What is HADES?

- A set of 24 R packages (and counting)
  - PatientLevelPrediction
  - CohortMethod
  - Cyclops
  - SqlRender
  - …
- Implementing analytics based on the CDM
- Meeting some minimum quality requirements
  - Continuous integration (including unit testing)
  - Validated
  - Documented
  - Cross-database-platform
- Used in pretty much all OHDSI studies

Visit the HADES website

https://ohdsi.github.io/Hades

Developer community developments

Increasing transparency

- Documenting requirements for HADES packages NEW

- Package releases announced on OHDSI forums

- Better organization of issues NEW

- Use of milestones for future releases NEW

- HADES milestones dashboard NEW

- Monthly HADES meetings (inc. this Thursday at noon EST)

Recent software developments

- Lots of incremental improvements, bug fixes
- HYDRA now uses renv in all its skeletons for software stability
- CohortGenerator for cohort instantiation
- Empirical calibration of MaxSPRT (EmpiricalCalibration package)
- Added the PhenotypeLibrary package (works with CohortGenerator)

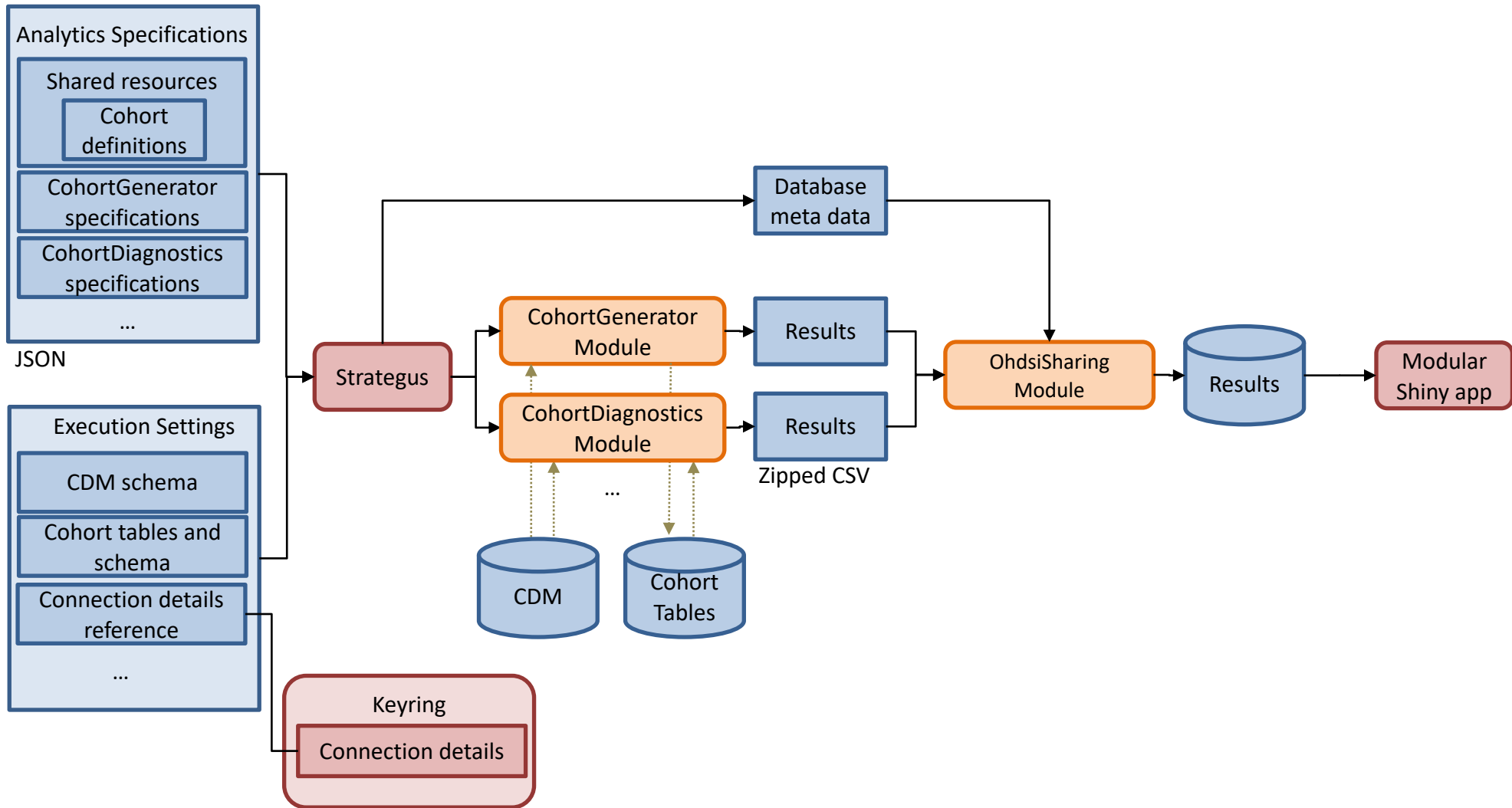# Near-future software developments

- CohortMethod v5.0.0
  - Scaling to ridiculous cohort sizes
  - More per-outcome customization options
  - Go/no go diagnostics
  - Fully controllable via JSON input specs
- FeatureExtraction
  - Cohort-based covariates
  - Cohort-based-covariate table 1 (with PhenotypeLibrary)
- Andromeda
  - Switching back-end from SQLite to arrow for performance boost
- DatabaseConnector
  - Exploring switching from JDBC to DBI for offloading maintenance efforts, and maybe support dbplyr
- OhdsiTargets
  - Exploring using the 'targets' package to improve OHDSI analytics workflows

Strategus

- (JSON) analysis specs → results (no R coding required)
- Combine various analytics (modules) in a single study, e.g.
  - Cohort generation
  - Cohort diagnostics
  - Characterization
  - Estimation
  - Prediction
- OHDSI network studies would share specs instead of code
- (But still have flexibility to do custom, bleeding edge stuff)

Strategus

Thanks!