###### Appendix D. Weighting technical summary

The Gambling Survey Pilot responding sample (n=1078) has been weighted to control for bias and improve representativeness. As there was no disproportionate sampling, selection weights were not required to adjust for design effects.

The first step in the weighting process was to control for non-response bias. Within-household non-response weights were calculated using a logistic regression model, run for households with more than one eligible adult aged 16 or over. Both area-level and household-level variables were tested for association with one or two responses, including area age profile, education profile, employment profile, ethnicity, urban-rural categorisation, household income, household tenure, and number of children in the household.

The final non-response model included variables that were predictive of more than one survey response per household: region, quintiles of education to degree level in the area, quintiles of population aged 55 or over in the area, household tenure, and household income. The predicted probabilities from the model were used to create non-response weights for households with more than one eligible adult. These were checked for outliers and left untrimmed. Weights for responding households with only one eligible adult aged 16 or over were set to 1.

The non-response weights were then calibrated to estimates of the eligible population, adults aged 16 or over in Great Britain. Calibration weighting adjusts the weights so that characteristics of the weighted achieved sample match population estimates, thus reducing residual bias. Population figures for calibration were taken from ONS mid-year population estimates and the most recent Labour Force Survey data. The calibration variables used were as follows: age bands by sex, region (with four categories: London, North West, South East, and other regions), education level, tenure, ethnicity, and IMD percentiles (quintiles for England and bitiles for Scotland and Wales). Due to the very low number of male respondents in the 16 to 24 age group, the youngest age band used for calibration was 16 to 29.

After calibration, the weights were checked and a single outlier trimmed. The final weights have a design factor (DEFT) of 1.17, design effect (DEFF) of 1.36, and produce an estimated effective sample size (NEFF) of 793. Their efficiency is 74%.