Day 1: Summary

1. Causal inference is concerned with the quantifying the effect of an *intervention*.

2. For *randomized experimental data*, causal comparisons are *straightforward*; we compare groups with different treatment assignments.

3. For *observational data*, causal comparisons are complicated by *confounding*; groups that we aim to compare are fundamentally *not comparable* due to their different confounder profiles.

4. We overcome confounding by *matching*; individuals with *identical confounder values* can only differ due to their treatment assignment.

5. Matching can be practically challenging, so instead of matching on all individual confounders, we can instead match on the value of the *propensity score*.

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