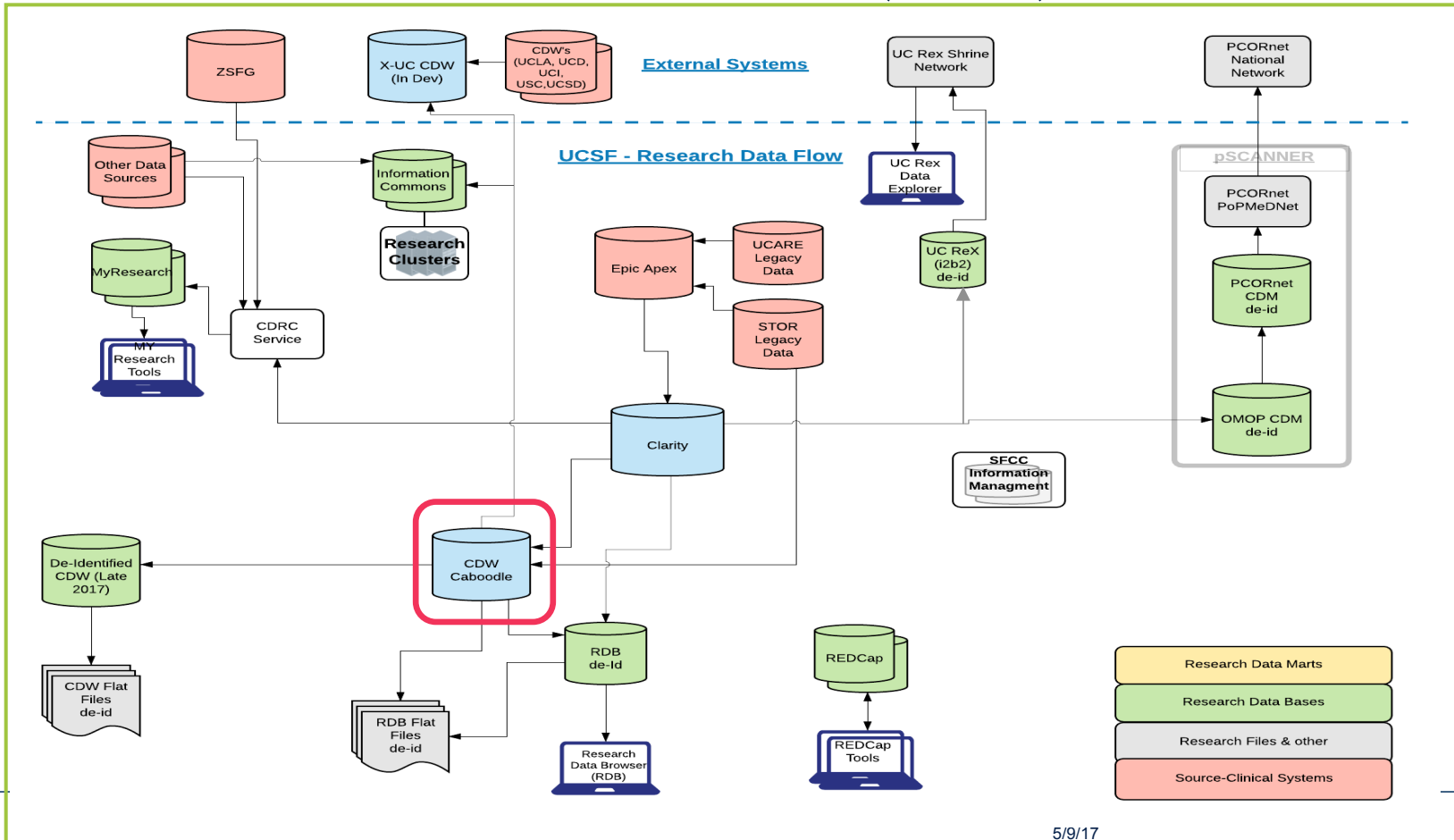# Clinical Data Warehouse (CDW)
AKA Caboodle

Dana Ludwig
Enterprise Information and Analytics

UCSF Clinical Data Warehouse (CDW)

Scenario	Self-serve (Free)	Consult Required (May have recharge)	IRB needed	Requires MyResearch account or other secure environment	Includes clinical notes	UC Health data available in addition to UCSF data
Counts	Yes	No	No	No	No	Yes
De-ided data	Yes	No	No	No	No	Yes *
Limited data	No	Yes	Yes	Yes	No	Yes *
Id'ed data	No	Yes	Yes	Yes	Yes	Yes *
Recruit	No	Yes	Yes	Yes	No	Yes *

* Process to obtain data from UC Health sites can be very lengthy

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UCSF Clinical Data Warehouses (CDW)

Clinical Data Warehouse (CDW)
High-Value APeX Data for Research

- Created by Epic about 2 years ago
- Sourced from High-Value Clarity Tables
  - 170 Tables today (UCSF uses only 104)
  - 2698 Columns (UCSF uses only 1525)
  - Small enough that you can understand all of it!
    - Solves the Forest and Trees problem of Clarity
- Includes a web-based Data Dictionary including where the data came from
- Supports integration with **Custom Non-Epic tables**
- Supports merging **Custom Non-Epic data** into Epic tables
  - As long as you don't add new columns to Epic tables
  - Ideal for UCSF STOR Legacy data integration
- Includes a **daily**, incremental ETL supported by Epic
  - CDW is only 1 day behind APeX.

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Clinical Data Warehouse (CDW)
What it Contains

- Includes migrated legacy data before 6/1/2012
- All Data feeding RDB:
  - Demographics, Diagnoses, Med orders, procedure orders, billing procedures, Billing accounts, Insurance Coverage data, visits, hospitalizations, labs, providers, departments, allergies, immunizations, vital signs
- **UCSF Custom data**: STOR data warehouse, others in the future
- flowsheets feeding the current flat files
- Medication Administration Record (IP Only)
- Medication Dispensing (IP Only)
- Surgical Cases and Procedures
- Emergency Department Visits
- Care Teams per Patient per Time Interval
- Chief Complaints
- SmartData
- Lab Tests (not just Lab Results)
- ADT - Patient Location (IP Only)

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Clinical Data Warehouse (CDW)
Limitations of CDW

- No clinical notes today
- HIPAA PHI - Like Clarity, it has identifiable patient information, so governance for research use is complicated
- Not the complete EHR - sometimes you need to go back to Clarity.

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CDW Web-based Data Documentation - by Epic

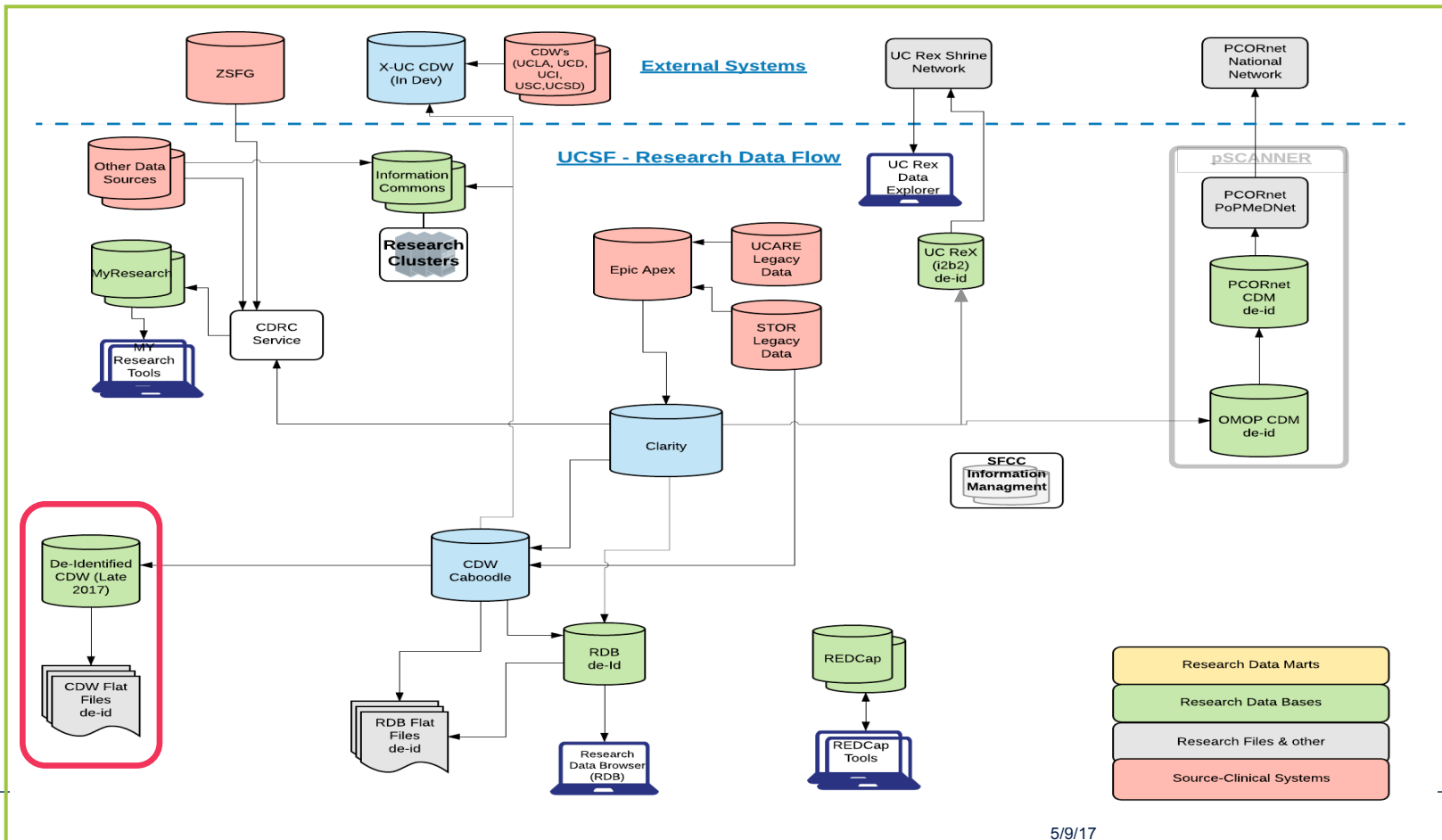

data.ucsf.edu   5/9/17

De-Identified CDW

Scenario	Self-serve (Free)	Consult Required (May have recharge)	IRB needed	Requires MyResearch account or other secure environment	Includes clinical notes	UC Health data available in addition to UCSF data
Counts	Yes	No	No	No	No	Yes
De-ided data	Yes	No	No	No	No	Yes *
Limited data	No	Yes	Yes	Yes	No	Yes *
Id'ed data	No	Yes	Yes	Yes	Yes	Yes *
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data.ucsf.edu   5/9/17

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De-Identified CDW

5/9/17

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Near Future: De-identified Clinical Data Warehouse

- Clinical Data for **All** UCSF Researchers:
  - As with CDW, it's 104 tables are easy to learn by everyone
  - Deidentified --> **all** UCSF investigators can see **all** the data on **all** the patients without IRB approval
  - Deidentified --> Self-service access to the data.
    - No "Honest Broker" required
    - no recharge
    - no delay to get your data
- **User-friendly views**
  - Internal codes are defined within the same view
    - e.g., Diagnosis had diagnosisKey = 12345
    - Now has DiagnosisName = 'Diabetes Mellitus'
  - A single, unique patient key is provided in every patient-related view
- User-friendly Flat Files - in case your software can't read relational tables.
- Available 4th Quarter, 2017

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