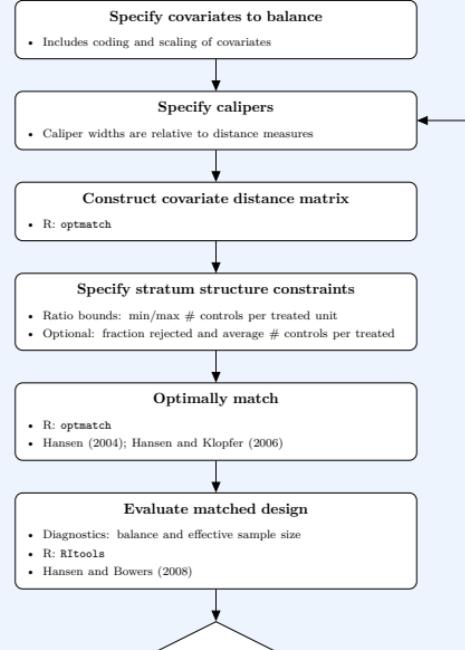


Part 1:

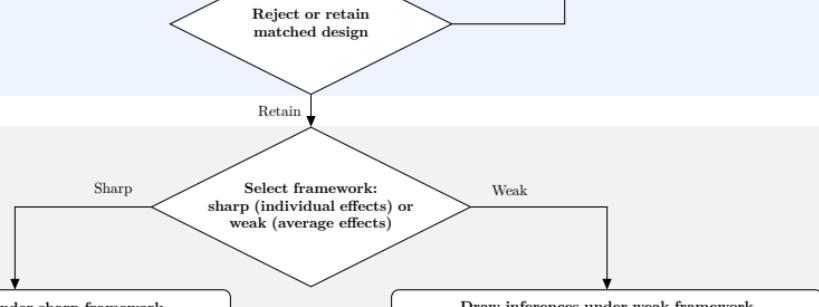
Making a Matched Dataset
(*toward Justifying As-If Randomization*)



Reject

Part 2:

Causal Inference
(*under As-If Randomization*)



Draw inferences under sharp framework

- Testing: Exact, simulation, or Normal approx.
- Estimation: Test inversion (e.g., Hodges- Lehmann point estimator)
- R: randomizr

Draw inferences under weak framework

- Estimation: Difference-in-Means with weights
- Testing: Plug-in variance with Normal approx.
- R: bikvar; custom function (included herein)
- Pashley and Miratrix (2021); Fogarty (2018)

Part 3:

Sensitivity Analysis
(*Departures from As-If Randomization*)

Evaluate sensitivity under sharp framework

- R: senestrat
- Rosenbaum (2018)

Evaluate sensitivity under weak framework

- R: custom function (included herein)
- Fogarty (2023)