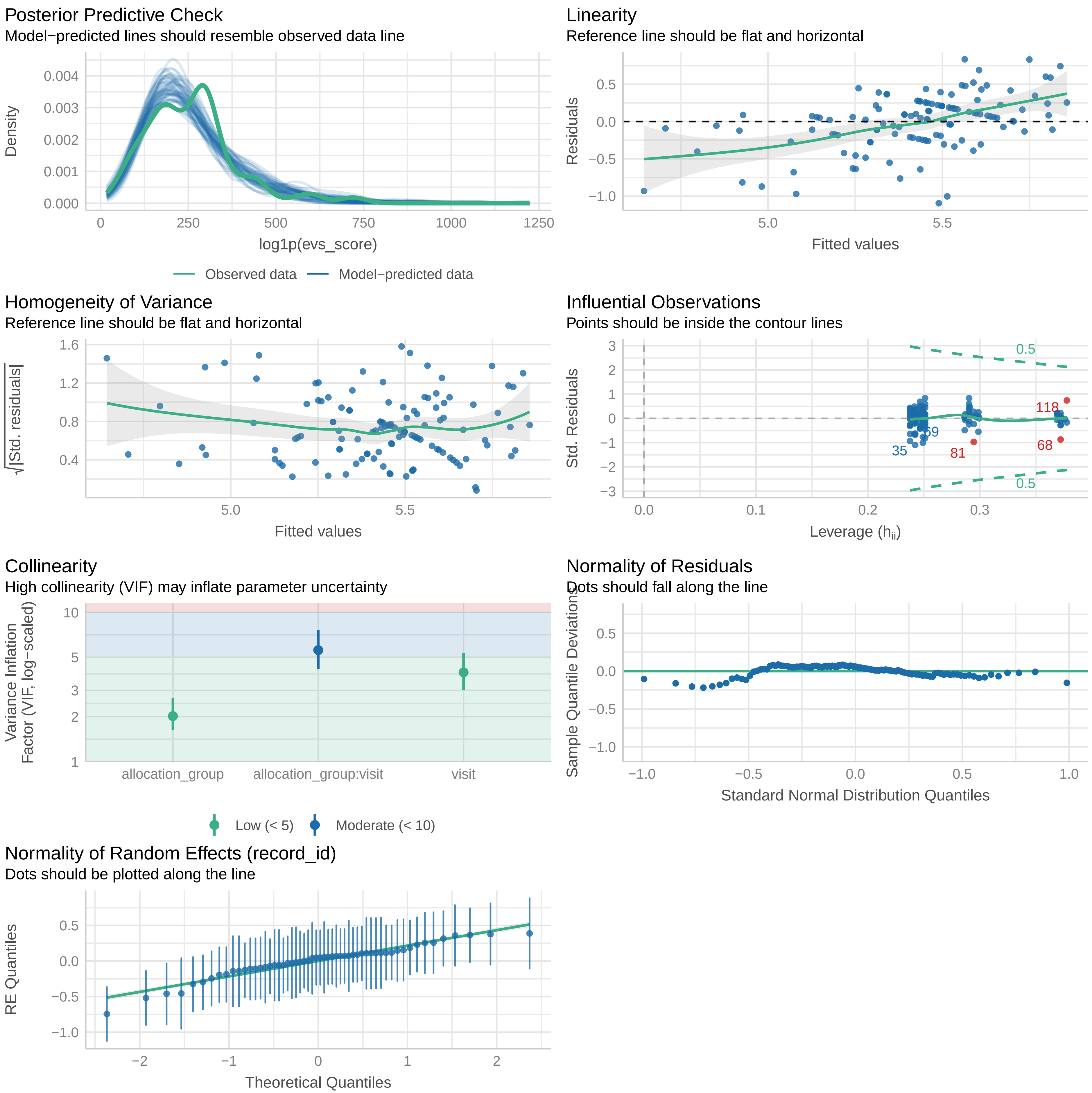
Posterior Predictive Check
Model−predicted lines should resemble observed data line
Density
0.004
0.003
0.002
0.001
0.000
0
250
500
750
1000
1250
log1p(evs_score)
Observed data
Model−predicted data
Linearity
Reference line should be flat and horizontal
Residuals
0.5
0.0
−0.5
−1.0
5.0
5.5
Fitted values
Homogeneity of Variance
Reference line should be flat and horizontal
√|Std. residuals|
1.6
1.2
0.8
0.4
5.0
5.5
Fitted values
Influential Observations
Points should be inside the contour lines
Std. Residuals
3
2
1
0
−1
−2
−3
0.5
0.5
118
59
35
81
68
0.0
0.1
0.2
0.3
Leverage (hii)
Collinearity
High collinearity (VIF) may inflate parameter uncertainty
Variance Inflation Factor (VIF, log−scaled)
10
5
3
2
1
allocation_group
allocation_group:visit
visit
Low (< 5)
Moderate (< 10)
Normality of Residuals
Dots should fall along the line
Sample Quantile Deviations
0.5
0.0
−0.5
−1.0
−1.0
−0.5
0.0
0.5
1.0
Standard Normal Distribution Quantiles
Normality of Random Effects (record_id)
Dots should be plotted along the line
RE Quantiles
0.5
0.0
−0.5
−1.0
−2
−1
0
1
2
Theoretical Quantiles