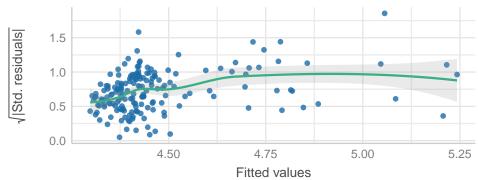
# Posterior Predictive Check Model-predicted lines should resemble observed data line 0.04 0.03 0.02 0.01 0.00 150 200 log1p(labs\_glucose)

Observed data — Model-predicted data

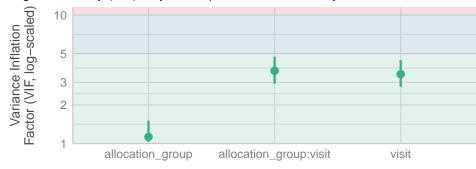
# Homogeneity of Variance

Reference line should be flat and horizontal



# Collinearity

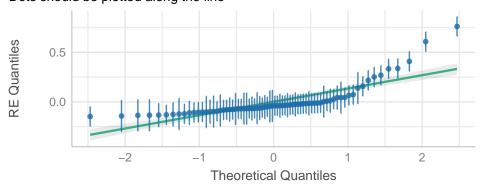
High collinearity (VIF) may inflate parameter uncertainty





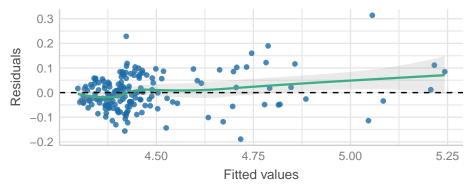
# Normality of Random Effects (record\_id)

Dots should be plotted along the line



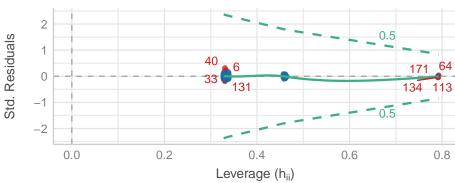
### Linearity

Reference line should be flat and horizontal



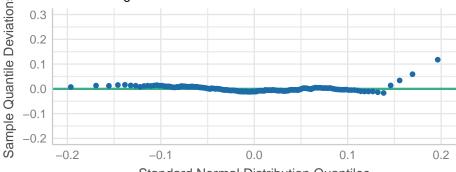
### Influential Observations

Points should be inside the contour lines



## Normality of Residuals

Dots should fall along the line



Standard Normal Distribution Quantiles