

Access EMR Data for Research

Srikar Chamala, PhD | Clinical Assistant Professor

Director of Biomedical Informatics (*Dept. of Pathology*)

Univ. of Florida | Dept. of Pathology, Immunology, and Laboratory Medicine

UF Health Pathology Laboratories | Dept. of Health Outcomes and Policy

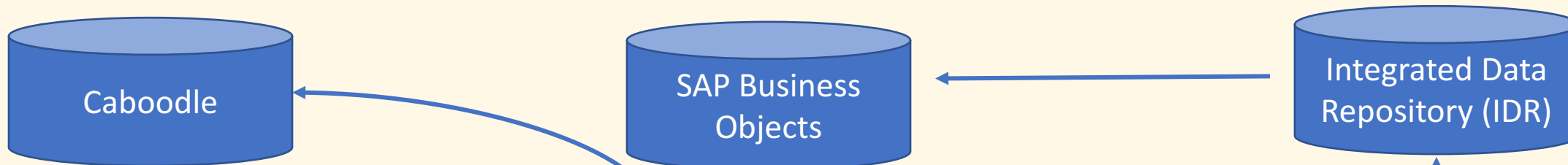
Outline

- **UF Health Electronic Health Data Architecture Overview**
- **Challenges – Data Elements**
- **SAP Business Objects/Clarity Reports**
- **Integrated Data Repository (i2b2 & Custom)**
- **OneFlorida Clinical Research Consortium**
- **Getting Assistance**

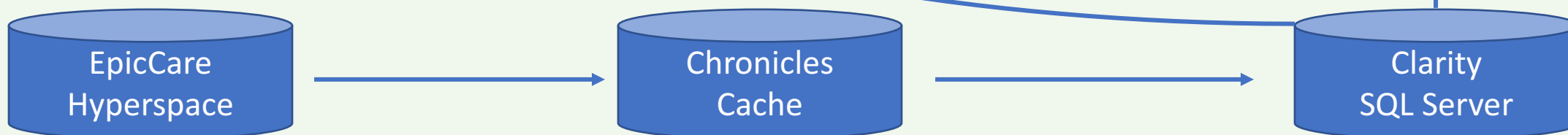
UF Health Electronic Health Data Architecture

Decision support service

- Epic's data warehouse
- Star schema – relational SQL data warehouse
- Can integrate with other data sources like SQL databases, flat files, etc.
- Enterprise information management
- Comes with SAP Webi a Business Intelligence reporting tool
- Can integrate with other data sources like SQL databases, flat files, etc.
- A large-scale database that collects and organizes information from across UF Health's clinical and research enterprises.



UF Health Information Technology



- Patient-centered electronic health record
- Reporting workbench
- Real-time Operational Reporting
- No-SQL database – KB SQL language
- Clarity Reporting / Enterprise Reporting
- Most of the Chronicles data is pushed here
- Snowflake schema – relational SQL data warehouse
- One day old data

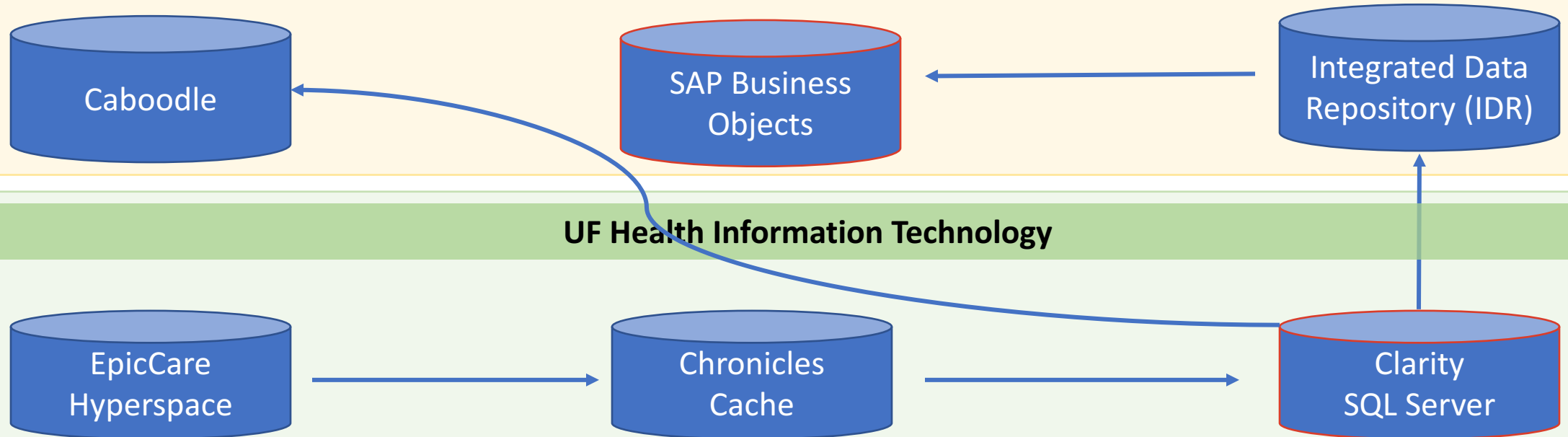
Challenges – Data Elements

- **What data elements are needed?**
 - Translating research data elements to clinical data elements
 - Experimental Pathologists
 - May have most difficult time
 - Collaborate/consult a clinician/pathologist
- **Where are the required data elements located in EMR databases?**
 - Epic Clarity / IDR / SAP BO / i2b2 etc.
 - Collaborate with biomedical/clinical informaticist
- **Understanding the quality and limitations of the query used to pull the data?**
 - Collaborate with clinician/pathologist and biomedical/clinical informaticist

Clinicians/Pathologists - SAP Business Objects/Clarity Reports

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Accessing Integrated Data Repository (IDR) for Research

- **Researchers can access IDR data in two ways**
 - i2b2 Cohort Discovery tool
 - Data Support / IRB Data Requests
- <https://www.ctsi.ufl.edu/research-initiatives/completed-projects/integrated-data-repository/>

i2b2: Informatics for Integrating Biology and the Bedside

- **Built on IDR**
- **i2b2 Cohort Discovery tool that can be used to ask these questions and more**
 - How many patients in the health system have particular ailments?
 - How many meet study eligibility criteria?
 - How many have agreed to be contacted for research studies?
 - Etc ..
- <https://idr.ufhealth.org/i2b2/>
- **Office hours for i2b2 assistance**
 - <https://www.ctsi.ufl.edu/2018/01/09/office-hours-announced-for-i2b2-assistance/>

Custom Data Requests

- **i2b2 cohort data / custom data - apply for IRB approval to obtain detailed data from the IDR for further research analysis**
- **You will work with IDR team to obtain identifiable/de-identified datasets**
- **Data Retrieval From IDR is not free – CTSI Vouchers**
- **<https://idr.ufhealth.org/services/>**

- <http://onefloridaconsortium.org/>
- **Fee Structure**
 - <http://onefloridaconsortium.org/front-door/fee-structure/>
- **Lot of Data – understand the quality steps involved in acquiring the data from various institutions.**

IRB / Costs / Guidance

- **CTSI Research Project Navigator will help,**
 - Bob Kolb - kolbhr@ufl.edu - 352.273.8882
 - Classify your study between QA/QI vs Research
 - <http://irb.ufl.edu/irb01/researcher-information/qaqi-vs-research.html>
 - IRB process
 - CTSI Vouchers – Data Retrieval From EMR Repositories like IDR is not free
 - <https://www.ctsi.ufl.edu/research/voucher-request/>
 - Get in touch with right informatics people for retrieving data (IDR Team)
- **Biomedical Informatics team at Dept. of Pathology, Immunology and Laboratory Medicine**
 - Srikar Chamala, Ph.D. – Director Biomedical Informatics; schamala@ufl.edu.

Thank you!!

Q&A