

Supplementary Materials Table 1 Distribution of long-term conditions (LTC) in Lambeth Datanet by gender, age, self-defined ethnicity and index of multiple deprivation

ICD 10 chapter			2	4	4	5	5	9	10	NA	5	6	13
Demographic	Number (%) N= 326,415	Any LTC N= 113,9 79	Cancer % N= 3,557	Obesity % N= 49,847	Diabetes % N=9,946	Depression % N=33,477	Severe Mental Illness % N=4,598	Cardiovasc* disease % N=19,605	Resp** disease % N=35,153	Chronic pain % N=4,550	Learning disability % N=839	Epilepsy % N= 2,298	Rheumatoid arthritis % N= 853
% population		34.9	1.1	15.3	3.1	10.3	1.4	6.0	10.8	1.4	0.3	0.7	0.3
Gender													
M	153,228 (46.9)	33.9	1.0	13.4	3.7	8.5	1.8	6.8	10.8	1.3	0.3	0.8	0.1
F	173,187 (53.1)	35.8	1.2	16.9	2.5	11.8	1.1	5.3	10.8	1.5	0.2	0.6	0.4
Age													
16-20	12,945 (4.0)	20.9	0.1	6.5	0.4	4.4	0.6	0.3	11.1	0.2	0.5	0.4	0.0
21-25	52,933 (16.2)	23.4	0.2	6.6	0.5	6.1	0.6	0.4	11.9	0.2	0.2	0.4	0.1
26-30	72,165 (22.1)	24.8	0.3	8.0	0.6	7.6	0.8	0.7	10.9	0.3	0.1	0.5	0.1
31-35	58,175 (17.8)	28.8	0.5	11.3	0.9	9.4	1.1	1.6	10.0	0.5	0.1	0.6	0.1
36-40	40,271 (12.3)	35.5	0.9	16.5	2.0	11.5	1.5	3.7	9.4	1.0	0.2	0.7	0.2
41-45	30,295 (9.3)	45.3	1.5	23.1	4.3	14.0	2.1	8.6	9.9	2.2	0.3	0.9	0.4
46-50	25,690 (7.9)	55.0	2.1	29.5	7.6	15.8	2.8	16.0	11.0	3.6	0.6	1.3	0.5
51-55	20,041 (6.1)	62.2	3.4	33.7	11.8	17.2	3.1	24.7	11.9	5.3	0.6	1.2	0.8
56-60	13,900 (4.3)	69.1	5.9	36.8	16.5	17.3	3.3	34.7	12.6	6.8	0.4	1.6	1.2
Ethnicity													
White	220,205 (67.5)	31.5	1.1	11.3	1.6	10.7	1.0	3.7	11.4	1.2	0.2	0.7	0.2
BlackAfrican	30,512 (9.4)	47.8	1.1	31.6	7.4	7.5	2.2	15.6	6.4	2.0	0.3	0.6	0.3
Asian	24,145 (7.4)	30.3	0.8	12.1	6.6	6.7	1.2	6.6	8.9	1.0	0.2	0.5	0.4
BlackCaribbean	16,845 (5.2)	58.5	1.8	34.5	8.4	14.6	4.4	17.3	14.8	3.0	1.0	1.0	0.6
Other mixed	15,933 (4.9)	36.6	0.7	16.3	2.7	11.2	2.0	5.5	11.6	1.5	0.4	0.9	0.2
Other	11,144 (3.4)	29.1	0.8	16.0	3.0	7.9	1.0	4.5	5.4	1.2	0.2	0.5	0.3
Black other	7,631 (2.3)	50.5	1.4	28.9	5.3	12.0	3.9	11.9	12.6	2.5	0.6	0.7	0.3
IMD quintile													
1	65,367 (20.0)	31.5	1.1	11.8	2.3	8.8	1.0	4.8	11.3	1.0	0.2	0.6	0.2
2	64,851 (19.9)	32.9	1.0	13.2	2.5	9.7	1.3	5.1	11.0	1.1	0.2	0.7	0.2
3	67,651 (20.7)	34.1	1.0	14.3	2.6	10.5	1.4	5.6	10.7	1.3	0.3	0.7	0.2
4	63,672 (19.5)	37.2	1.2	17.4	3.7	11.2	1.6	7.2	10.5	1.7	0.3	0.8	0.3
Mostdeprived5	64,874 (19.9)	39.1	1.2	19.7	4.2	11.2	1.8	8.5	10.4	1.9	0.4	0.8	0.3

*Cardiovascular: coronary heart disease, atrial fibrillation, heart failure, peripheral arterial disease, stroke and transient ischaemic attack and hypertension **Respiratory=Asthma and COPD; LTC = long term condition

Supplementary Materials

Table 2 Long term condition definitions

Group	Description
Asthma	Asthma Register: Patients with an unresolved Asthma diagnosis up to the end of the reporting period (treated with an asthma-related drug treatment in the last year)
Atrial fibrillation	Atrial fibrillation register: Patients with an unresolved diagnosis of Atrial fibrillation
Cancer	Cancer register; patients diagnosed with cancer since 1st April 2003
Coronary Heart Disease	CHD register: Register of patients with a CHD diagnosis.
Chronic Obstructive Pulmonary Disease	COPD register: Register of patients with a COPD diagnosis
Depression	Depression register: Patients aged at least 18 years old whose latest unresolved episode of depression is since 1st April 2006
Diabetes	Diabetes register: Patients aged at least 17 years old with an unresolved diabetes diagnosis.
Epilepsy	Epilepsy register: Patients aged at least 18 years old with an unresolved diagnosis of epilepsy who have a record of being on drug treatment for epilepsy in the last 6 months
Heart failure	Heart failure register 1 and 2: Patients with a diagnosis of heart failure
Hypertension register	Patients with an unresolved diagnosis of hypertension
Learning disability	Learning disability register: Patients with a learning disability
Serious mental illness	Mental health register 1 and 2: Patients with a diagnosis of psychosis, schizophrenia or bipolar affective disease
Obesity	Obesity register: Patients aged 18 years or over with a BMI ≥ 30 (all patient's not just those with data in the preceding 12 months).
Peripheral arterial disease	PAD register: Register of patients with peripheral arterial disease
Palliative care	Palliative Care register: Patients who have been identified as requiring palliative care
Rheumatoid arthritis	Rheumatoid arthritis register: Patients aged 16 years or over with a diagnosis of rheumatoid arthritis
Stroke or transient ischaemic attack	Stroke/TIA register: Register of patients with a Stroke or TIA diagnosis
Chronic pain	Chronic pain - Chronic pain repeat medication. Medication with BNF 4.7.2 or BNF 4.7.3 with repeat, repeat dispensed or automatic issue type.

Supplementary Materials
Table 3
Data from excluded group:

Demographics	Demographic subgroup	Total N=76,497	FFN (per 1000/year)	Hazard ratio (95 CI)
Gender	M	41,922 (54.8)	46.8	1
	F	34,575 (45.2)	67.6	1.44 (1.34-1.54)
Age (years)	16-20	13,427 (17.6)	37.4	1
	21-25	13,404 (17.5)	64.7	1.75 (1.60-1.93)
	26-30	12,569 (16.4)	60.2	1.61 (1.45-1.80)
	31-35	9,240 (12.1)	53.7	1.43 (1.27-1.61)
	36-40	7,131 (9.3)	49.3	1.30 (1.14-1.49)
	41-45	6,280 (8.2)	54.9	1.45 (1.29-1.64)
	46-50	6,171 (8.1)	63.2	1.67 (1.47-1.91)
	51-55	4,850 (6.3)	67.9	1.80 (1.56-2.09)
Ethnicity	56-60	3,425 (4.5)	70.0	1.85 (1.59-2.17)
	White	9,660 (12.6)	69.3	1
	Black African	3,676 (4.8)	64.8	0.93 (0.64-1.37)
	Asian	1,810 (2.4)	53.5	0.77 (0.65-0.92)
	BlackCaribbean	2,862 (3.7)	106.9	1.53 (1.29-1.82)
	Other/mixed	1,596 (2.1)	73.5	1.06 (0.93-1.21)
	Other	723 (1.0)	52.0	0.75 (0.61-0.92)
	Black-other	1,955 (2.6)	74.5	1.07 (0.90-1.29)
Missing	54,215 (70.9)	46.4	0.68 (0.58-0.79)	
IMD score quintiles	Least deprived	9,189 (12.0)	37.7	1
	2	8,571 (11.2)	41.7	1.11 (0.94-1.30)
	3	8,120 (10.6)	41.1	1.09 (0.86-1.37)
	4	8,838 (11.6)	54.5	1.44 (1.18-1.74)
	Most deprived	7,998 (10.5)	57.6	1.51 (1.28-1.78)
	Missing	33,781 (44.2)	63.4	1.65 (1.33-2.04)

CI=Confidence interval
IMD=Index of multiple deprivation
FFN= First fit note