

UC-Research eXchange (UC-ReX): Connecting Data Across our Clinical Data Warehouses

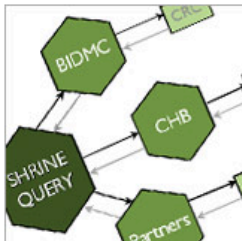
UC-Wide Biomedical Research Acceleration Initiative
Retreat

9/23/11



Search de-identified data from clinic visits at several Harvard-affiliated hospitals.

SHRINE



[Overview](#)

[Contacts](#)

[Getting Started](#)

[Beth Israel Deaconess Medical Center](#)

[Brigham and Women's Hospital \(Partners\)](#)

[Children's Hospital Boston](#)

[Dana-Farber Cancer Institute](#)

At a glance

Key Features

Request aggregate numbers of patients seen at participating hospitals who meet criteria of interest

Useful for

- Characterizing potential clinical trial cohorts
- Generating new research hypotheses
- Conducting research requiring large sample sizes (e.g., population health studies)

Available to
Eligible clinical
investigators at
participating institutions

[Watch Tutorials](#)

[Get Started](#)

What is SHRINE?

The Shared Health Research Information Network (SHRINE) helps researchers overcome one of the greatest problems in population-based research: Compiling large groups of well-

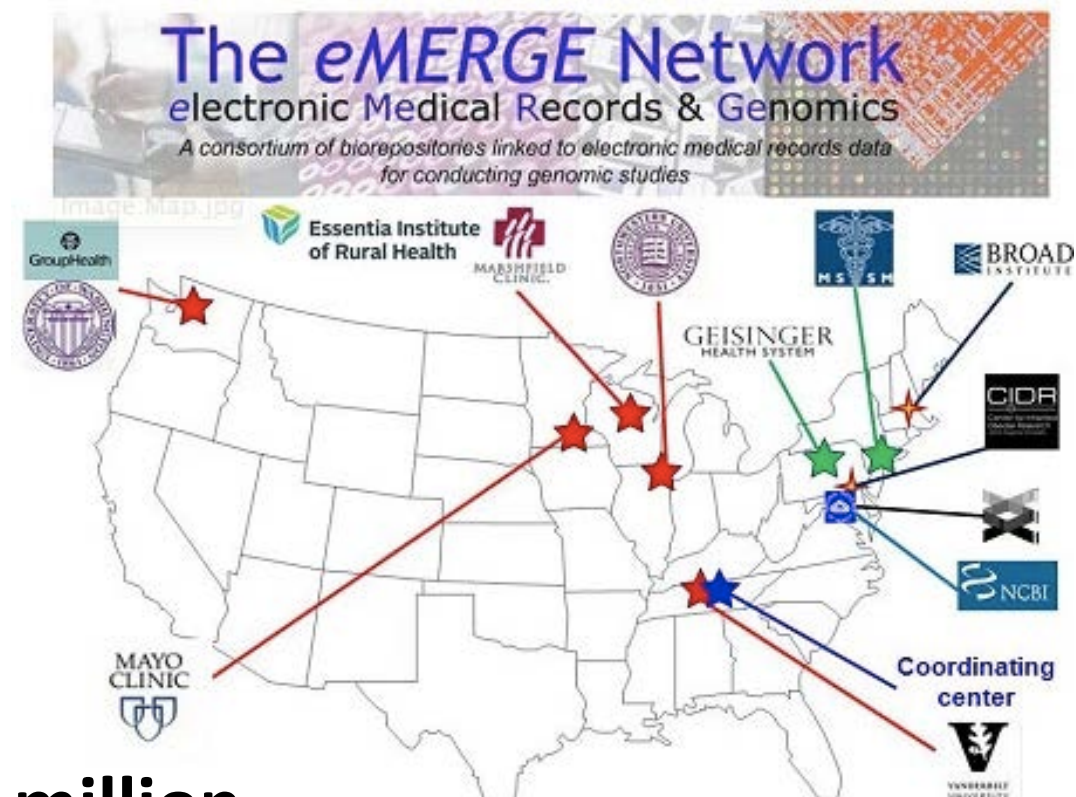
Sponsoring Program

[Biomedical Informatics Program](#)

See Also

- [Biostatistical Consulting](#)
- [Genetics & Bioinformatics Consulting](#)
- [IRB Ceded Review Request](#)
- [REDCap \(Research Electronic Data Capture\)](#)
- [Regulatory Atlas](#)

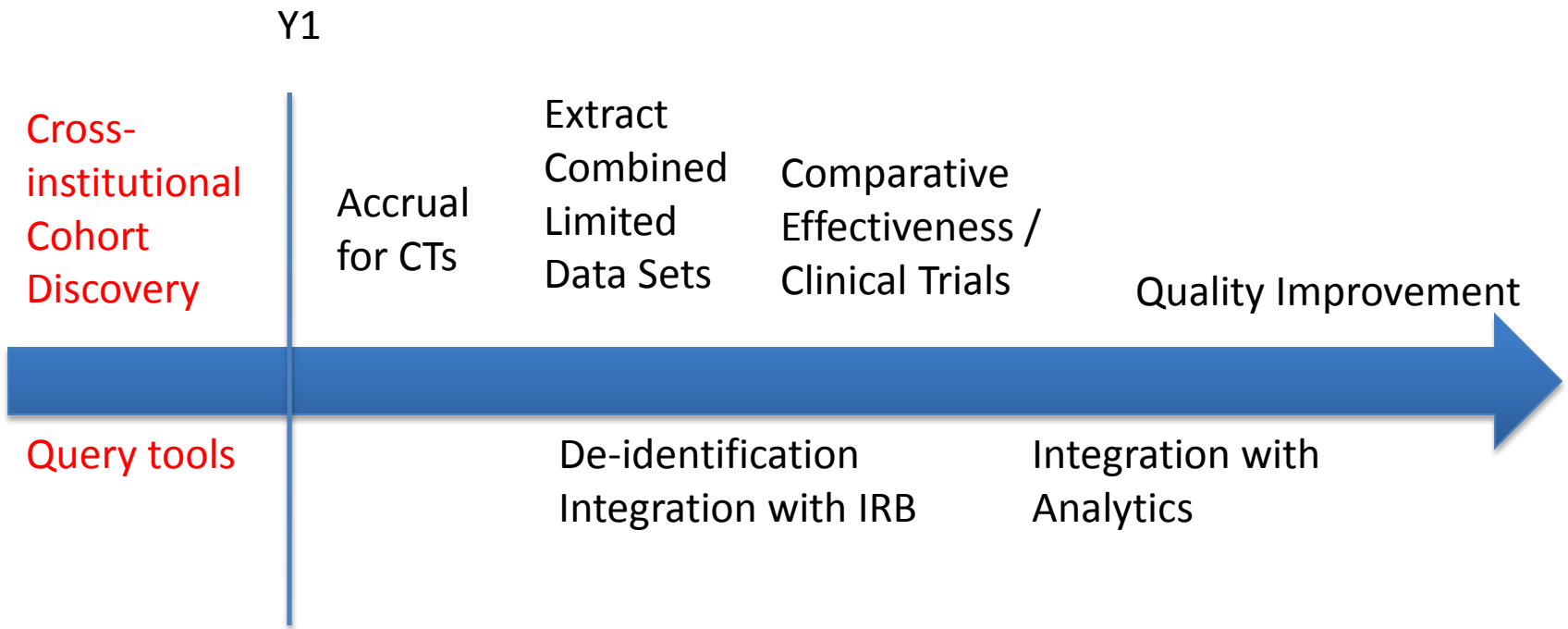
- Research project funded by the NHGRI
- Private institutions
- 5 diseases ONLY
 - Long QT
 - Cataract
 - Dementia
 - PAD
 - DM
- 8 year project
- 4 year budget is **25 million**
- Pediatric RFA up



Status of Clinical Data Warehouses (CDW) and EMR systems

- UC Davis
 - 2M patients in CDW, full EMR (in- and out-patient)
- UC Irvine
 - 1.5M patients in CDW, full EMR (in- and partial out-patient)
- UC SD
 - 2M patients in CDW, full EMR (in- and out-patient)
- UC SF
 - 2.7M patients in IDR, EMR under implementation
- UC LA
 - > 2M, CDW under construction, EMR under implementation

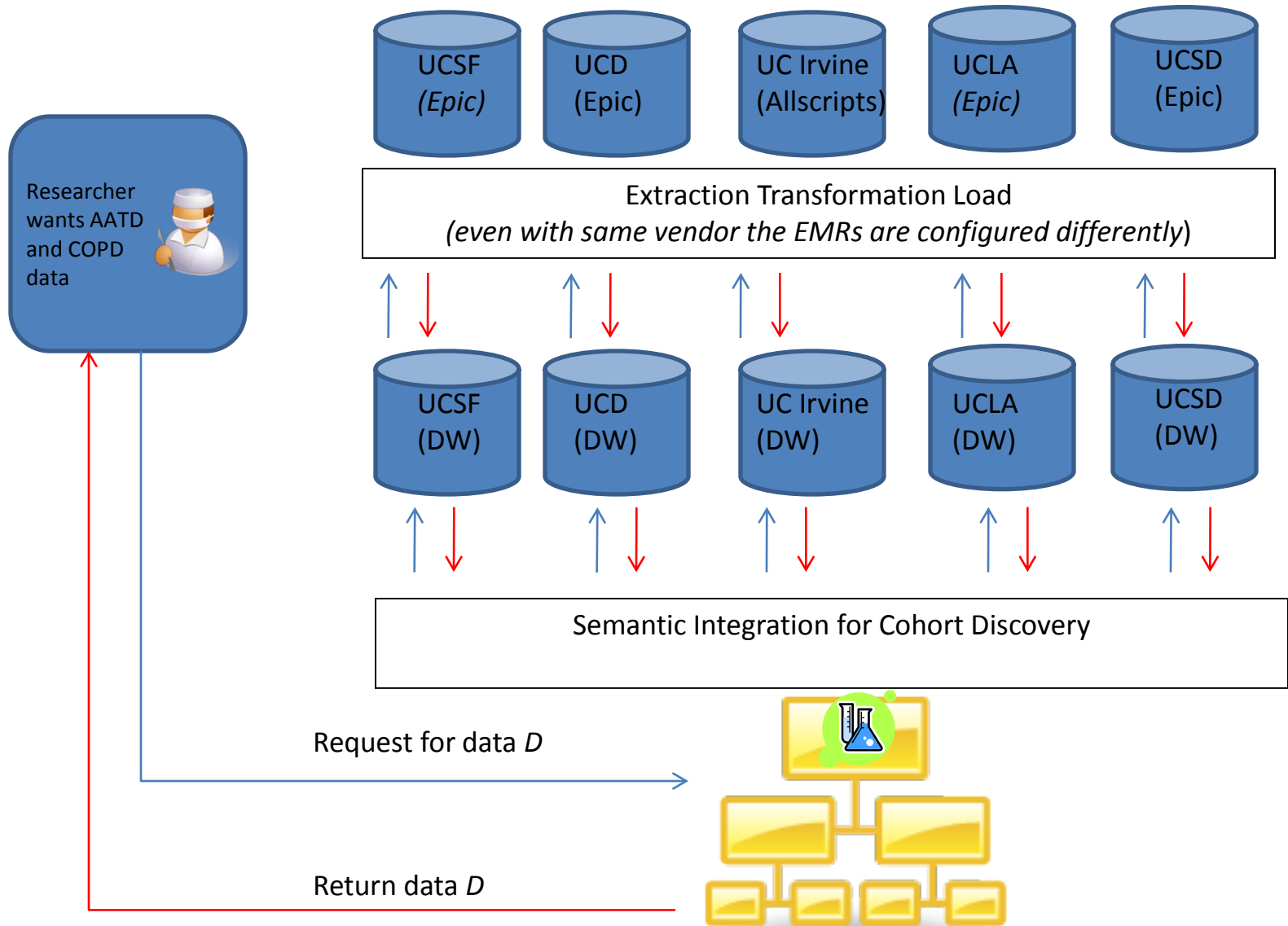
Planned Evolution of Data Sharing



UC-ReX is funded for Cross-institutional work, each campus is responsible for their own Data Warehouse Development

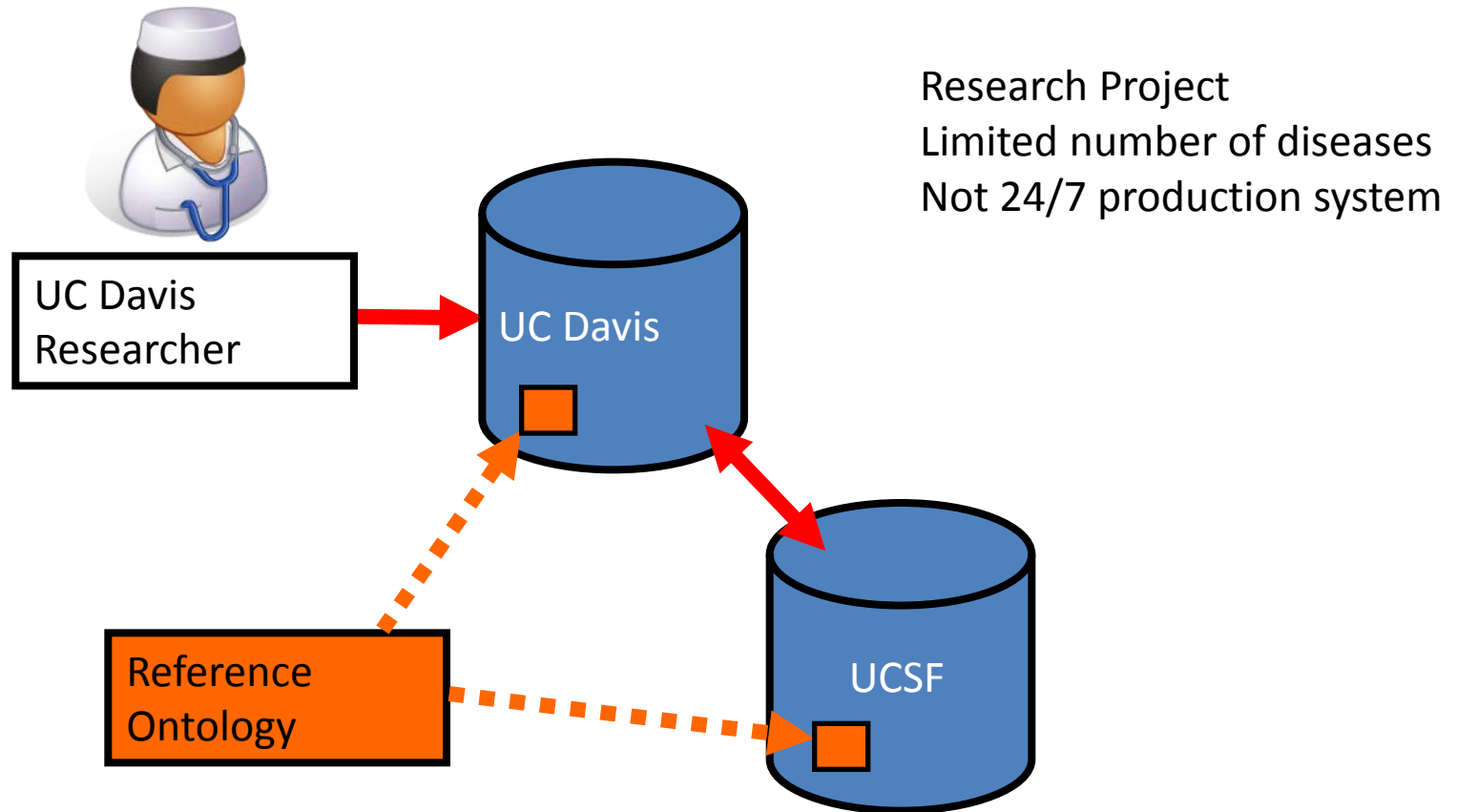
\$5M over 5 years

Querying Across Institutions



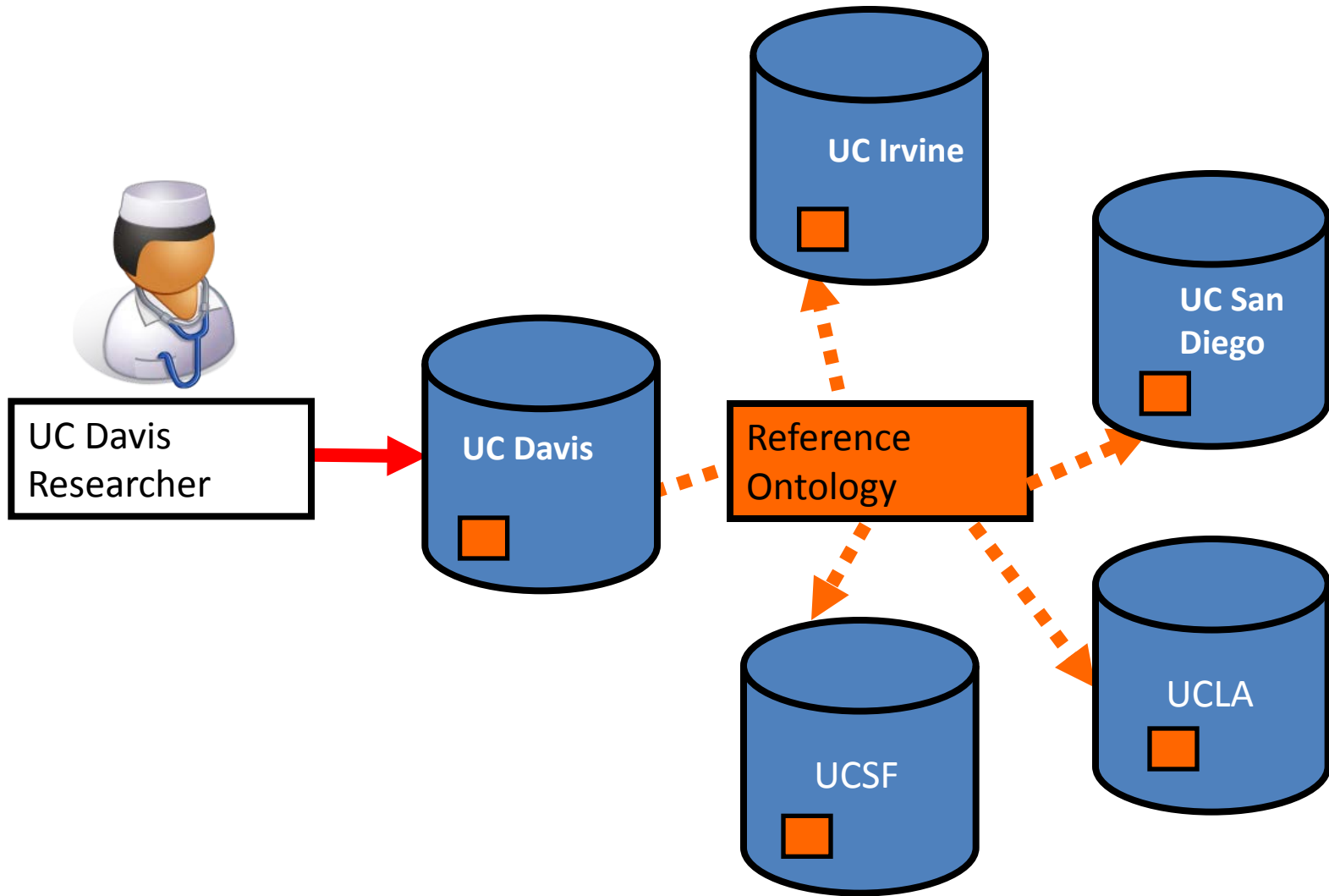
Year 0

Proof-of-Concept of Cross-Institutional Cohort Discovery



Year 1

Real Cross-Institutional Cohort Discovery



Discussion

- IRB Workgroup
 - Unified IRB or federated?
 - Federated requires uniform guidelines
 - Protocol for count queries across campus approved by early Spring' 12
- Contracts Workgroup
 - Need contract with vendor signed now

Clinical Data at UC

UC is investing > \$500,000,000 to collect patient data through EMRs

1% of this to enable data sharing initiatives for research and quality improvement