

ODYSSEUS DATA SERVICES

THE HEALTHCARE DATA EXPERTS



ODYSSEUS
DATA SERVICES INC

ARACHNE Research Network

Arachne Research Network and Workflow Suite



Study Write up



Study Notebook

Build a research team



Expert Finder

Find relevant clinical data



Clinical Data Catalog

Perform Data Analysis



Analysis Execution

Create Research Paper



Study Publisher

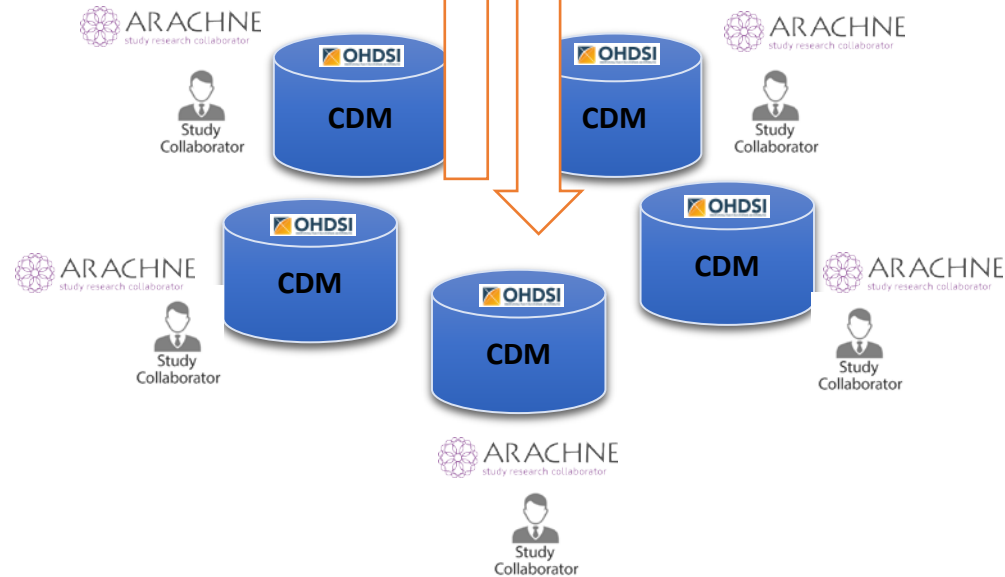
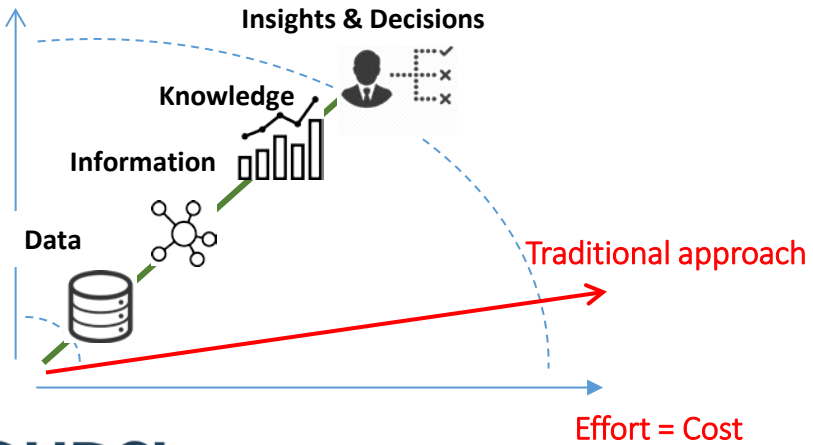
Publish into Insights Library



Insights Library

Value = Competitive Advantage

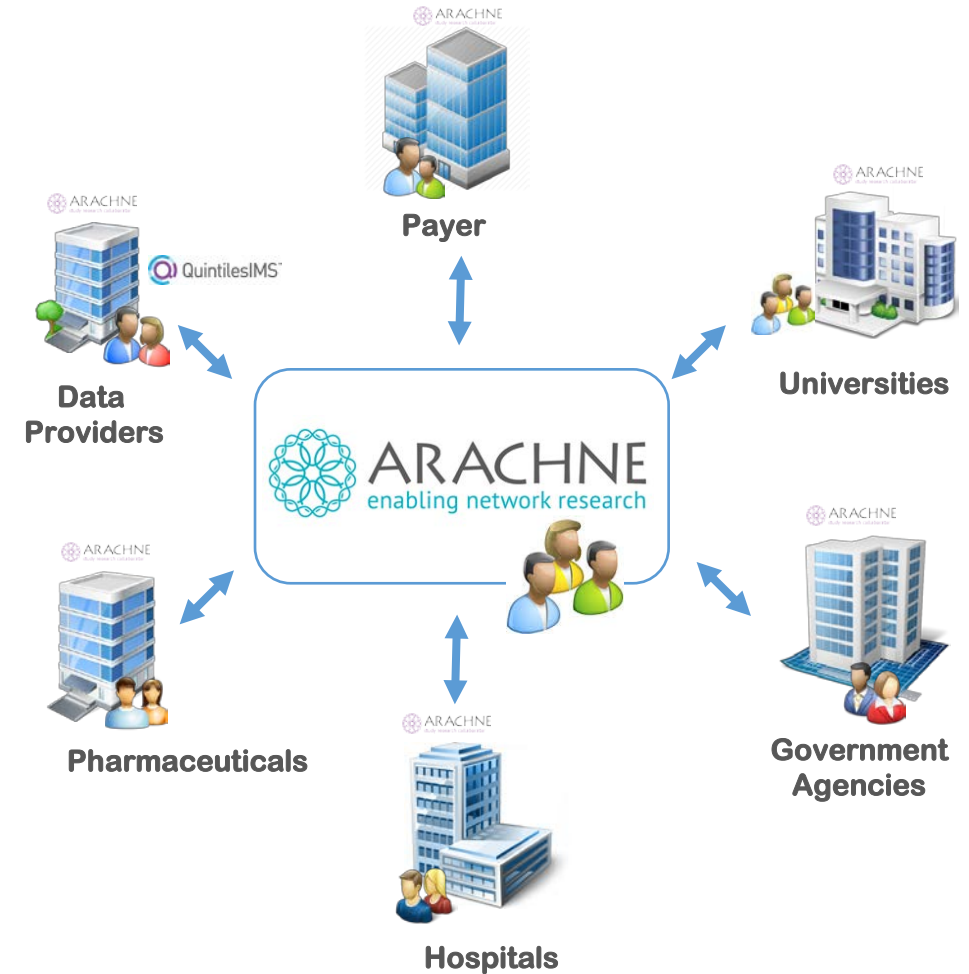
Arachne Approach



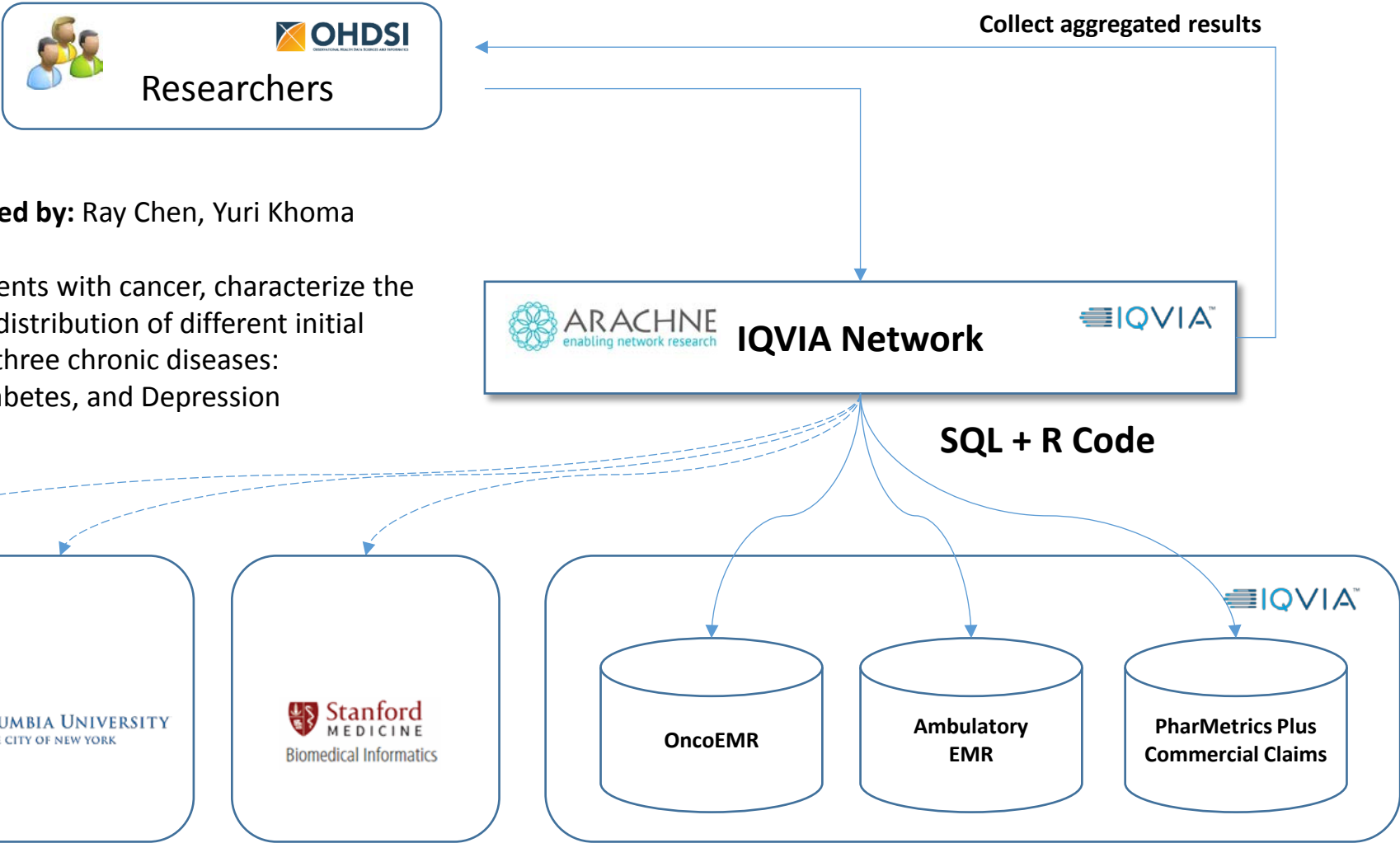
ARACHNE Research Network

Conduct federated collaborative research studies across healthcare organizations, data owners and researches

- Study lifecycle and workflow management
- RWE data catalog
- Build study team
- Secure, compliant and trusted data access
- Federated analysis across organizational boundaries
- Store analysis aggregate results
- Elastic, parallel, remote job execution
- Integration with OHDSI Tools (ATLAS/WebAPI, Achilles)
- Support for OHDSI standards and tools
 - SQL, R, Python and complex packages
 - OHDSI analytical methods library (cohort features, incidence rates, PLP and PLE)
 - OHDSI OMOP CDM



Case study 1: Executing OHDSI Treatment Pathways Study (Christian Reich)

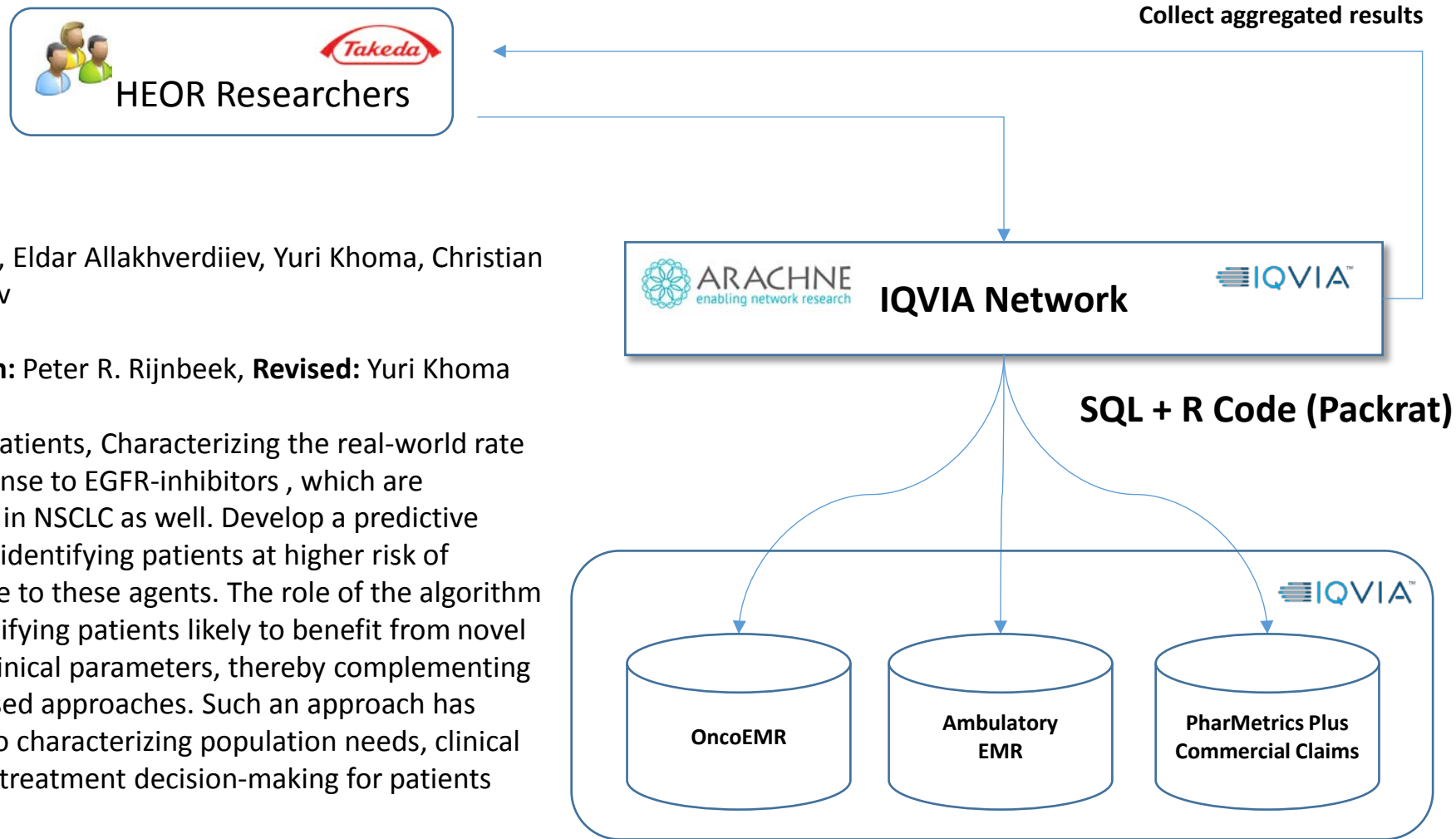


Author: Jon Duke; **Revised by:** Ray Chen, Yuri Khoma

Study goals: Among patients with cancer, characterize the prevalence, variety, and distribution of different initial treatment pathways for three chronic diseases: Hypertension, Type II Diabetes, and Depression

-----> future roadmap

Case study 2: Recurrence/Relapse in EGFR positive NSCLC Patients (Aaron Galaznik)



Author: Aaron Galaznik, Eldar Allakhverdiiev, Yuri Khoma, Christian Reich, Gregory Klebanov

Patient Level Prediction: Peter R. Rijnbeek, **Revised:** Yuri Khoma

Study goals: In NSCLC patients, Characterizing the real-world rate of treatment non-response to EGFR-inhibitors , which are increasingly being used in NSCLC as well. Develop a predictive modeling algorithm for identifying patients at higher risk of treatment non-response to these agents. The role of the algorithm would be to aid in identifying patients likely to benefit from novel therapeutics through clinical parameters, thereby complementing genomic/biomarker based approaches. Such an approach has potential applications to characterizing population needs, clinical study recruitment, and treatment decision-making for patients with NSCLC.

Questions?