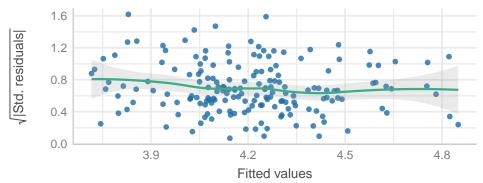
# Posterior Predictive Check Model-predicted lines should resemble observed data line 0.03 0.02 0.01 0.00 40 80 120 160 log1p(labs\_alkp)

# — Observed data — Model-predicted data

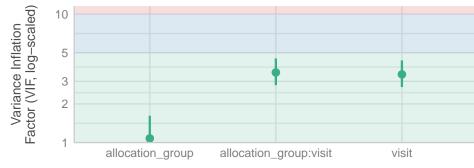
Homogeneity of Variance

Reference line should be flat and horizontal



# Collinearity

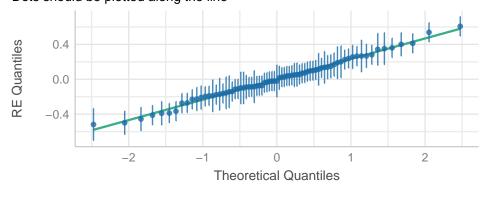
High collinearity (VIF) may inflate parameter uncertainty



Low (< 5)

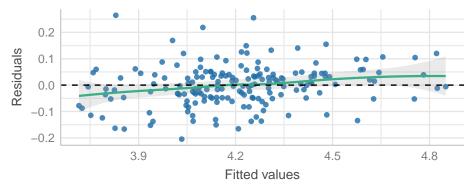
# Normality of Random Effects (record\_id)

Dots should be plotted along the line



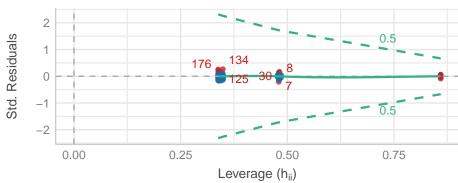
## Linearity

Reference line should be flat and horizontal



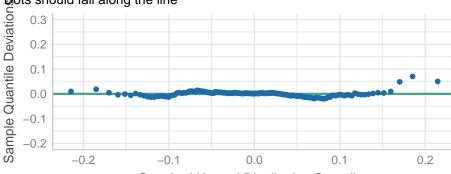
### Influential Observations

Points should be inside the contour lines



### Normality of Residuals

Dots should fall along the line



Standard Normal Distribution Quantiles