## Results

### August 31, 2021

### 1 Summary Statistics

```
print(dat_summary_N)
## # A tibble: 1 x 5
     N_not_flagged_by_01 N_not_flagged_by_02 N_not_flagged_by_03 N_not_flagged_by_~
##
                   <dbl>
                                        <dbl>
                                                             <dbl>
                                                                                 <dbl>
## 1
                     479
                                          444
                                                               428
                                                                                   415
## # ... with 1 more variable: N_never_flag <dbl>
print(dat_summary_p)
## # A tibble: 1 x 5
##
     p_not_flagged_by_01 p_not_flagged_by_02 p_not_flagged_by_03 p_not_flagged_by_~
                   <dbl>
## 1
                   0.845
                                        0.783
                                                             0.755
                                                                                 0.732
## # ... with 1 more variable: p_never_flagged <dbl>
print(table01)
## # A tibble: 2 x 4
     is_not_flagged_by_01 prop_male prop_white average_PBSSOverall
##
                    <dbl>
                               <dbl>
                                          <dbl>
                                                               <dbl>
## 1
                                          0.943
                               0.386
                         0
                                                                63.0
## 2
                         1
                               0.376
                                          0.829
                                                                65.5
print(table02)
## # A tibble: 2 x 4
     is_not_flagged_by_02 prop_male prop_white average_PBSSOverall
##
                    <dbl>
                               <dbl>
                                          <dbl>
                                                               <dbl>
## 1
                               0.374
                                          0.935
                                                                64.2
                         0
## 2
                         1
                               0.378
                                          0.822
                                                                65.4
print(table03)
## # A tibble: 2 x 4
     is_not_flagged_by_03 prop_male prop_white average_PBSSOverall
##
                    <dbl>
                               <dbl>
                                          <dbl>
                                                               <dbl>
## 1
                               0.374
                                          0.942
                                                               64.1
                               0.379
## 2
                                          0.815
                                                                65.4
                         1
```

#### print(table04)

```
## # A tibble: 2 x 4
     is_not_flagged_by_04 prop_male prop_white average_PBSSOverall
##
                                          <dbl>
                    <dbl>
                              <dbl>
## 1
                              0.382
                                          0.928
                                                               63.7
                        0
## 2
                              0.376
                                          0.817
                                                                65.6
                        1
```

# 2 Outcome: Y=1 if NOT classified as non-responder by 1st decision point; Y=0 otherwise

```
summary(mod_not_flagged_by_01a)
##
## Call:
## glm(formula = is_not_flagged_by_01 ~ is_white + is_male + sPBSSOverall +
      stot_days_with_any_drinks, family = "binomial", data = dat_new)
## Deviance Residuals:
      Min 1Q Median
                                  3Q
                                          Max
## -2.3629 0.3417 0.4230 0.5591
                                       1.4295
## Coefficients:
                            Estimate Std. Error z value Pr(>|z|)
## (Intercept)
                              2.6482
                                         0.4813 5.502 3.76e-08 ***
## is_white
                             -0.8215
                                         0.5001 -1.643 0.1004
                                                          0.6748
## is_male
                             -0.1100
                                         0.2622 -0.420
## sPBSSOverall
                              0.2607
                                         0.1438 1.812
                                                          0.0699 .
                                         0.1168 -6.690 2.24e-11 ***
## stot_days_with_any_drinks -0.7813
## Signif. codes: 0 '*** 0.001 '** 0.01 '* 0.05 '.' 0.1 ' 1
## (Dispersion parameter for binomial family taken to be 1)
##
      Null deviance: 473.64 on 530 degrees of freedom
## Residual deviance: 416.01 on 526 degrees of freedom
     (36 observations deleted due to missingness)
## AIC: 426.01
## Number of Fisher Scoring iterations: 5
summary(mod_not_flagged_by_01b)
##
## Call:
## glm(formula = is_not_flagged_by_01 ~ is_white + is_male + sPBSSOverall +
##
      stypical_num_drinks_per_day, family = "binomial", data = dat_new)
##
## Deviance Residuals:
```

```
10 Median
     Min
## -2.630
                   0.302
                                    2.316
            0.218
                            0.573
##
## Coefficients:
##
                               Estimate Std. Error z value Pr(>|z|)
                                            0.5233
                                                     5.266 1.39e-07 ***
## (Intercept)
                                 2.7559
## is white
                                -0.8237
                                            0.5402 - 1.525
                                                             0.1273
## is male
                                 0.3729
                                            0.2879
                                                     1.295
                                                             0.1952
## sPBSSOverall
                                 0.3262
                                            0.1714
                                                     1.904
                                                             0.0569 .
## stypical_num_drinks_per_day -1.2240
                                            0.1451 -8.433 < 2e-16 ***
## Signif. codes: 0 '*** 0.001 '** 0.01 '* 0.05 '.' 0.1 ' 1
  (Dispersion parameter for binomial family taken to be 1)
##
##
       Null deviance: 473.64 on 530 degrees of freedom
## Residual deviance: 368.57 on 526 degrees of freedom
     (36 observations deleted due to missingness)
## AIC: 378.57
##
## Number of Fisher Scoring iterations: 5
```

## 3 Outcome: Y=1 if NOT classified as non-responder by 2nd decision point; Y=0 otherwise

```
summary(mod not flagged by 02a)
```

```
##
## Call:
  glm(formula = is_not_flagged_by_02 ~ is_white + is_male + sPBSSOverall +
##
       stot_days_with_any_drinks, family = "binomial", data = dat_new)
##
## Deviance Residuals:
##
      Min
                 1Q
                     Median
                                   3Q
                                           Max
                               0.6841
## -2.2431
             0.3388
                      0.5038
                                        1.5717
##
## Coefficients:
                             Estimate Std. Error z value Pr(>|z|)
                                          0.3897
                                                  5.281 1.29e-07 ***
## (Intercept)
                               2.0577
## is white
                              -0.7526
                                          0.4083 - 1.844
                                                           0.0652
## is_male
                              -0.0425
                                          0.2323 -0.183
                                                           0.8548
## sPBSSOverall
                               0.1828
                                          0.1241
                                                   1.473
                                                           0.1407
                                          0.1072 -6.942 3.86e-12 ***
## stot_days_with_any_drinks -0.7446
## ---
## Signif. codes: 0 '*** 0.001 '** 0.01 '* 0.05 '.' 0.1 ' 1
  (Dispersion parameter for binomial family taken to be 1)
##
##
##
       Null deviance: 572.40 on 530
                                      degrees of freedom
## Residual deviance: 509.08 on 526 degrees of freedom
```

```
(36 observations deleted due to missingness)
## AIC: 519.08
##
## Number of Fisher Scoring iterations: 4
summary(mod_not_flagged_by_02b)
##
## Call:
  glm(formula = is_not_flagged_by_02 ~ is_white + is_male + sPBSSOverall +
       stypical_num_drinks_per_day, family = "binomial", data = dat_new)
##
## Deviance Residuals:
      Min
                1Q
                     Median
                                   3Q
## -2.5047
                     0.4011
                               0.6856
                                        2.3801
            0.2767
## Coefficients:
##
                               Estimate Std. Error z value Pr(>|z|)
## (Intercept)
                                 2.0654
                                            0.4168 4.955 7.22e-07 ***
## is_white
                                -0.7175
                                            0.4363 -1.644
                                                              0.100
## is male
                                 0.3209
                                            0.2516
                                                     1.276
                                                              0.202
                                                     1.604
## sPBSSOverall
                                 0.2275
                                            0.1419
                                                              0.109
## stypical_num_drinks_per_day -1.1069
                                            0.1250 -8.855 < 2e-16 ***
## ---
## Signif. codes: 0 '*** 0.001 '** 0.01 '* 0.05 '.' 0.1 ' 1
##
  (Dispersion parameter for binomial family taken to be 1)
##
      Null deviance: 572.40 on 530 degrees of freedom
## Residual deviance: 461.76 on 526 degrees of freedom
     (36 observations deleted due to missingness)
## AIC: 471.76
## Number of Fisher Scoring iterations: 5
```

# 4 Outcome: Y=1 if NOT classified as non-responder by 3rd decision point; Y=0 otherwise

summary(mod\_not\_flagged\_by\_03a)

```
##
                             Estimate Std. Error z value Pr(>|z|)
## (Intercept)
                              2.06614
                                         0.39110
                                                  5.283 1.27e-07 ***
## is white
                             -0.92317
                                         0.40790 - 2.263
                                                           0.0236 *
## is_male
                             -0.05637
                                         0.22686 -0.248
                                                           0.8038
## sPBSSOverall
                              0.20805
                                         0.12032
                                                   1.729
                                                           0.0838
                                         0.10819 -7.559 4.05e-14 ***
## stot_days_with_any_drinks -0.81781
## Signif. codes: 0 '*** 0.001 '** 0.01 '* 0.05 '.' 0.1 ' 1
##
## (Dispersion parameter for binomial family taken to be 1)
##
      Null deviance: 606.36 on 530 degrees of freedom
## Residual deviance: 526.46 on 526 degrees of freedom
     (36 observations deleted due to missingness)
## AIC: 536.46
##
## Number of Fisher Scoring iterations: 4
summary(mod_not_flagged_by_03b)
##
## Call:
## glm(formula = is not flagged by 03 ~ is white + is male + sPBSSOverall +
##
       stypical_num_drinks_per_day, family = "binomial", data = dat_new)
##
## Deviance Residuals:
##
      Min
                 1Q
                      Median
                                   3Q
                                           Max
## -2.5178
           -0.6045
                      0.4063
                               0.6150
                                        2.5605
##
## Coefficients:
##
                               Estimate Std. Error z value Pr(>|z|)
## (Intercept)
                                 2.0956
                                            0.4217
                                                     4.969 6.73e-07 ***
## is white
                                -0.9265
                                            0.4391
                                                   -2.110
                                                             0.0349 *
## is_male
                                 0.3074
                                            0.2465
                                                     1.247
                                                             0.2123
## sPBSSOverall
                                 0.2638
                                            0.1371
                                                     1.925
                                                             0.0543 .
## stypical_num_drinks_per_day -1.1753
                                            0.1253 -9.379 < 2e-16 ***
## Signif. codes: 0 '*** 0.001 '** 0.01 '* 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for binomial family taken to be 1)
##
##
       Null deviance: 606.36 on 530 degrees of freedom
## Residual deviance: 475.92 on 526 degrees of freedom
     (36 observations deleted due to missingness)
## AIC: 485.92
```

## Number of Fisher Scoring iterations: 5

# 5 Outcome: Y=1 if NOT classified as non-responder by 4th decision point; Y=0 otherwise

```
summary(mod_not_flagged_by_04a)
##
## Call:
## glm(formula = is_not_flagged_by_04 ~ is_white + is_male + sPBSSOverall +
       stot_days_with_any_drinks, family = "binomial", data = dat_new)
##
## Deviance Residuals:
      Min
           10
                    Median
                                  30
                                          Max
## -2.1426 -0.9091 0.5259
                              0.7428
                                        1.8281
## Coefficients:
##
                            Estimate Std. Error z value Pr(>|z|)
## (Intercept)
                              1.8167
                                         0.3591
                                                 5.059 4.21e-07 ***
                                         0.3762 -2.063
## is_white
                             -0.7762
                                                          0.0391 *
## is_male
                             -0.0800
                                         0.2223 -0.360
                                                          0.7190
                              0.2344
                                                  2.016
## sPBSSOverall
                                         0.1162
                                                          0.0438 *
## stot_days_with_any_drinks -0.8586
                                         0.1088 -7.892 2.98e-15 ***
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for binomial family taken to be 1)
##
      Null deviance: 630.32 on 530 degrees of freedom
## Residual deviance: 543.84 on 526 degrees of freedom
     (36 observations deleted due to missingness)
## AIC: 553.84
## Number of Fisher Scoring iterations: 4
summary(mod_not_flagged_by_04b)
##
## Call:
## glm(formula = is_not_flagged_by_04 ~ is_white + is_male + sPBSSOverall +
##
       stypical_num_drinks_per_day, family = "binomial", data = dat_new)
##
## Deviance Residuals:
      Min
                1Q
                    Median
                                  3Q
                                          Max
                                       2.6775
                    0.4171
                              0.6542
## -2.3910 -0.7284
## Coefficients:
                              Estimate Std. Error z value Pr(>|z|)
## (Intercept)
                                1.8150
                                           0.3878
                                                   4.680 2.87e-06 ***
## is white
                               -0.7546
                                           0.4061 -1.858
                                                            0.0632 .
## is_male
                                0.2690
                                           0.2417
                                                   1.113
                                                            0.2659
## sPBSSOverall
                                0.3020
                                                   2.294
                                           0.1317
                                                            0.0218 *
```

0.1255 -9.700 < 2e-16 \*\*\*

## stypical\_num\_drinks\_per\_day -1.2170

```
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for binomial family taken to be 1)
##
## Null deviance: 630.32 on 530 degrees of freedom
## Residual deviance: 490.31 on 526 degrees of freedom
## (36 observations deleted due to missingness)
## AIC: 500.31
##
## Number of Fisher Scoring iterations: 5
```