Whole Game 2: Malaria and Mosquito Nets

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RStudio, PBC

2021-09-01 (updated: 2022-07-23)

- Specify causal question
- 2 Draw assumptions (causal diagram)
- Model assumptions (e.g. with a propensity score)
- 4 Analyze propensities (diagnostics)
- Estimate causal effects
- 6 Conduct a sensitivity analysis

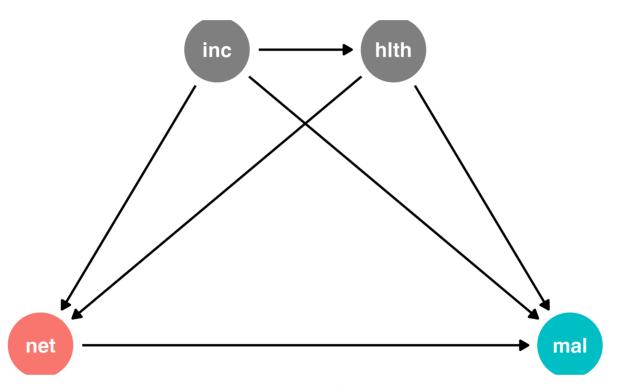
Does mosquito bed net use reduce malaria risk?

The Data

library(causalworkshop)
net_data

```
## # A tibble: 1,138 × 5
##
         id income health net malaria risk
             <dbl> <dbl> <int>
##
      <int>
                                         <dbl>
4⊧4⊧
          1
              409.
                   63.1
                                          45.1
   1
4F4F
              521.
                      83.5
                                          23.4
          3
4‡4‡
              581.
                      73.0
                                          36.5
4‡4‡
              324.
                      60.6
                                          58.7
##
              532.
                      73.4
                                1
                                          32.7
##
              538.
                      42.6
                                          52.5
4F4F
             457.
                      41.3
                                1
                                          41.8
                                1
##
          8
              459.
                      79.1
                                          33.1
          9
##
              458.
                      61.8
                                          33.8
## 10
         10
              433.
                      71.5
                                          32.5
## # ... with 1,128 more rows
```

Proposed DAG



Thanks to Andrew Heiss for the data!

Your Turn!