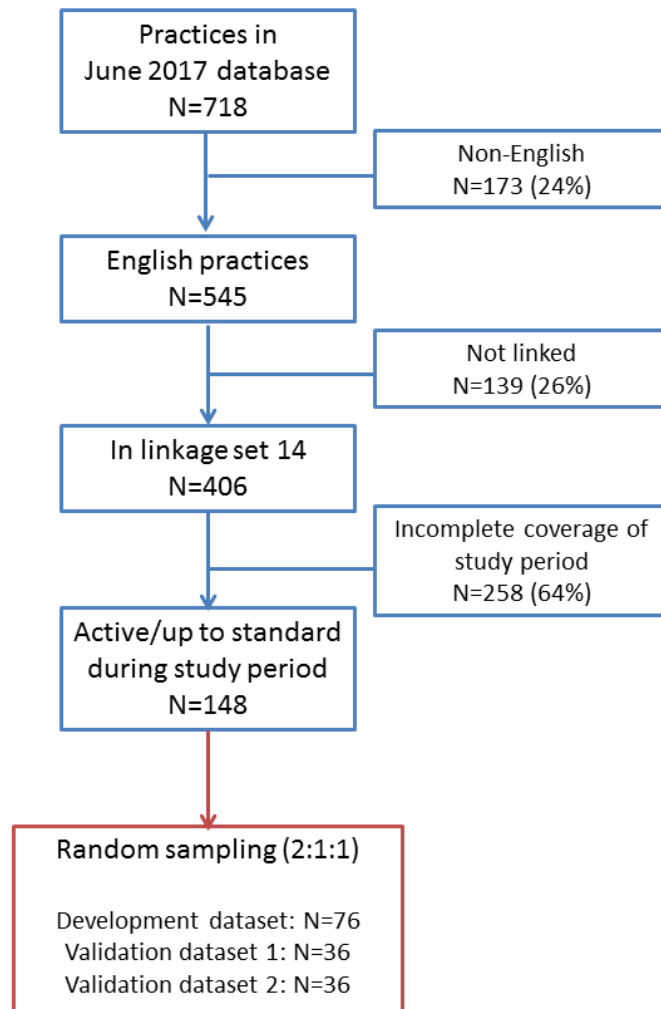


**Appendix 1 (as supplied by the authors):** *Flowchart for the selection of GP practices*

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**Notes:**

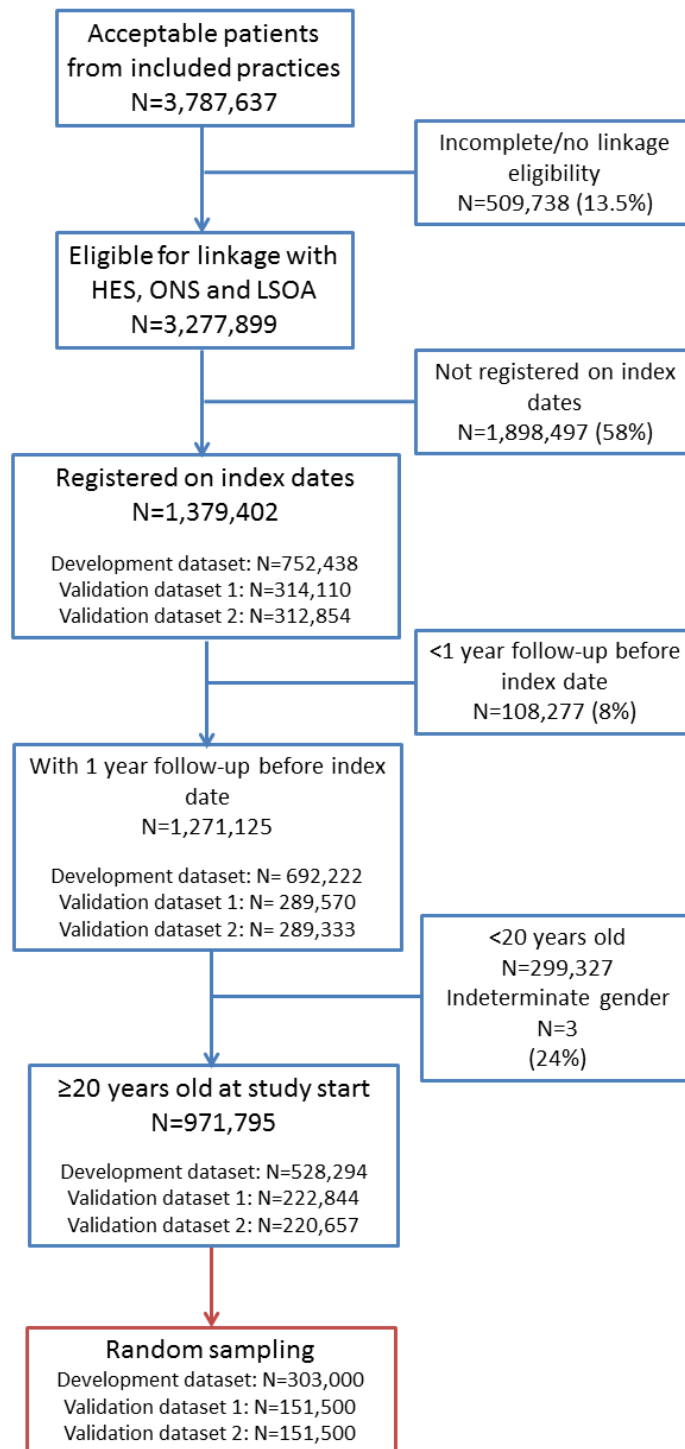
- i. Study period refers to 01/01/2010 to 31/12/2015. Non-English practices refer to Scottish, Welsh and Northern Irish.
- ii. At the allocation stage of practices to the three datasets, in order to minimize variation due to chance, practices were sorted by a measure of mortality not explained by age and gender (i.e. the best linear unbiased predictor from a model including a practice random effect), using a block randomization approach.
- iii. We compared included and excluded English practices in terms of list-size, percentage of patients >65 years old and mortality rates, as summarized in the following table. The median list-size for “included” practices is slightly larger than for “excluded” practices, but otherwise the range of values for all three characteristics is comparable to that of the excluded practices.

| Practice characteristic <sup>1</sup>                 | Practices included in study sample (N=148) | English practices excluded (N=377) <sup>2</sup> |
|--|--|---|
| List-size (x1,000), median (range)                   | 9.0 (2.2-28.0)                             | 7.7 (1.4-33.5)                                  |
| Percentage of patients >65 years old, median (range) | 17.8 (5.8-39.9)                            | 16.4 (2.9-40.7)                                 |
| Mortality rate, per 1,000 patient-years (range)      | 8.8 (2.3-20.9)                             | 8.4 (1.0-24.5)                                  |

1. List-size and percentage of patients >65 years old were calculated at one year before each practice last collection date for only those practices where CPRD rated data collection as “up to standard” (UTS) at that time. Mortality rates were calculated in the period between 1 and 2 years before the practice’s last data collection date, to avoid changes due to the practice closing.

2. Twenty practices were not UTS one year before last collection date so they were excluded from this analysis, as it required UTS data.

Flowchart for the selection of patients.



Notes: We sampled an additional 1% for each dataset to allow for later exclusion criteria, in particular, missing deprivation quintile and divergence between CPRD and ONS death dates (see Appendix 3). The sizes for the final analysis datasets were 300,000 for the development dataset and 150,000 for the two validation datasets.