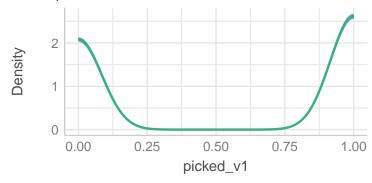
### reg\_rate \* variation \* reg\_dist + baseline\_p

#### Posterior Predictive Check

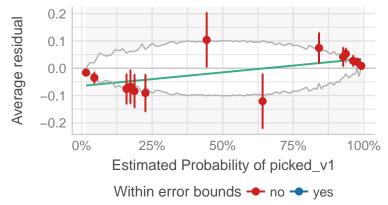
Model-predicted lines should resemble observed data line



del-predicted data — Observed data — Observed data —

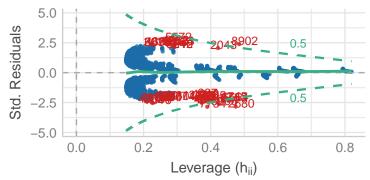
#### Binned Residuals

Points should be within error bounds



Influential Observations

Points should be inside the contour lines

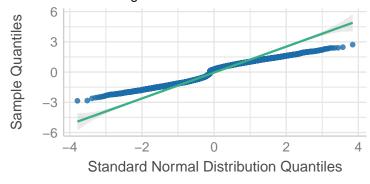


### Collinearity

High collinearity (VIF) may inflate parameter uncertainty

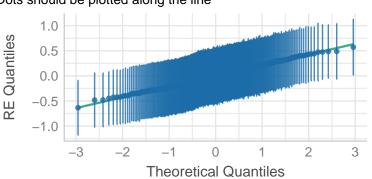


Normality of Residuals Dots should fall along the line



# Normality of Random Effects (base)

Dots should be plotted along the line



Low (< 5) 
 Moderate (< 10)
</p>

## Normality of Random Effects (part\_id)

Dots should be plotted along the line

