

## Severity

**Critical**  
(Respirator)

**Severe**  
(Respiratory distress)

**Mild**

**Asymptomatic**

## Hierarchy of observed outcomes

**COVID-19  
Fatality**

**ICU**

**Hospitalized**

**Confirmed**

**Unobserved**

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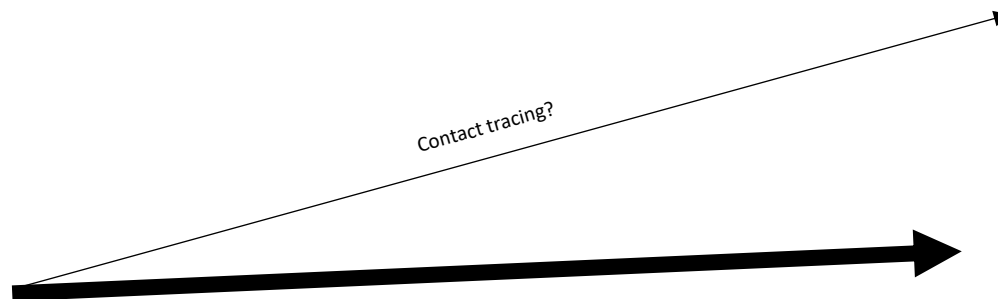
COVID-19  
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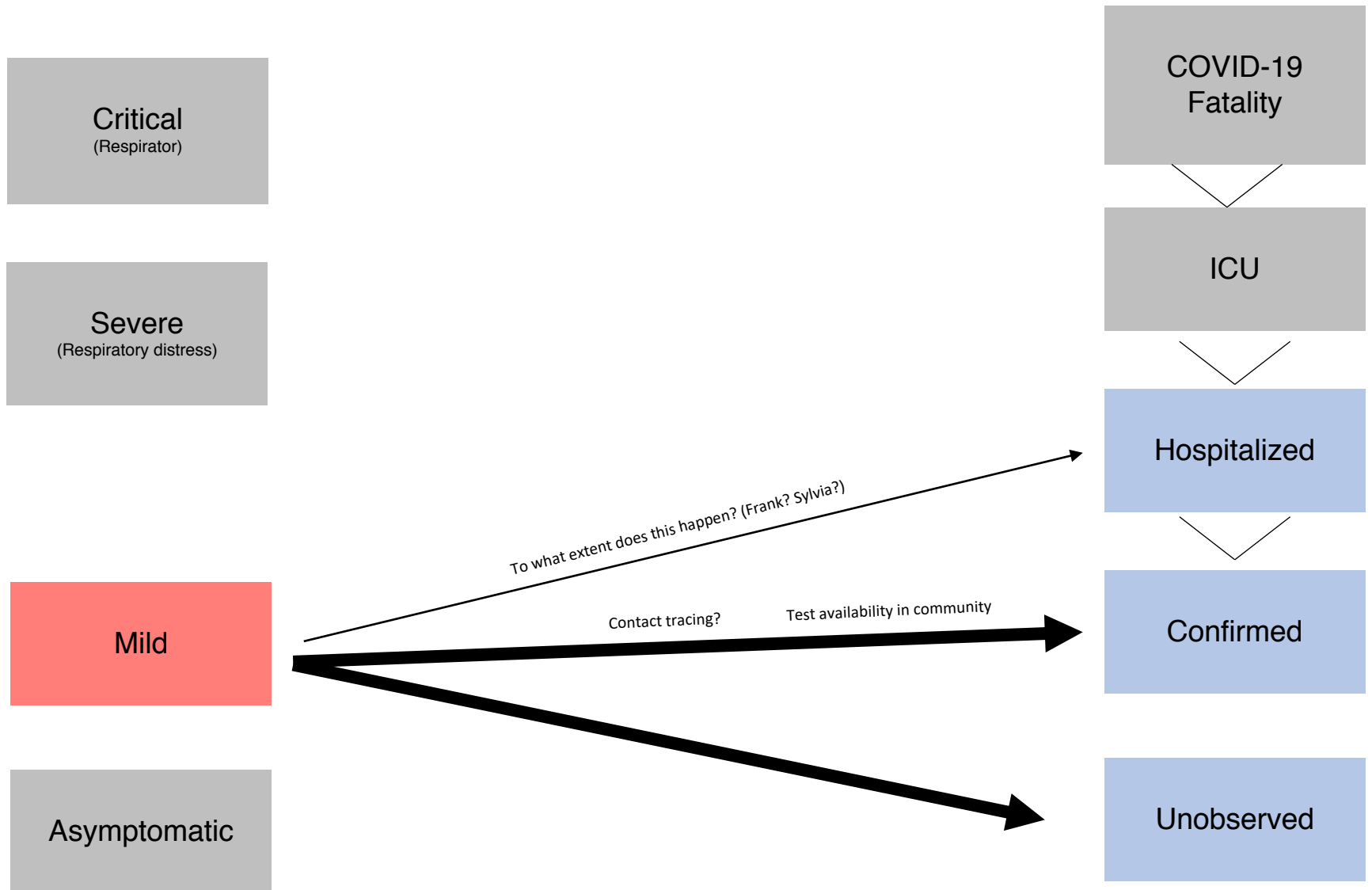
Unobserved



Proposal: Model  $n$  contacts traced in the whole population as a logistic function of total infections, saturating at some level of capacity?

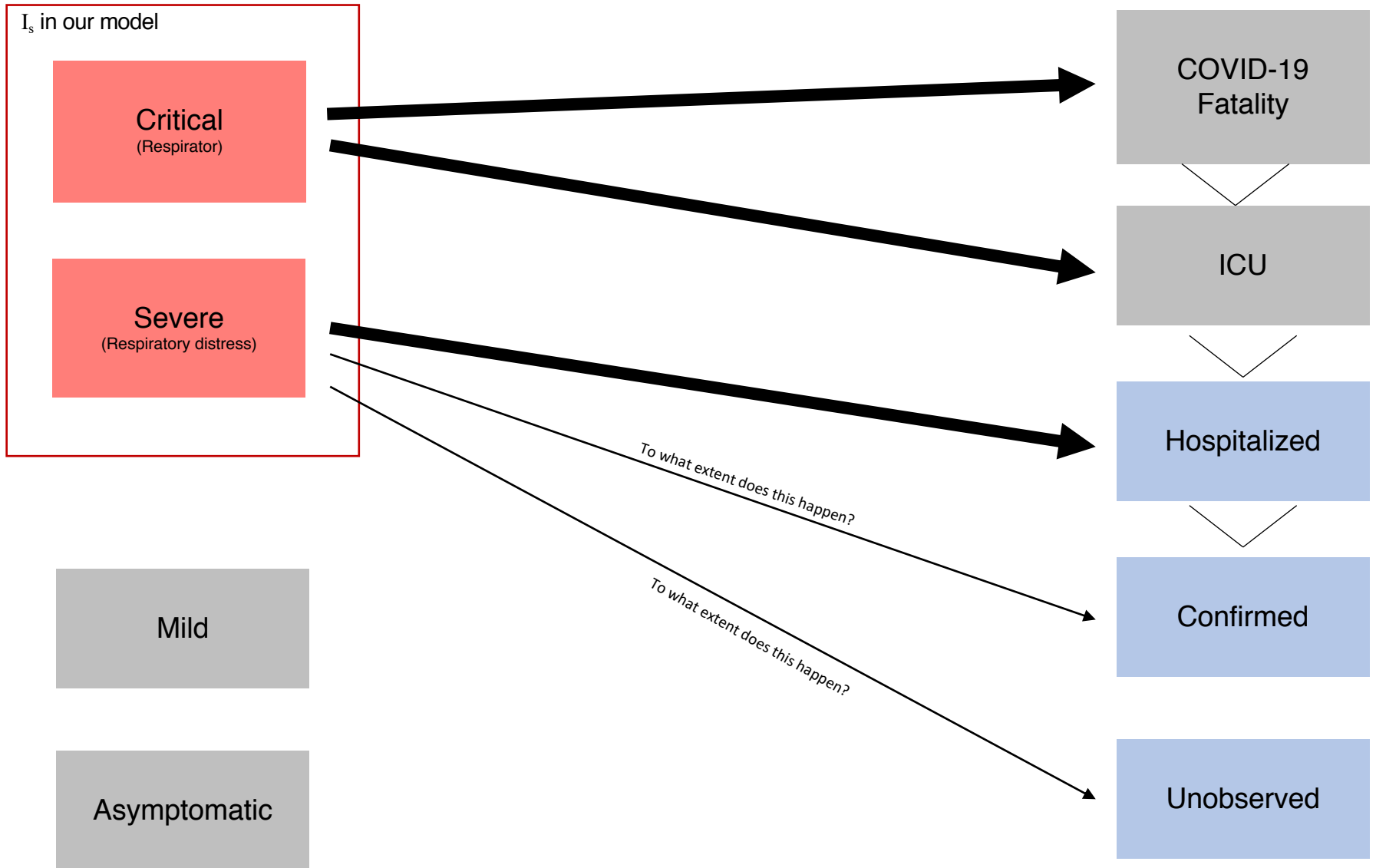
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$I_s$  in our model

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