Posterior Predictive Check
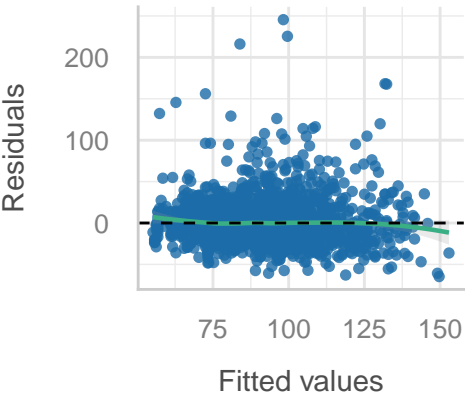
Model−predicted lines should resemble observed data line

Linearity

Reference line should be flat and horizontal

Density — time89
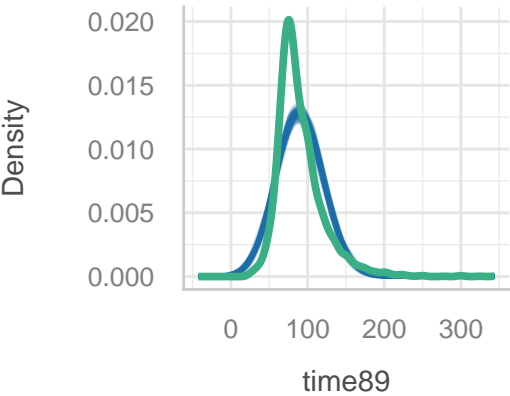
— Observed data — Model−predicted data

Residuals — Fitted values

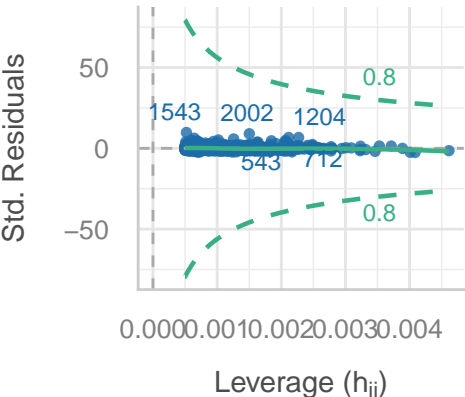## Homogeneity of Variance

Reference line should be flat and horizontal
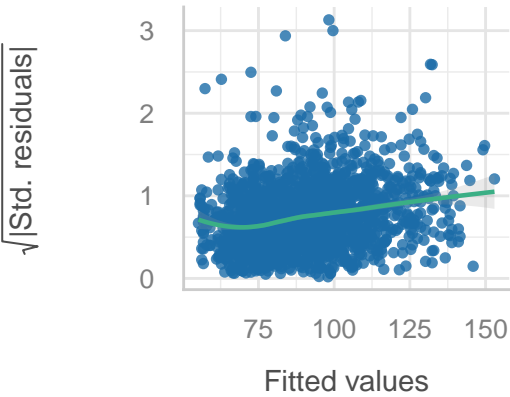
Influential Observations

Points should be inside the contour lines

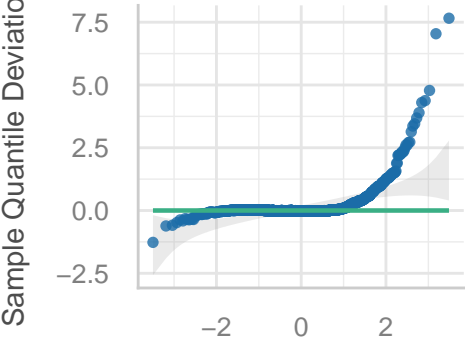$\sqrt{|\text{Std. residuals}|}$ — Fitted values

Std. Residuals — Leverage (h_{ii})

Collinearity

High collinearity (VIF) may inflate parameter uncertainty

Normality of Residuals

Dots should fall along the line

Variance Inflation Factor (VIF, log−scaled) — age, ed, female

Sample Quantile Deviations — Standard Normal Distribution Quantiles

● Low (< 5)