

Whole Game 2: Malaria and Mosquito Nets

Malcolm Barrett

RStudio, PBC

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

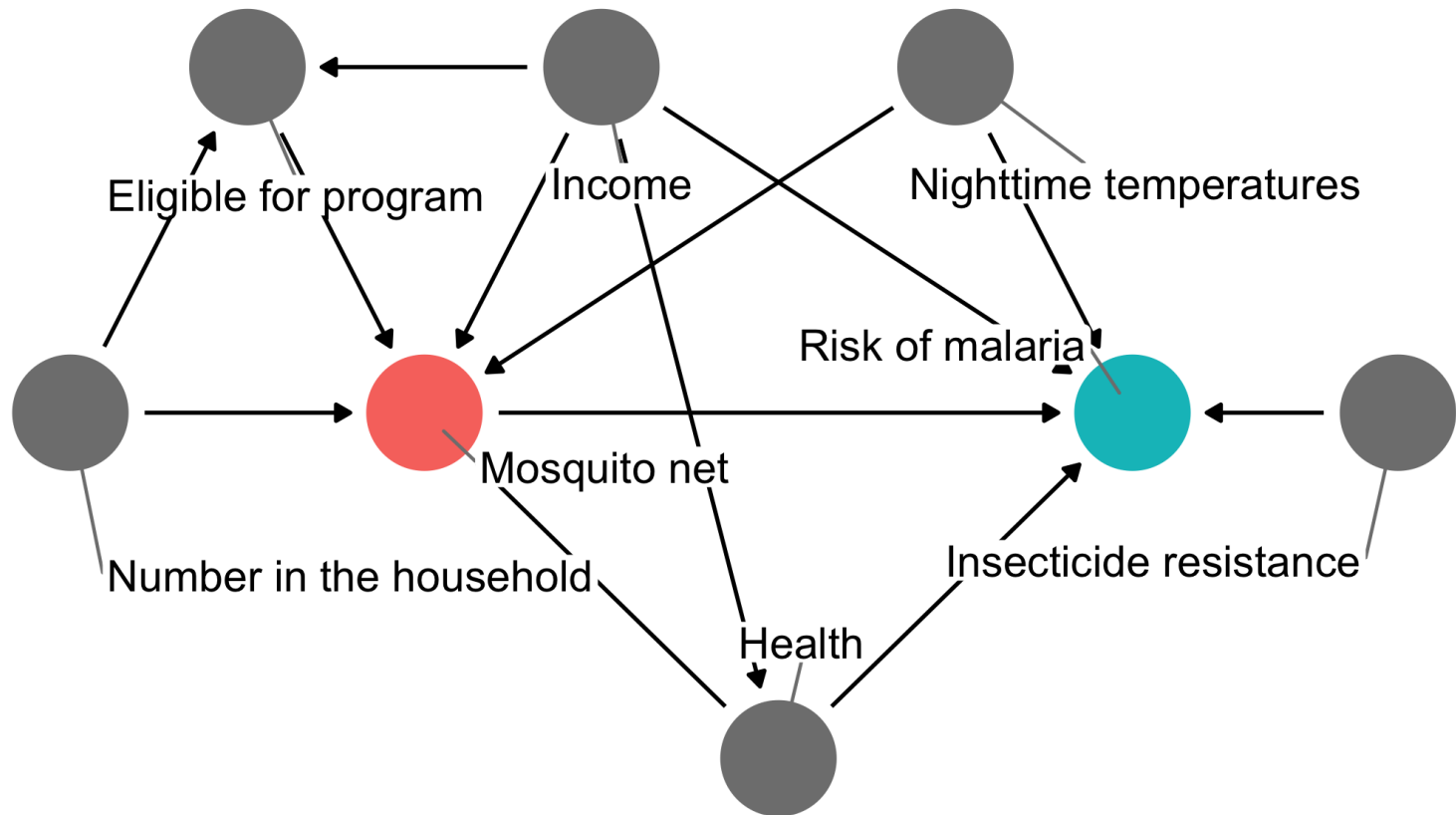
**Does mosquito bed net use
reduce malaria risk?**

The Data

```
library(causalworkshop)
net_data
```

```
## # A tibble: 1,752 × 10
##       id net   net_num malaria_risk income health
##   <int> <lgl>   <int>         <dbl>   <dbl>   <dbl>
## 1     1   FALSE     0          38     779     35
## 2     2   FALSE     0          48     700     35
## 3     3   FALSE     0          32    1083     58
## 4     4   FALSE     0          55     753     68
## 5     5   FALSE     0          36     919     46
## 6     6   FALSE     0          30     969     37
## 7     7   FALSE     0          29    1012     58
## 8     8   FALSE     0          45     708     30
## 9     9   FALSE     0          51     733     18
## 10    10   FALSE     0          42     862     64
## household eligible temperature insecticide_resis...1
##       <dbl> <lgl>         <dbl>         <dbl>
## 1         1 FALSE         18.3          38
## 2         3 FALSE         18.6          40
```

Proposed DAG



Thanks to Andrew Heiss for the data!

Your Turn!