## Posterior Predictive Check Linearity Model-predicted lines should resemble observed data line 2 0.20 Residuals Density 0.15 0.10 0.05 0.00 27.5 30.0 32.5 35.0 37.5 40.0 29 31 bmi Observed data — Model-predicted data Homogeneity of Variance Influential Observations Reference line should be flat and horizontal Points should be inside the contour lines 10 √|Std. residuals Residuals 1.5 1.0 Std. 0.5 0.0 35 37 39 29 31 33 0.00 Fitted values Collinearity Normality of Residuals High collinearity (VIF) may inflate parameter uncertainty Variance Inflation Factor (VIF, log-scaled) 10 allocation\_group allocation\_group:visit visit Low (< 5) Normality of Random Effects (record\_id) Dots should be plotted along the line 5.0 RE Quantiles 2.5

**Theoretical Quantiles** 

2

0.0

-2.5-5.0

## Reference line should be flat and horizontal 33 37 Fitted values



