Supplementary file 1: Allocation algorithm

Ages, quinquennial ages (ending in 0 or 5), and practice location were split between groups (using a random number generator) as follows:

1. Patients of different ages were systematically split between Group 1 and Group 2, in order to ensure that mean age was approximately equal in both groups (see Table S1).
2. The quinquennial ages (ending in 0/5) were systematically split separately (see Table S1), since letter invitations are sent to people in Southwark when they reach one of these milestones, so these were the patients who were likely to have already received a letter invitation in 2015 and who might be most likely to respond to a prompt.
3. The 43 practices were divided into two groups depending on whether they were in North Southwark or South Southwark, so randomisation could be stratified across these two areas with differing levels of deprivation, with half in each area assigned to Group 1 and half to Group 2. Which of Group 1 and Group 2 was assigned to intervention and control was reversed across the two areas, to ensure the maximum number of permutations of age and locality across conditions.

Table S1. Assignment of patients of different ages to intervention and control

General Ages								Milestone Ages	
40	IG1	52	IG1	64	IG1	**45**	IG1
41	IG2	53	IG2	66	IG2	**50**	IG2
42	IG1	54	IG1	67	IG1	**55**	IG2
43	IG2	56	IG2	68	IG2	**60**	IG1
44	IG1	57	IG1	69	IG1	**65**	IG1
46	IG2	58	IG2	71	IG2	**70**	IG2
47	IG1	59	IG1	72	IG1		
48	IG2	61	IG2	73	IG2		
49	IG1	62	IG1	74	IG1		
51	IG2	63	IG2				

IG1 = Intervention Group 1, IG2 = Intervention Group 2