Posterior Predictive Check Model-predicted lines should resemble observed data line 0.004 0.003 Density 0.002 0.001 0.000 500 1000 1500 log1p(evs_score) Observed data — Model-predicted data Homogeneity of Variance Reference line should be flat and horizontal 1.6 √|Std. residuals 1.2 8.0 0.4 5.0 5.5 Fitted values Collinearity High collinearity (VIF) may inflate parameter uncertainty Variance Inflation Factor (VIF, log-scaled) 10 allocation_group allocation_group:visit visit Low (< 5) Moderate (< 10) Normality of Random Effects (record_id) Dots should be plotted along the line 0.5 RE Quantiles 0.0 -0.5

0 Theoretical Quantiles

-1.0

-2

Reference line should be flat and horizontal 0.5 0.0 -0.5 -1.0 5.0 5.5 Fitted values

Linearity

-2 -3

0.0

Influential Observations Points should be inside the contour lines 3 2 1 118 0 7 10 118 0

0.2

Leverage (h_{ii})

0.3

0.1

