

Three Wave Panel: Confounding Control & Threats

Assumed Causation

Confounding Threat

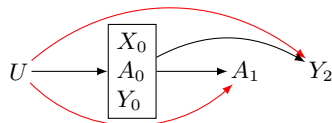
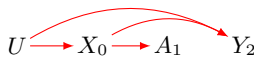
Control Strategy

Unmeasured confounder:

A_1 , Y_2 share common causes $\{X_0, U\}$; **Control:** condition on baseline

1. confounders associated with treatment/outcome; include baseline exposure and outcome measures:

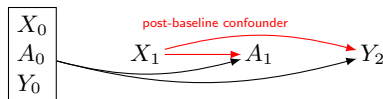
X_0 A_0 Y_0



Post-baseline confounding

Issue: post-baseline confounding

2. **Action:** condition on X_1 if not mediator; sensitivity analysis if timing unclear



Attrition Bias

Issue: Treatment affects

3. censoring

Action: IPCW



Issue: Confounding in

4. censored group

Action: IPCW



A_1 : treatment; A_0 : baseline treatment; Y_2 : outcome; Y_0 : baseline outcome; U : unmeasured common causes; X : measured covariates; X : conditioning on X ; \rightarrow : assumed causal path; \rightarrow : bias path. **Threat:** Potential unmeasured confounding despite baseline controls.