Table 1: Variations in having an NHS Health Check among different socio-economic, demographic and behavioural groups

|  | NHS Health Check |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | No $\mathrm{n}=342$ | $\begin{aligned} & \text { Yes } \\ & \mathrm{n}=637 \end{aligned}$ | OR (95\% CI) | $P$ value |
| Age (in years) | 53.8 (10.2)* | 55.3 (9.9)* | $0.02\left(0.01\right.$ to 0.03) ${ }^{\wedge}$ | 0.027 |
| Sex |  |  |  |  |
| Male | 169 (49.42) | 355 (55.73) | 1 |  |
| Female | 173 (50.58) | 282 (44.27) | 0.78 (0.60 to 1.01) | 0.059 |
| Index of multiple deprivation (quintile) |  |  |  |  |
| 1 | 136 (39.77) | 265 (41.60) | 1 |  |
| 2 | 99 (28.95) | 203 (31.87) | 1.05 (0.77 to 1.44) | 0.752 |
| 3 | 67 (19.59) | 120 (18.84) | 0.92 (0.64 to 1.32) | 0.649 |
| 4 | 37 (10.82) | 41 (6.44) | 0.57 (0.35 to 0.93) | 0.024 |
| 5 | 3 (0.88) | 8 (1.26) | 1.37 (0.36 to 5.24) | 0.647 |
| Sexual orientation |  |  |  |  |
| Heterosexual | 318 (92.98) | 582 (91.37) | 1 |  |
| LGBT | 7 (2.05) | 23 (3.61) | 1.80 (0.76 to 4.23) | 0.181 |
| Prefer not to say | 17 (4.97) | 32 (5.02) | 1.03 (0.56 to 1.88) | 0.927 |
| Ethnicity |  |  |  |  |
| White | 225 (65.79) | 342 (53.69) | 1 |  |
| BME | 117 (34.21) | 295 (46.31) | 1.66 (1.26 to 2.18) | <0.001 |
| Religion |  |  |  |  |
| Christianity | 126 (36.84) | 224 (35.16) | 1 |  |
| Other | 101 (29.53) | 277 (43.49) | 1.54 (1.13 to 2.11) | 0.007 |
| No | 114 (33.33) | 133 (20.88) | 0.66 (0.47 to 0.91) | 0.013 |
| Don't know/refused | 1 (0.29) | 3 (0.47) | 1.69 (0.17 to 16.39) | 0.652 |
| English language skills |  |  |  |  |
| Yes | 336 (98.25) | 622 (97.65) | 1 |  |
| No | 6 (1.75) | 15 (2.35) | 1.35 (0.52 to 3.51) | 0.538 |
| Smoker |  |  |  |  |
| Never | 181 (52.92) | 397 (62.32) | 1 |  |
| Ex-smoker | 85 (24.85) | 112 (17.58) | 0.60 (0.43 to 0.84) | 0.003 |
| Current smoker | 76 (22.22) | 128 (20.09) | 0.77 (0.55 to 1.07) | 0.121 |
| Alcohol drinker |  |  |  |  |
| Never | 127 (37.13) | 290 (45.53) | 1 |  |


| Ex-drinker | $22(6.43)$ | $33(5.18)$ | $0.66(0.37$ to 1.17$)$ | 0.154 |
| ---: | :--- | :--- | :--- | :--- |
| Current drinker | $192(56.14)$ | $307(48.19)$ | $0.70(0.53$ to 0.92$)$ | 0.011 |
| Prefer not to say/don't know | $1(0.29)$ | $7(1.10)$ | $3.07(0.37$ to 25.18$)$ | 0.297 |

*mean (SD); ^coefficient (95\% CI)

Table 2: Any association between having an NHS Health Check and a healthy lifestyle

NHS Health Check

|  | NHS Health Check |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { No } \\ & \mathrm{n}=342 \end{aligned}$ | $\begin{aligned} & \text { Yes } \\ & \mathrm{n}=637 \end{aligned}$ | OR (95\% CI) | P value |
| Describing a healthy lifestyle |  |  |  |  |
| A healthy diet |  |  |  |  |
| Yes | 269 (78.65) | 473 (74.25) | 1 |  |
| No | 73 (21.35) | 164 (25.75) | 1.28 (0.93 to 1.75) | 0.126 |
| Regular exercise |  |  |  |  |
| Yes | 251 (73.39) | 435 (68.29) | 1 |  |
| No | 91 (26.61) | 202 (31.71) | 1.28 (0.96 to 1.72) | 0.097 |
| No smoking |  |  |  |  |
| Yes | 118 (34.50) | 192 (30.14) | 1 |  |
| No | 224 (65.50) | 445 (69.86) | 1.22 (0.92 to 1.62) | 0.162 |
| Not drinking too much <br> alcohol   |  |  |  |  |
| Yes | 101 (29.53) | 167 (26.22) | 1 |  |
| No | 241 (70.47) | 470 (73.78) | 1.18 (0.88 to 1.58) | 0.268 |
| Following a healthy lifestyle |  |  |  |  |
| Current diet- fruit and vegetables |  |  |  |  |
| $\geq 5$ portions/day | 90 (26.32) | 155 (24.33) | 1 |  |
| <5 portions/day | 252 (73.68) | 482 (75.67) | 1.11 (0.82 to 1.50) | 0.495 |
| Current physical activitymoderate intensity |  |  |  |  |
| $\geq 150$ mins/week | 191 (55.85) | 356 (55.89) | 1 |  |
| <150 mins/week | 148 (43.27) | 260 (40.82) | 0.94 (0.72 to 1.23) | 0.665 |
| Don't know | 3 (0.88) | 21 (3.30) | 3.76 (1.11 to 12.75) | 0.034 |
| Current smoking or tobacco usage |  |  |  |  |
| No | 264 (77.19) | 496 (77.86) | 1 |  |
| Yes | 78 (22.81) | 141 (22.14) | 0.96 (0.70 to 1.32) | 0.810 |
| Current alcohol drinking |  |  |  |  |
| $\leq 14$ units/week | 303 (88.60) | 553 (86.81) | 1 |  |
| >14 units/week | 39 (11.40) | 84 (13.19) | 1.18 (0.79 to 1.77) | 0.423 |
| Current BMI |  |  |  |  |
| Normal | 95 (27.78) | 152 (23.86) | 1 |  |
| Under | 11 (3.22) | 9 (1.41) | 0.51 (0.20 to 1.28) | 0.152 |
| Overweight/obese | 185 (54.09) | 395 (62.01) | 1.33 (0.98 to 1.82) | 0.068 |
| Not stated | 51 (14.91) | 81 (12.72) | 0.99 (0.64 to 1.53) | 0.973 |
| Thinking of making lifestyle changes in the next 6 months |  |  |  |  |
| Eat more healthily |  |  |  |  |
| Yes | 92 (26.90) | 215 (33.75) | 1 |  |


| No | 250 (73.10) | 422 (66.25) | 0.72 (0.54 to 0.97) | 0.028 |
| :---: | :---: | :---: | :---: | :---: |
| Lose weight |  |  |  |  |
| Yes | 116 (33.92) | 235 (36.89) | 1 |  |
| No | 226 (66.08) | 402 (63.11) | 0.88 (0.67 to 1.16) | 0.355 |
| Increase the amount of physical activity |  |  |  |  |
| Yes | 88 (25.73) | 169 (26.53) | 1 |  |
| No | 254 (74.27) | 468 (73.47) | 0.96 (0.71 to 1.29) | 0.786 |
| Cut down or stop smoking |  |  |  |  |
| Yes | 35 (10.23) | 66 (10.36) | 1 |  |
| No | 307 (89.77) | 571 (89.64) | 0.99 (0.64 to 1.52) | 0.950 |
| Cut down the amount of alcohol |  |  |  |  |
| Yes | 12 (3.51) | 39 (6.12) | 1 |  |
| No | 330 (96.49) | 598 (93.88) | 0.56 (0.29 to 1.08) | 0.083 |

Table 3: Any association between having an NHS Health Check and cut down/stop smoking among current smokers or amount of alcohol current drinkers would like to drink

|  | NHS Health Check |  | tobacco usage |  |
| :---: | :---: | :---: | :---: | :---: |
| Cut down/stop smoking among current smokers, included smoking and other forms of tobacco usage |  |  |  |  |
|  | $\begin{aligned} & \text { No } \\ & \mathrm{n}=78 \end{aligned}$ | $\begin{array}{\|l\|} \hline \text { Yes } \\ \mathrm{n}=141 \\ \hline \end{array}$ | OR (95\% CI) | P value |
| Trying to cut down or give up smoking completely |  |  |  |  |
| Yes | 41 (52.56) | 72 (51.06) | 1 |  |
| No | 35 (44.87) | 58 (41.13) | 0.94 (0.53 to 1.67) | 0.841 |
| Don't know | 2 (2.56) | 11 (7.8) | 3.13 (0.66 to 14.83) | 0.150 |
| Giving up smoking altogether |  |  |  |  |
| Yes | 40 (51.28) | 83 (58.87) | 1 |  |
| No | 32 (41.03) | 53 (37.59) | 0.80 (0.45 to 1.42) | 0.445 |
| Don't know | 6 (7.69) | 5 (3.55) | 0.40 (0.12 to 1.40) | 0.151 |
| Ever tried to stop smoking |  |  |  |  |


| Yes | 65 (83.33) | 105 (74.47) | 1 |  |
| :---: | :---: | :---: | :---: | :---: |
| No | 13 (16.67) | 36 (25.53) | 1.71 (0.85 to 3.47) | 0.134 |
| Amount of alcohol current drinkers would like to drink |  |  |  |  |
|  | $\begin{aligned} & \text { No } \\ & \text { n=192 } \end{aligned}$ | $\begin{aligned} & \text { Yes } \\ & \mathrm{n}=307 \end{aligned}$ | OR (95\% CI) | P value |
| Like to drink alcohol |  |  |  |  |
| Less than as at the moment | 31 (16.15) | 68 (22.15) | 1 |  |
| About the same as at the moment | 158 (82.29) | 232 (75.57) | 0.67 (0.42 to 1.07) | 0.094 |
| More than as at the moment | 3 (1.56) | 7 (2.28) | 1.06 (0.26 to 4.39) | 0.932 |

Table 4: Multiple logistic regression models, having adjusted for 'a priori' confounders

|  | OR (95\% CI) | $P$ value |
| :---: | :---: | :---: |
| Variations in having an NHS Health Check among specific sociodemographic and behavioural groups |  |  |
| Ethnicity* |  |  |
| White | 1 |  |
| BME | 1.74 (1.31 to 2.32) | <0.001 |
| Religion* |  |  |
| Christianity | 1 |  |
| Other | 1.61 (1.16 to 2.25) | 0.005 |
| No | 0.69 (0.49 to 0.98) | 0.037 |
| Don't know/refused | 1.55 (0.16 to 15.29) | 0.707 |
| Index of multiple deprivation (quintile)\# |  |  |
| 1 | 1 |  |
| 2 | 0.91 (0.66 to 1.27) | 0.596 |
| 3 | 0.84 (0.58 to 1.22) | 0.367 |
| 4 | 0.55 (0.34 to 0.91) | 0.019 |
| 5 | 1.64 (0.42 to 6.40) | 0.473 |
| Index of multiple deprivation (quintile) |  |  |
| 1 | 1 |  |
| 2 | 0.92 (0.66 to 1.27) | 0.598 |
| 3 | 0.81 (0.55 to 1.17) | 0.255 |
| 4 | 0.55 (0.33 to 0.90) | 0.019 |
| 5 | 1.68 (0.43 to 6.59) | 0.455 |
| Smoker $\perp$ |  |  |
| Never | 1 |  |
| Ex-smoker | 0.65 (0.45 to 0.92) | 0.017 |
| Current smoker | 0.85 (0.59 to 1.21) | 0.364 |
| Smoker $\pm$ |  |  |
| Never | 1 |  |
| Ex-smoker | 0.67 (0.47 to 0.97) | 0.031 |
| Current smoker | 0.89 (0.62 to 1.27) | 0.506 |
| Alcohol drinker $\perp$ |  |  |
| Never | 1 |  |
| Ex-drinker | 0.74 (0.41 to 1.36) | 0.334 |
| Current drinker | 0.82 (0.60 to 1.12) | 0.209 |
| Prefer not to say/don't know | 3.94 (0.46 to 33.31) | 0.209 |
| Alcohol drinker $\pm$ |  |  |


| Never | 1 |  |
| :---: | :---: | :---: |
| Ex-drinker | 0.79 (0.43 to 1.45) | 0.446 |
| Current drinker | 0.87 (0.64 to 1.20) | 0.407 |
| Prefer not to say/don't know | 4.44 (0.52 to 38.28) | 0.175 |
| Association between having an NHS Health Check and thinking of eating more healthily in the next 6 months |  |  |
| Eat more healthily $\perp$ |  |  |
| Yes | 1 |  |
| No | 0.80 (0.59 to 1.09) | 0.155 |
| Eat more healthily $\pm$ |  |  |
| Yes | 1 |  |
| No | 0.82 (0.61 to 1.12) | 0.210 |

*adjusted for age, sex and index of multiple deprivation; \#adjusted for age, sex and ethnicity; ^adjusted for age, sex and religion; $\perp$ adjusted for age, sex, index of multiple deprivation and ethnicity; $\pm$ adjusted for age, sex, index of multiple deprivation and religion

