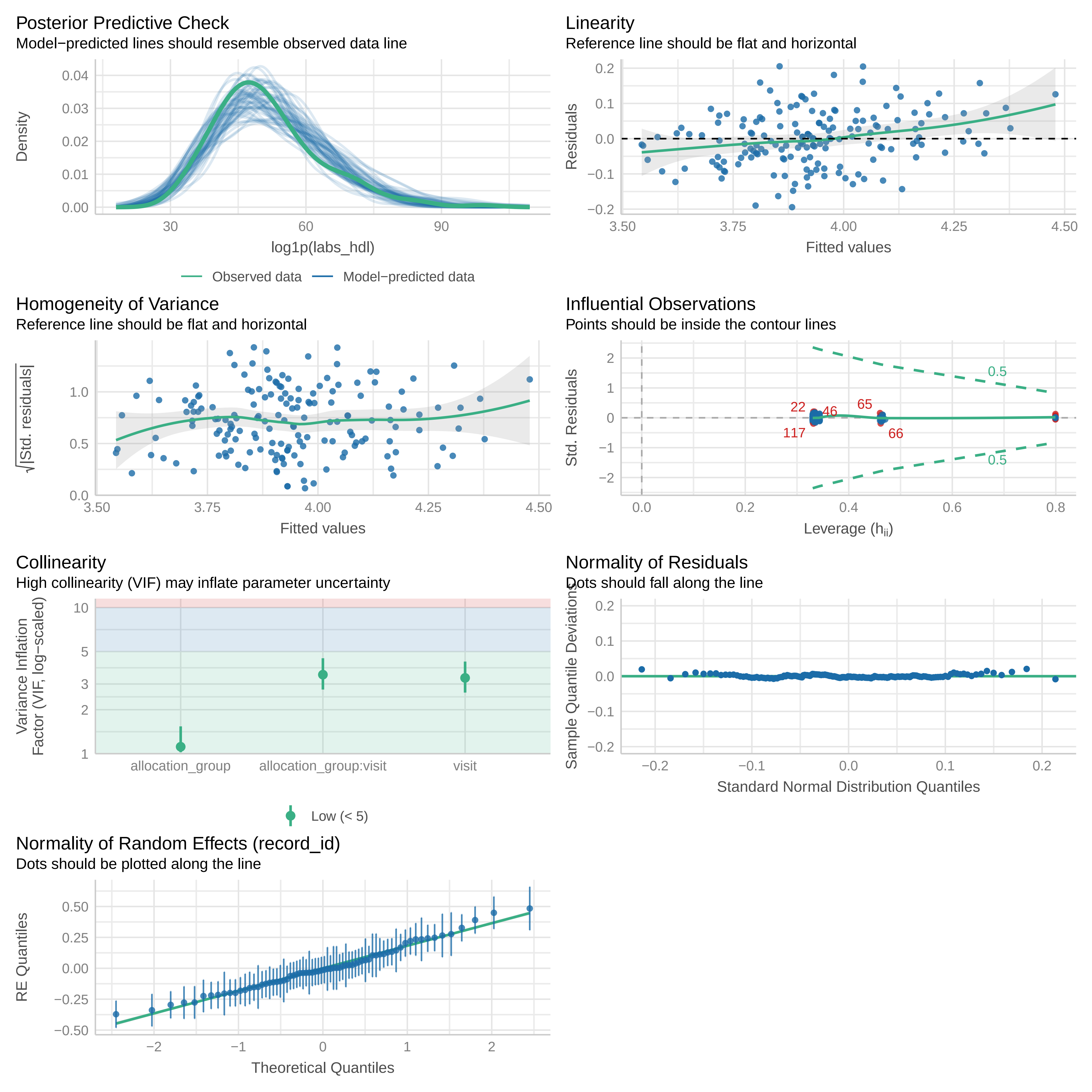
Posterior Predictive Check
Model−predicted lines should resemble observed data line
Density
0.04
0.03
0.02
0.01
0.00
30
60
90
log1p(labs_hdl)
Observed data
Model−predicted data
Linearity
Reference line should be flat and horizontal
Residuals
0.2
0.1
0.0
−0.1
−0.2
3.50
3.75
4.00
4.25
4.50
Fitted values
Homogeneity of Variance
Reference line should be flat and horizontal
√|Std. residuals|
1.0
0.5
0.0
3.50
3.75
4.00
4.25
4.50
Fitted values
Influential Observations
Points should be inside the contour lines
Std. Residuals
2
1
0
−1
−2
0.5
0.5
22
46
65
117
66
0.0
0.2
0.4
0.6
0.8
Leverage (h_{ii})
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)
Normality of Residuals
Dots should fall along the line
Sample Quantile Deviations
0.2
0.1
0.0
−0.1
−0.2
−0.2
−0.1
0.0
0.1
0.2
Standard Normal Distribution Quantiles
Normality of Random Effects (record_id)
Dots should be plotted along the line
RE Quantiles
0.50
0.25
0.00
−0.25
−0.50
−2
−1
0
1
2
Theoretical Quantiles