Causal frameworks minimize causal gap

Machine + Targeted Learning minimize statistical gap

## Best Statistical Estimate

Closest to truth

Accurately quantify uncertainty

## **Causal Question**



**Causal Frameworks** 

## **Closest Statistical Target**



**Machine Learning** 

## **Untargeted Estimate**

Closer to truth (but still too far)

Uncertainty still not accurately quantified

**Targeted Learning**