

Table 2 Description of factors tested and explanatory power in the univariate linear regression

Factor	Source	Median (IQR)	Range	Pearson's R ²	p-value	Direction of correlation
Population						
INCOME % population in an area that live in income deprived families	IMD 2010 [17]	15% (11,19)	7-33	60%	<0.001	+
EMPLOYMENT % population with employment deprivation	IMD 2010 [17]	6% (5, 8)	3-12	72%	<0.001	+
ETHNICITY % population minority ethnic	ONS [19]	9% (5, 20)	3-63	9%	<0.001	+
OVER75 % population aged 75 or over	ONS [20]	7% (7, 9)	3-13	18%	<0.001	-
ALONE % pensioners living alone	ONS [21]	6% (5, 6)	3-8	<1%	0.547	+
Geography						
URBAN/RURAL	ONS [22]	No PCTs (%)		29%	<0.001	-
major urban		58 (39%)				
large urban		19 (13%)				
other urban		23 (15%)				
sign'nt rural		26 (17%)				
rural 50%		22 (15%)				
rural 80%		2 (1%)				
Health⁺						
CHD prevalence Coronary Heart Disease	QOF [23]	4% (3, 4)	1-5	3%	0.032	+
COPD prevalence of COPD	QOF [23]	2% (1, 2)	1-3	20%	<0.001	+
DIABETES prevalence Diabetes	QOF [23]	5% (5, 6)	3-9	18%	<0.001	+
Hospital						
MANAGEMENT/CODING % emergency admissions with length of stay <1 day	HES [15]	28% (24, 30)	14-41	16%	<0.001	+
MANAGEMENT % population waiting 4 or more weeks for elective admission	Department of Health [24]	62% (53,68)	35-98	1%	0.198	-

Emergency departments						
EDDEMAND Directly age sex and deprivation standardised rate of ED attendances per 100,000 population	NHS Atlas of Variation 2011 [18]	275 (241,324)	149-909	15%	<0.001	+
EDCONVERSION Directly age sex deprivation standardised rate of conversion from ED attendance to emergency admissions	NHS Atlas of Variation 2011 [18]	100 (88,112)	70-148	7%	0.001	+
Community						
CAREHOME Admission rate for people aged >74 from nursing home or residential care home settings per 10,000	NHS Atlas of Variation 2011 [18]	12 (6, 29)	1-193	4%	0.013	+
General practice						
GPSUPPLY GPs per 100,000 population	London Health Observatory [25]	69 (64, 75)	54-99	0%	0.855	+
GPACCESS1 %GP single handed	Information Centre [26]	13% (7, 23)	0-48	17%	<0.001	+
GPACCESS2 % practices offering extended opening hours	Department of Health [27]	75% (69, 86)	39-100	0%	0.901	-
GPACCESS3 %able to see GP in 48 hours	GP survey [28]	80% (77,83)	71-89	25%	<0.001	-
GPADMISSION % admissions from general practice	HES [15]	18% (7,26)	0	11%	<0.001	-
GP QUALITY QOF indicators	QOF [23]	Six indicators tested		0-9%	<0.001 - 0.570	-\$
General Practice out of hours						
GPOOH1 % know how to contact GP out of hours	GP survey [28]	66% (62, 69)	48-79	10%	<0.001	-
GPOOH2 %of GP ooh users reporting 'very easy' to	GP survey [28]	38% (34-42)	20-55	1%	0.231	-

contact by phone						
Ambulance service						
AMBRESPONSE %category A response within 8 minutes*	Informati on Centre [29]	75% (73, 75)	71-78	13%	<0.001	-
AMBTRANSPORT %not transported to hospital*	Informati on Centre [29]	21% (16, 30)	8-34	35%	<0.001	-

+ prevalence of 3 of the 14 conditions in the age sex adjusted admission rate.

\$ for the one statistically significant correlation