$\beta_0 \sim \text{Normal}(M_0, S_0)$
$\beta_{j(i)} \sim \text{Normal}(0, \sigma_\beta)$
$\sigma_\beta \sim \text{Gamma}(\text{shape}, \text{rate})$
$\mu_i = \beta_0 + \vec{\beta} \cdot \vec{x}$
$y_i \sim \text{Normal}(\mu_i, \sigma)$
$\sigma \sim \text{Unif}(L, H)$