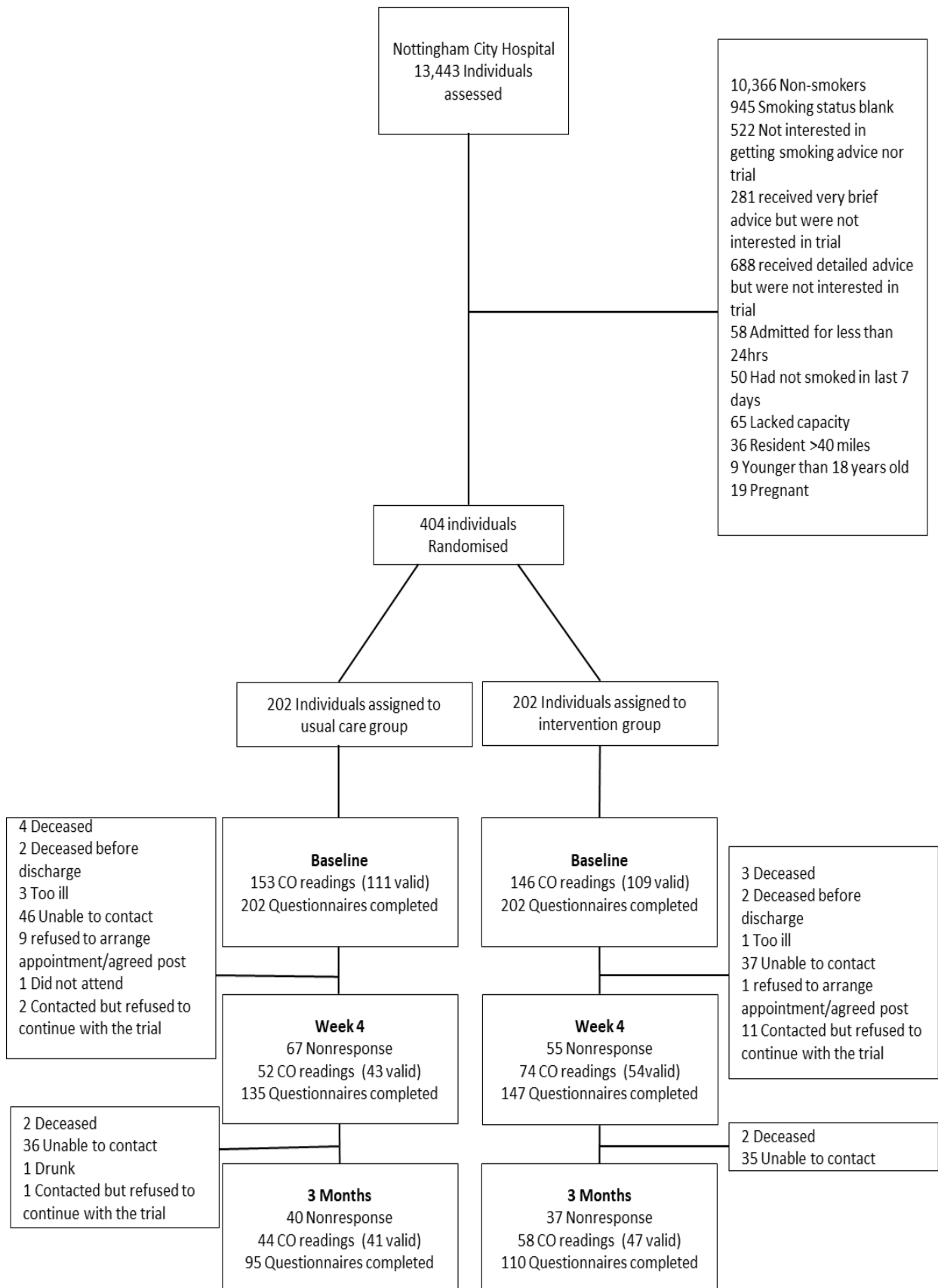


# 1. Participant flow



## 2. Baseline characteristics

| Characteristic                                    | Total         | Usual Care    | Intervention  |
|---|---------------|---------------|---------------|
|   | 404           | 202           | 202           |
| <b>Age (Years)</b>                                |               |               |               |
| Mean (SD)   | 54.77 (14.50) | 55.58 (13.82) | 53.96 (15.11) |
| <b>Gender</b>                                     |               |               |               |
| Female N (%)                                      | 158 (39.11)   | 86 (42.57)    | 72 (35.64)    |
| Male N (%)  | 246 (60.89)   | 116 (57.43)   | 130 (64.36)   |
| <b>Ethnic group</b>                               |               |               |               |
| White British (%)                                 | 372 (92.08)   | 189 (93.56)   | 183 (90.59)   |
| White Other* (%)                                  | 15 (3.71)     | 6 (2.98)      | 9 (4.46)      |
| Other† (%)  | 11 (2.72)     | 3 (1.50)      | 8 (3.96)      |
| Unknown (%)                                       | 6 (1.49)      | 4 (1.96)      | 2 (0.99)      |
| <b>Multiple deprivation index rank</b>            |               |               |               |
| 1 – most deprived(%)                              | 168 (42.00)   | 82 (41.21)    | 86 (42.79)    |
| 2 (%)   | 85 (21.25)    | 47 (24.62)    | 38 (18.91)    |
| 3 (%)   | 60 (15.00)    | 31 (15.58)    | 29 (14.43)    |
| 4 (%)   | 42 (10.50)    | 19 (9.55)     | 23 (11.44)    |
| 5 – least deprived (%)                            | 45 (11.25)    | 20 (10.05)    | 25 (12.44)    |
| <b>Reason admitted to hospital</b>                |               |               |               |
| Elective surgery N (%)                            | 58 (14.36)    | 26 (12.87)    | 32 (15.84)    |
| Emergency N (%)                                   | 340 (84.16)   | 172 (85.15)   | 168 (83.17)   |
| Routine care N (%)                                | 3 (0.74)      | 3 (1.47)      | 0             |
| Other N (%)                                       | 3 (0.74)      | 1 (0.49)      | 2 (0.99)      |
| <b>Number of other people living in the house</b> |               |               |               |
| <b>Adults</b>                                     |               |               |               |
| Mean (SD)   | 0.88 (0.92)   | 0.86 (0.89)   | 0.90 (0.95)   |
| <b>Children</b>                                   |               |               |               |
| Mean (SD)   | 0.44 (0.99)   | 0.41 (0.93)   | 0.47 (1.05)   |
| <b>Qualification</b>                              |               |               |               |
| None N (%)  | 163 (40.35)   | 84 (41.58)    | 79 (39.11)    |
| GCSEs N (%)                                       | 117 (28.96)   | 45 (22.28)    | 72 (35.64)    |
| A-levels/AS-levels N (%)                          | 44 (10.89)    | 23 (11.39)    | 21 (10.40)    |
| Degree N (%)                                      | 38 (9.41)     | 23 (11.39)    | 15 (7.43)     |
| Other (%)   | 42 (10.40)    | 27 (13.37)    | 15 (7.43)     |
| <b>General No of cigs daily before admission</b>  |               |               |               |
| Median (IQR)                                      | 15 (10-20)    | 15 (10 - 20)  | 15 (9–20)     |
| <b>Heaviness of smoking index</b>                 |               |               |               |
| Very low dependence (%)                           | 139 (35.10)   | 60 (30.30)    | 79 (39.90)    |
| Low to moderate dependence (%)                    | 119 (30.05)   | 59 (29.80)    | 60 (30.30)    |
| Moderate dependence                               | 94 (23.74)    | 48 (24.24)    | 46 (23.23)    |
| High dependence                                   | 44 (11.11)    | 31 (15.66)    | 13 (6.57)     |
| <b>Fagestrom score</b>                            |               |               |               |
| No dependence                                     | 17 (4.21)     | 8 (3.96)      | 9 (4.46)      |
| Low dependence                                    | 60 (14.85)    | 26 (12.87)    | 34 (16.83)    |
| Low to moderate dependence                        | 110 (27.23)   | 51 (25.25)    | 59 (29.21)    |
| Moderate dependence                               | 169 (41.83)   | 92 (45.54)    | 77 (38.12)    |
| High dependence                                   | 48 (11.88)    | 25 (12.38)    | 23 (11.39)    |
| <b>Live with other smokers</b>                    |               |               |               |
| Yes   | 144 (37.11)   | 77 (40.10)    | 67 (34.18)    |
| No  | 244 (62.89)   | 115 (59.90)   | 129 (65.82)   |
| <b>Years as a smoker</b>                          |               |               |               |
| <1  | 1 (0.26)      | 0             | 1 (0.52)      |
| 1 - 10  | 25 (6.53)     | 8 (4.19)      | 17 (8.85)     |

|   |             |            |            |
|---|-------------|------------|------------|
| 11 - 20   | 53 (13.84)  | 23 (12.04) | 30 (15.63) |
| 21 -40  | 146 (38.12) | 76 (39.79) | 70 (36.46) |
| 41 +  | 158 (41.25) | 84 (43.98) | 74 (38.54) |
| <b>Readmission status</b>   |             |            |            |
| Readmitted to hospital between baseline and 4 weeks post discharge  | 43 (10.64)  | 18 (8.91)  | 25 (12.38) |
| Readmitted to hospital between baseline and 3 months post discharge | 69 (17.08)  | 31 (15.35) | 38 (18.81) |
| <b>Duration of admission</b>  |             |            |            |
| Median (IQR)  | 3 (1 - 6)   | 2 (1 – 5)  | 3 (1 – 6)  |

\* White – Irish and European

†Mixed White and Black Carribean, Mixed White and Black African, Asian/Asian British Indian, Asian/Asian British Pakistani, Black/Black British Carribean, Black/Black British African, Any Other Ethnic Group

### 3. Outcome measures

#### Trial effectiveness summaries: Four week and three month comparison by treatment arm (Odds Ratio)

|   | Usual Care Group | Intervention Group | Unadjusted                          | Adjusted model 1†                   | Adjusted model 2 ‡                  |
|---|------------------|--------------------|-------------------------------------|-------------------------------------|-------------------------------------|
|   |                  |                    | Odds ratio<br>(95% CI)<br>[P-value] | Odds ratio<br>(95% CI)<br>[P-value] | Odds ratio<br>(95% CI)<br>[P-value] |
| Total   | 202              | 202                | 404                                 | 392                                 | 277                                 |
| Continuous smoking cessation, validated at 4 weeks*   | 38 (18.81%)      | 43 (21.29%)        | 1.17<br>(0.72, 1.90)<br>[0.53]      | 1.05<br>(0.64, 1.73)<br>[0.84]      | 0.95<br>(0.56, 1.62)<br>[0.85]      |
| Self-reported continuous smoking cessation (4 weeks)  | 50 (24.75%)      | 55 (27.23%)        | 1.14<br>(0.73, 1.78)<br>[0.57]      | 1.11<br>(0.70, 1.75)<br>[0.66]      | 0.99<br>(0.60, 1.63)<br>[0.97]      |
| Self-report having a smoke-free home (4 weeks)        | 92 (45.54%)      | 102 (50.50%)       | 1.22<br>(0.83, 1.80)<br>[0.32]      | 1.11<br>(0.72, 1.70)<br>[0.64]      | 1.06<br>(0.69, 1.64)<br>[0.78]      |
| Self-reported continuous smoking cessation (3 months) | 32<br>(15.84%)   | 42<br>(20.79%)     | 1.39<br>(0.84, 2.32)<br>[0.17]      | 1.32<br>(0.78, 2.22)<br>[0.30]      | 1.31<br>(0.74, 2.32)<br>[0.35]      |
| Continuous smoking cessation, validated at 3 months*  | 29<br>(14.36%)   | 28<br>(13.86%)     | 0.96<br>(0.55, 1.68)<br>[0.89]      | 0.86<br>(0.49, 1.53)<br>[0.67]      | 0.81<br>(0.44, 1.50)<br>[0.51]      |

\* Validated by exhaled CO less than 6ppm

† Adjusted for co-habitation with a smoker status, deprivation index & heaviness of smoking index

‡ Adjusted for readmission status, cohabitation with a smoker status, deprivation index & heaviness of smoking index

**Adherence to and helpfulness of intervention components at three months (intervention group only)**

|  | Used at least once during trial(%) | Participants reporting the component as useful* (%) |
|--|------------------------------------|---|
| Received behavioural support                   | 97 ( 79.51%)                       | 61 (62.89%)   |
| Home visit                                     | 89 (72.95%)                        | 64 (71.91%)   |
| Nicotine Replacement Therapy                   | 69 (56.56%)                        | 47 (68.12%)   |
| Supportive phone calls texts                   | 69 (56.56%)                        | 37 (53.62%)   |
| Support to make home Smoke-Free                | 25 (20.49%)                        | 13 (52.00%)   |
| Air quality feedback                           | 20 (16.39%)                        | 14 (70.00%)   |
| Information on E-Cigarettes                    | 16 (13.11%)                        | 7 (43.75%)  |
| Advice given to other smokers about quitting** | 12(9.84%)                          | 4 (33.33%)  |
| Signposting to websites                        | 12 (9.84%)                         | 2 (16.67%)  |
| Signposting to phone apps                      | 12 (9.84%)                         | 2 (16.67%)  |
| Referral to local SSS                          | 2 (1.64%)                          | 0 (0%)  |

\*In those using the component

\*\* To family, carers, others.

#### 4. **Adverse events**

There were no adverse events associated with this trial