Supplemental Analyses

Personal sensing for temporally precise lapse risk prediction for alcohol use disorder

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This file is the supplemental analysis script for *Personal sensing for temporally precise lapse risk prediction for alcohol use disorder*. It includes all supplemental figures.

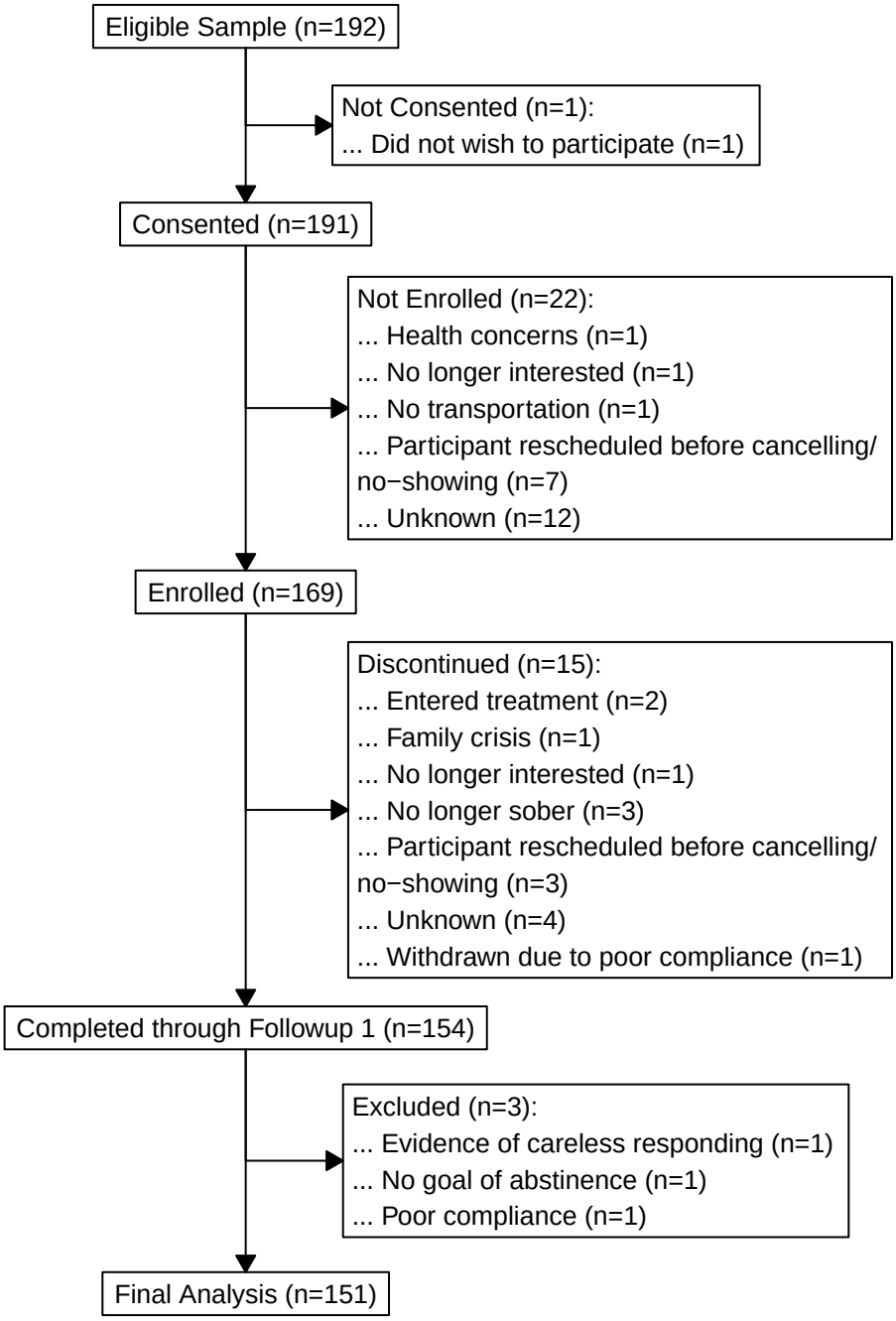

Figure S1 : CONSORT diagram. The diagram depicts participant retention at each study milestone. It also displays reasons for discontinuation when known and reasons for data exclusions.

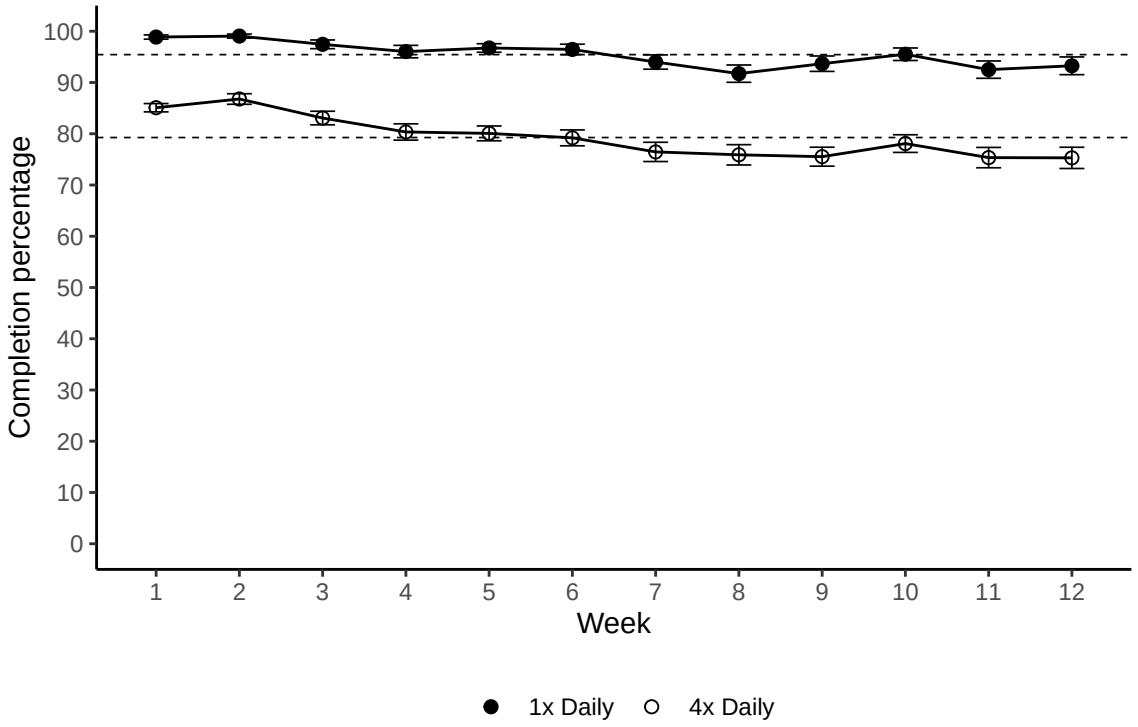

Figure S2 : EMA completion. The plot depicts completion percentages over time (by week) across the study period for 1x (closed circles) and 4x (open circles) daily EMA. Dashed lines represent mean EMA completion over entire study period.

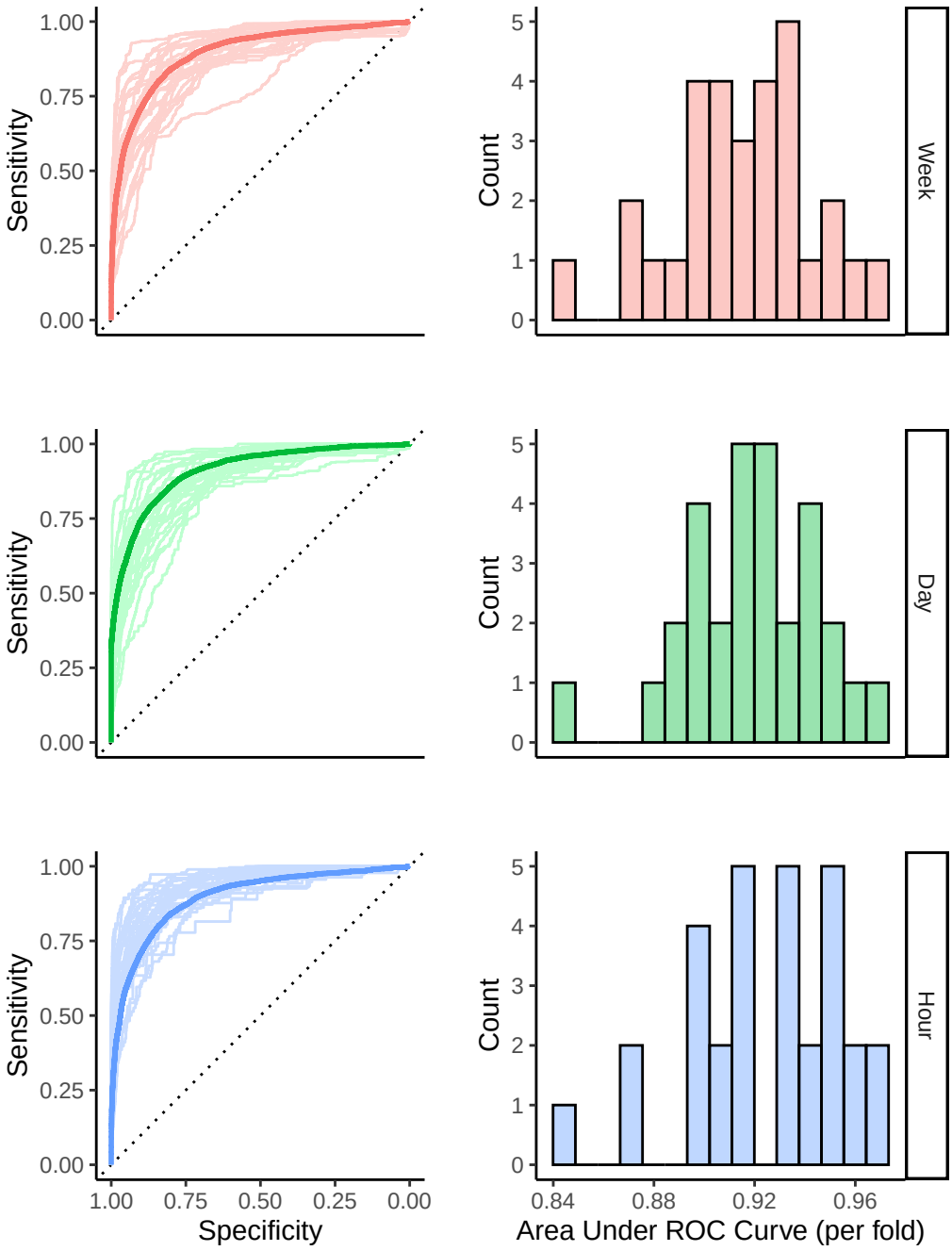

Figure S3 : ROC curves and auROCs for each held out fold. The plots on the left depict individual ROC curves from each of the 30 test sets. The darker curves represent the median ROC curve across test sets. The plots on the right depict the distribution of auROCs from the 30 test sets. The rows are organized by model (week, day, hour).

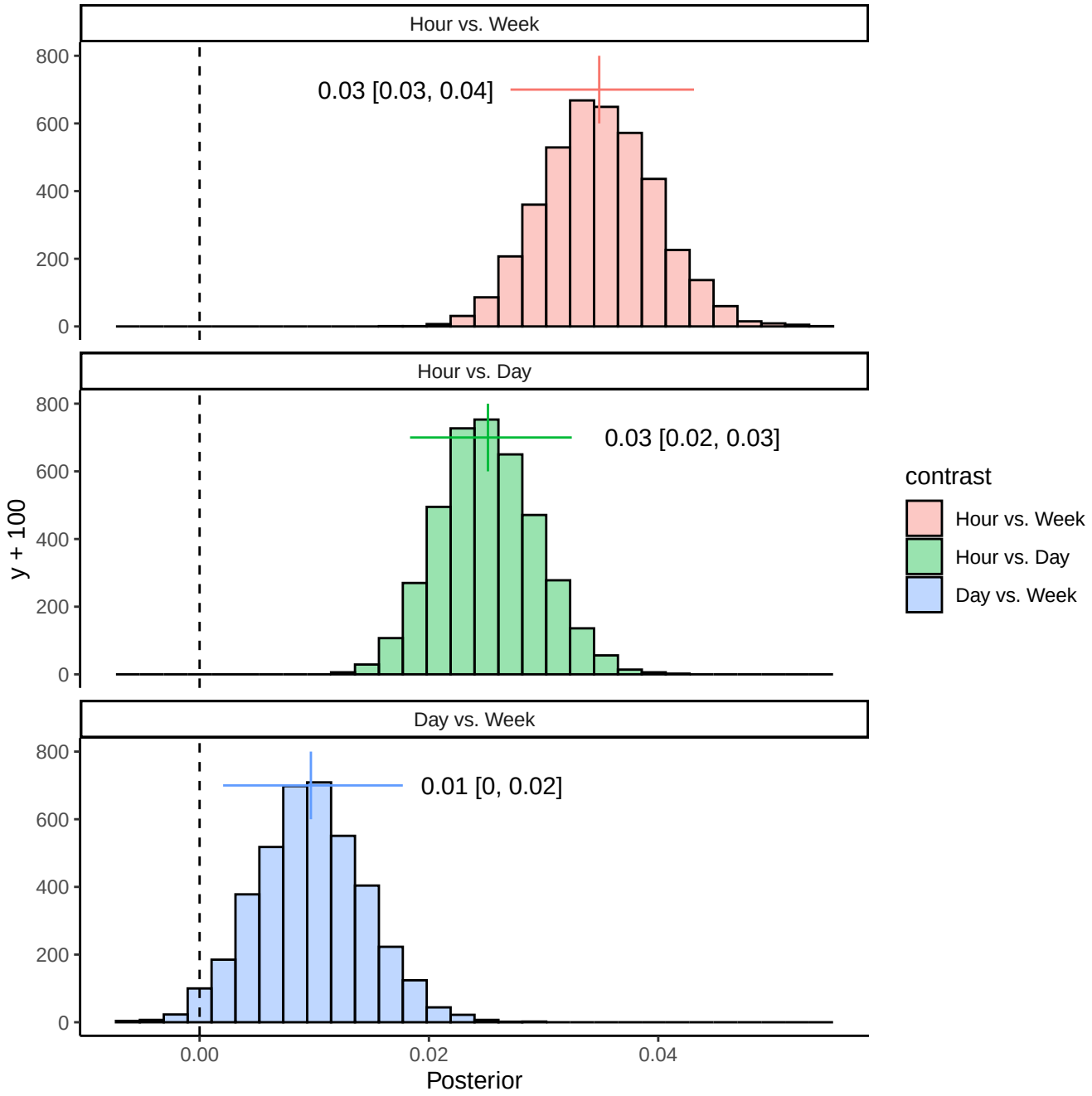

Figure S4 : Bayesian model contrasts. The plots above depict the posterior probabilities for the auROCs of our model contrasts. Each row represents a model constrast (hour vs. week, hour vs. day, day vs. week). The solid vertical lines represent the mean posterior probability. The horizontal lines represent the 95% credible interval. The dashed vertical lines denote a posterior probability of 0.

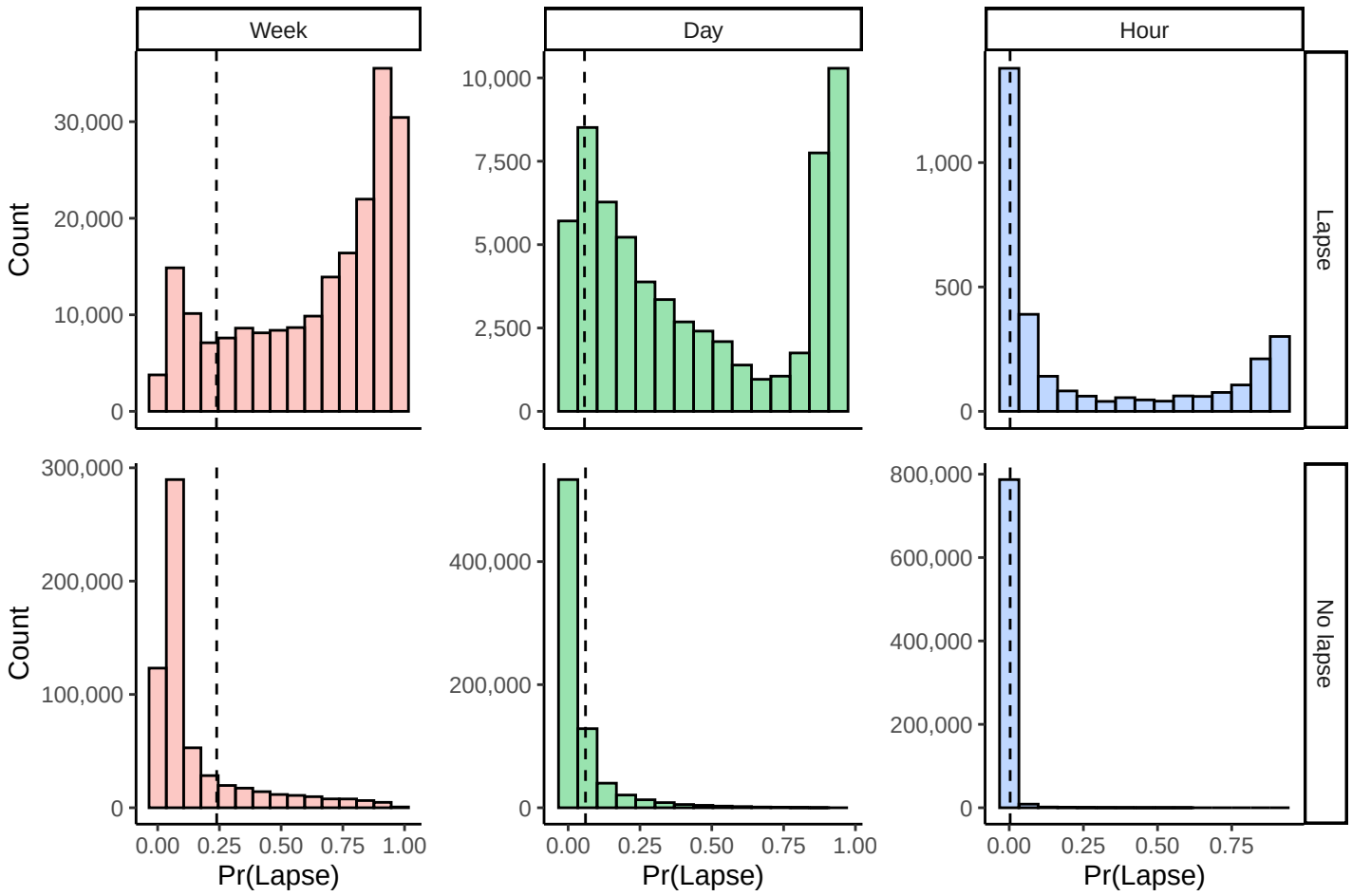

Figure S5 : Lapse probability predictions by model. The plots above depict predicted probabilities for all observations in the 30 test sets. The columns are organized by model (week, day, hour). The top row depicts estimated lapse probabilities for true lapses. The bottom row depicts estimated lapse probabilities for true no lapses. The dashed vertical lines represent the decision threshold for each model, determined using Youden's index.