Data Supplement for Kemp et al., Effects of Depression, Anxiety, Comorbidity, and Antidepressants on Resting-State Heart Rate and Its Variability: An ELSA-Brasil Cohort Baseline Study. Am J Psychiatry (doi: 10.1176/appi.ajp.2014.13121605)

Model Adequacy Checks

Statistical analysis

PS weighted analysis involves generalised boosted modelling, a machine-learning, multivariate nonparametric regression technique, to determine weights relating to the propensity that participants belong to a particular group based on covariates. Covariates included age, sex, smoking status, physical activity, BMI, hypertension, diabetes mellitus, dyslipidemia, myocardial infarction and coronary revascularisation (as described in the manuscript). A series of model adequacy checks were performed to determine how well the resulting weights succeeded in manipulating the groups so that the weighted covariates match, or balance, one another. In the accompanying Excel tables, we report participant characteristics before and after PS weighting for analysis on the mental disorders and analysis on use of antidepressants. These tables include a measure of standardised bias; this measure – essentially a Cohen's d effect size – reflects the group mean difference divided by the pooled sample standard deviation. As a rule of thumb, standardised bias of <0.2 is considered small, between 0.4 and 0.6, medium, and >0.8 large when considering its importance. Standardised bias is not influenced by sample size and allows for comparison of covariates in different units.