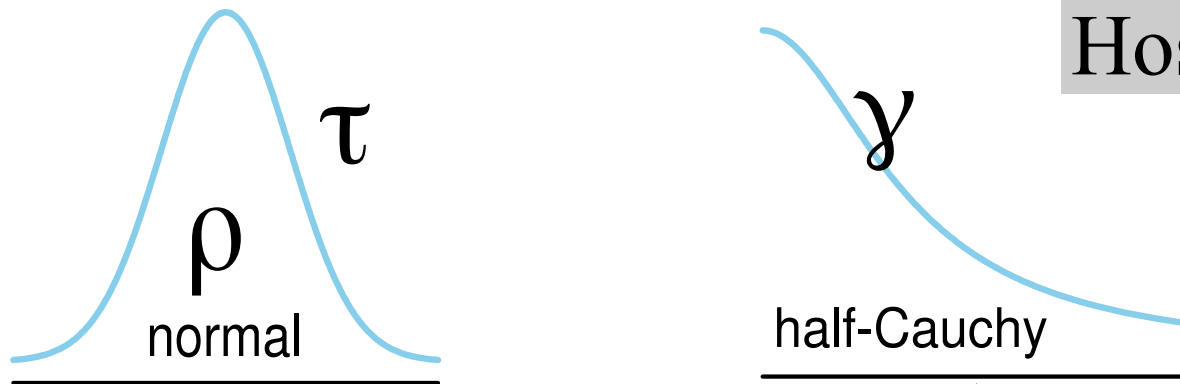
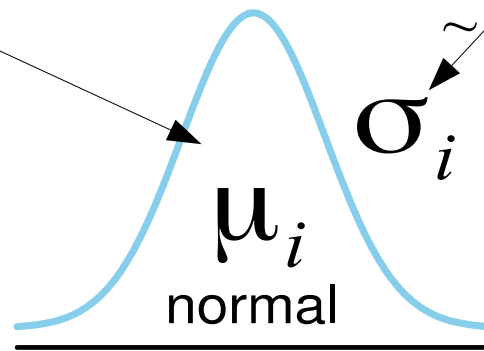


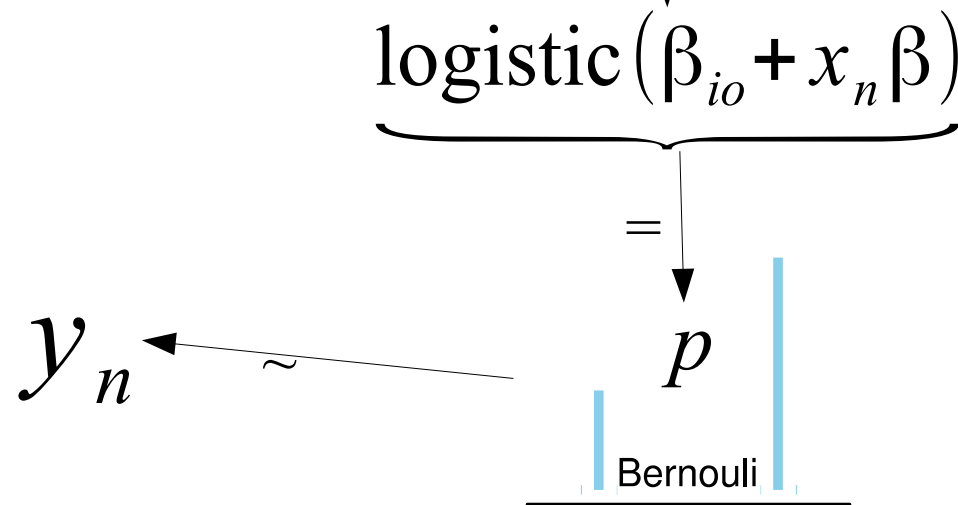
## Hospital Level



## Anesthesiologist Level



## Patient Level



$$\begin{aligned}
 y_n &\sim \text{Bernoulli}(p) \\
 \beta_{io} &\sim \text{Normal}(\mu_i, \sigma_i) \\
 \mu_i &\sim \text{Normal}(\rho, \tau) \\
 \sigma &\sim \text{Cauchy}(0, \gamma)
 \end{aligned}$$