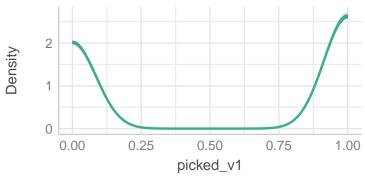
## reg\_rate \* baseline\_log\_odds\_jitter \* reg\_dist + variation

#### Posterior Predictive Check

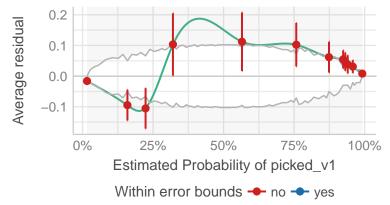
Model-predicted lines should resemble observed data line



# del-predicted data — Observed data — Observed data —

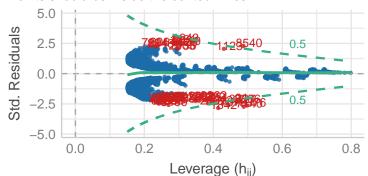
#### Binned Residuals

Points should be within error bounds



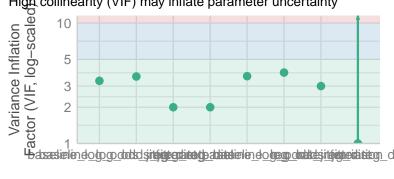
#### Influential Observations

Points should be inside the contour lines



## Collinearity

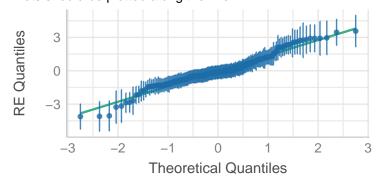
High collinearity (VIF) may inflate parameter uncertainty



### Normality of Residuals Dots should fall along the line

6 Sample Quantiles 3 0 -6 -2 0 Standard Normal Distribution Quantiles

## Normality of Random Effects (part\_id) Dots should be plotted along the line



## Low (< 5)

Normality of Random Effects (base) Dots should be plotted along the line

