WORKBENCH Build & test open source algorithms

**LEGACY**
- Legal medical record and document search and viewer

**PRIVATE CLOUD**
- Hyperconverged, composable, distributed, resilient, secure, multi-tenant, hosted private cloud with native hybrid and multi-cloud support

**INSIGHTS**
- AI/ML-assisted data discovery

**GOVERN**
- Drive data confidence with the ability to trace data from source to target

**Business Applications & Analytic Tools**
- Business Applications & Analytic Tools
  - EHR
  - ERP
  - RCM
  - SCM
  - PHM
  - Others
  - Qlik
  - Tableau
  - Excel
  - Others

**SINGLE SIGN ON WEB ACCESS**

**VPN**

**SFTP**

**SFTP & VPN**

**Bring Your Own Tools**
DISCOVER is a tool currently installed and pulling from the existing OMOP database.

**DATA SOURCES**
- **Streaming**
  - HIE
  - Sensors
  - Devices
  - Monitors
  - Audio
  - Video
  - IoT Logs

- **Clinical & Operational**
  - EHR
  - ERP
  - RCM
  - SCM
  - PHM
  - Others

- **Other/Scientific**
  - Images
  - Clinical Trials
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**CONNECT**
- Single Sign-On Web Access

**DATA CONSUMERS**
- Business Applications
  - EHR
  - ERP
  - Tableau
  - RCM
  - SCM
  - PHM
  - Others

**VPN**
- Secure Audit Log

**SFTP**
- ODBC, JDBC, OData, JSON, CSV, XML, HL7/FHIR, REST API, SOAP Web Services
DISCOVER: Empowering researchers with a self-service data exploration tool

- Powerful **self-service** web-based data exploration tool
- Encompasses Banner OMOP data back to 2014 and includes 2.5 billion clinical events across 7 million patients
- Enabled rapid access to **self-service** data without having to go through Honest Broker program
- Clean, simple, and intuitive interface
- Cohorts can easily be made available for **reporting**
- Cohorts can be **easily shared** and viewed by others
- Robust **filtration** capabilities on Scope, Diagnosis and Interventions, and Demographic and Clinical
- Tracker shows **real time** size of cohort as it is being defined
- **Compare** function allows you to compare your current defined cohorts to others
- **Intersection**/subgroup of patients saved as a subgroup
- **Cohort Summary** provides a detailed summary with more functions like freezing, sampling, etc.

*Enterprise license for Discover through end of 2022 (auto renew)*
**DISCOVER Resources**

<table>
<thead>
<tr>
<th>DISCOVER</th>
<th><a href="https://secure.clearsensecloud.com/login/banner">https://secure.clearsensecloud.com/login/banner</a></th>
<th>Going to this link while logged into your pc should log you in to the application using single sign on. When creating a bookmark, be sure to use this exact link.</th>
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<tbody>
<tr>
<td>DISCOVER Training Video</td>
<td>(ETA 7/29/21)</td>
<td>30-minute instructional video walking through the tool.</td>
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• Help you to navigate the different areas of the software  
• Clearly demonstrate how to carry out many different tasks using Discover  
• Introduce you to useful features |
| Cohort Discovery Guide | [Discover Cohort Discovery Guide - Updated July 2021.pdf](Discover%20Cohort%20Discovery%20Guide%20-%20Updated%20July%202021.pdf) | This guide supports cohort creation. Also, it takes you through the different screens and functions, and provides some introductory exercises. |
DISCOVER Support and Training

- **Support / Access:** ServiceNow
- **Monthly meetings for ongoing training:**
  - Detailed trainings
  - Shared learnings
  - Tips & tricks
  - User collaboration
  - Q & A