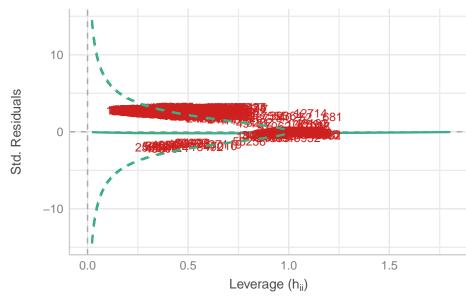
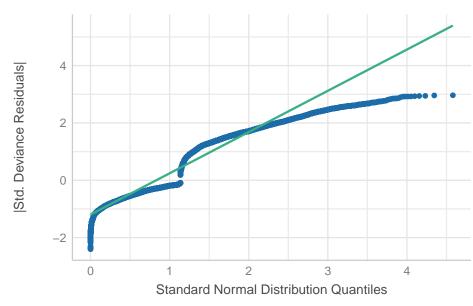
# Posterior Predictive Check Model-predicted intervals should include observed data points 80000 40000 0 1 er\_bin Observed data Model-predicted data

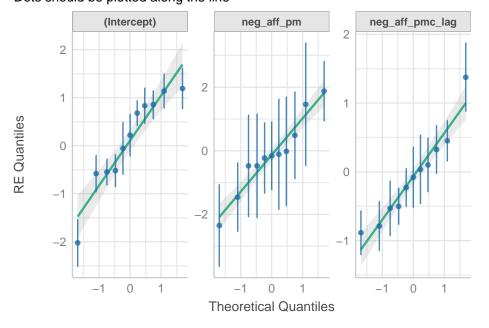
# Influential Observations Points should be inside the contour lines



## Normality of Residuals Dots should fall along the line

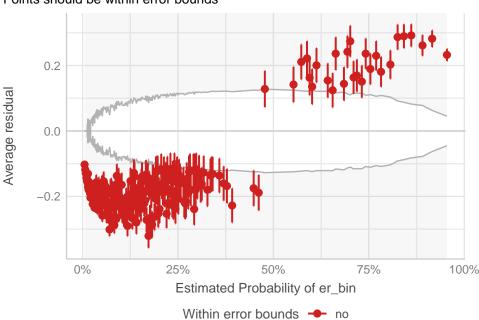


# Normality of Random Effects (study) Dots should be plotted along the line



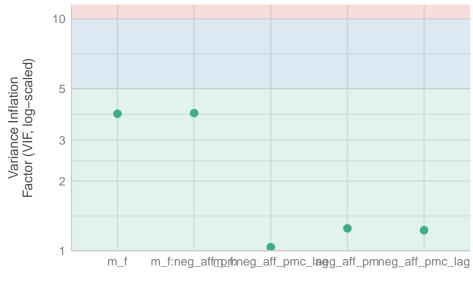
### Binned Residuals

Points should be within error bounds



### Collinearity

High collinearity (VIF) may inflate parameter uncertainty



Low (< 5)

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

(Intercept) neg\_aff\_pm neg\_aff\_pmc\_lag 5.0 5.0 2.5 RE Quantiles 2.5 0 0.0 0.0 -5.0-2 0 2 0 -2 0 **Theoretical Quantiles**