

Supplementary Table 1: Neighborhood-level characteristics of the SEPEA study catchment – description, summary and representativeness

Environmental variable	Description	Catchment (N=530)		Rest of England (N=7,159)		Median difference [^]		
		Median	IQR	Median	IQR	Diff.	95%CI	p-value
Population density	People per square mile	588	(209-4,653)	3,646	(573-8,976)	-3,583	(-4,347, -2,818)	<0.01
Ethnicity	% of population from black and minority ethnic groups	5.5	(3.5-11.1)	6.7	(4.0-15.7)	-1.2	(-1.8, -0.5)	0.01
Multiple deprivation	% of households in 2 or more of the domains below:	20.6	(16.7-25.7)	21.4	(16.3-28.3)	-0.7	(-1.8, 0.3)	0.14
<i>Employment domain</i>	% of households with at least one adult member reported as long-term sick or unemployed, not in full time study	N/A		N/A				-
<i>Education domain</i>	% of households without any member with at least “Level 2” education (≥5 GCSEs or equivalent) or in full-time study	N/A		N/A				-
<i>Health & disability domain</i>	% of households with at least one member’s self-rated health as “bad” or “very bad”, or with a limiting long-term health problem	N/A		N/A				-
<i>Living environment domain</i>	% of households with at least one of the following: (i) in overcrowding [†] ; (ii) living in a shared dwelling [‡] , (iii) without central heating	N/A		N/A				-

IQR – Interquartile range; GCSE – General Certificate for Secondary Education, mandatory for children in 10th and 11th years of education. N/A: Domain-specific deprivation data not published by the Office for National Statistics.

[^]Obtained from quantile regression

[†]ONS definition of overcrowding based on number of rooms and people per household, weighted for age and relationship status.

[‡]A unit of accommodation shared by two or more households.

Legend: Neighborhood-level variation in population density, ethnicity and deprivation varied across the 530 neighborhoods in the SEPEA region. The SEPEA region was, however, substantially more rural than the rest of England ($p < 0.01$). Median differences in neighborhood-level ethnic composition (-1.2%; 95%CI: -1.8, -0.5; $p = 0.01$) and multiple deprivation (-0.7%; 95%CI: -1.8, 0.3; $p = 0.14$) between the SEPEA region and the rest of England were small, but only met statistical significance for the former. 2011 Census data were obtained from: Table QS119EW (deprivation); Table PHP01 (population density), and; Table KS201EW (ethnicity); see www.nomisweb.co.uk.

Supplementary Table 2: Multivariable Poisson analysis of non-affective and affective psychotic disorders by major sociodemographic characteristics

IRR: incidence rate ratio

Variable	Non-affective psychoses				Affective psychoses			
	N	%	IRR [†]	95%CI	N	%	IRR [†]	95%CI
Total cases	571	(100.0)	-		84	(100.0)	-	
Sex								
Women	185	(32.3)	Ref		36	(42.9)	Ref	
Men	388	(67.7)	1.97	(1.65, 2.35) [‡]	48	(57.1)	1.27	(0.82, 1.96)
Age group								
16-24	368	(64.2)	Ref		51	(60.7)	Ref	
25-29	118	(20.6)	0.64	(0.52, 0.81) [‡]	24	(28.6)	0.72	(0.43, 1.22)
30-35	87	(15.2)	0.45	(0.35, 0.58) [‡]	9	(10.7)	0.24	(0.11, 0.51) [‡]
Ethnicity								
White British	434	(75.7)	Ref		53	(64.3)	Ref	
Black & minority ethnic groups	139	(24.3)	1.41	(1.15, 1.71) [‡]	30	(36.7)	2.30	(1.44, 3.68) [‡]
Participant socioeconomic status								
Professional & managerial	58	(10.1)	Ref		12	(14.3)	Ref	
Intermediate occupation	63	(11.0)	1.53	(1.07, 2.19) [‡]	13	(15.5)	1.55	(0.70, 3.42)
Routine & manual	232	(40.5)	2.41	(1.80, 3.24) [‡]	31	(36.9)	1.47	(0.74, 2.92)
Long-term unemployed, students & unclassifiable	220	(38.4)	2.37	(1.73, 3.24) [‡]	28	(33.3)	1.17	(0.56, 2.44)
Early intervention psychosis service								
N. Cambridgeshire	71	(12.4)	Ref		18	(21.4)	Ref	
S. Cambridgeshire	130	(22.7)	1.29	(0.96, 1.73)	29	(34.5)	1.19	(0.65, 2.16)
West Norfolk	28	(4.9)	1.10	(0.71, 1.70)	5	(6.0)	0.85	(0.31, 2.31)
Central Norfolk	129	(22.5)	1.14	(0.85, 1.53)	13	(15.5)	0.51	(0.25, 1.04)
Great Yarmouth & Waveney	63	(11.0)	1.68	(1.19, 2.37) [‡]	14	(16.8)	1.73	(0.85, 3.53)
Suffolk	152	(26.5)	1.37	(1.03, 1.82) [‡]	5	(6.0)	0.19	(0.07, 0.51) [‡]

[†]Adjusted for all other variables listed in table

[‡]p<0.05

Supplementary Table 3: Neighborhood level variation in the incidence of non-affective and affective psychotic disorders

Variable	Non-affective psychoses*				Affective psychoses^			
	N	%	IRR [†]	95%CI	N	%	IRR [†]	95%CI
Total cases	548	(100.0)	-		83	(100.0)		-
Neighborhood population density (People per square mile)								
48-587 (Below median)	110	(20.1)	Ref		19	(22.9)	Ref	
588-4,653 (50-75 th percentile)	154	(28.1)	1.31	(1.01, 1.70) [‡]	20	(24.1)	0.77	(0.39, 1.53)
4,654-11,099 (76-95 th percentile)	185	(33.8)	1.20	(0.92, 1.57)	24	(28.9)	0.99	(0.49, 2.01)
11,100-21,970 (96-100 th percentile)	99	(18.1)	1.30	(0.95, 1.77)	20	(24.1)	1.59	(0.74, 3.44)
Neighborhood multiple deprivation (% households)								
7.8-18.0%	129	(23.5)	Ref		28	(33.7)	Ref	
18.1-28.0%	243	(44.3)	1.47	(1.15, 1.89) [‡]	33	(39.8)	0.81	(0.43, 1.51)
28.1-38.0%	132	(24.1)	1.46	(1.07, 2.00) [‡]	17	(20.5)	0.67	(0.28, 1.58)
38.1-47.1%	44	(8.0)	2.74	(1.71, 4.39) [‡]	5	(6.0)	0.44	(0.12, 1.57)
Early Intervention Psychosis service								
North Cambridgeshire	70	(12.8)	Ref		18	(21.7)	Ref	
South Cambridgeshire	121	(22.1)	1.68	(1.19, 2.38) [‡]	28	(33.7)	1.00	(0.48, 2.11)
West Norfolk	27	(4.9)	1.12	(0.70, 1.79)	5	(6.0)	1.00	(0.34, 2.94)
Central Norfolk	126	(23.0)	1.28	(0.93, 1.76)	13	(15.7)	0.50	(0.23, 1.09)
Great Yarmouth & Waveney	61	(11.1)	1.41	(0.97, 2.05)	14	(16.9)	2.10	(0.94, 4.71)
Suffolk	143	(26.1)	1.58	(1.15, 2.17) [‡]	5	(6.0)	0.18	(0.06, 0.50) [‡]

IRR: incidence rate ratio; EIP: Early Intervention Psychosis

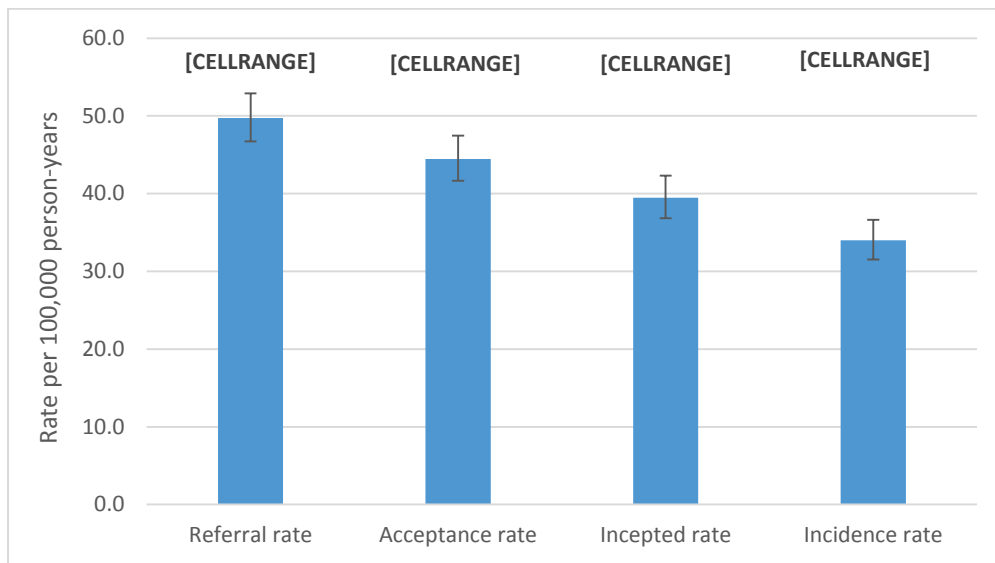
†Adjusted for all other variables listed in table and age group (three-category), sex, ethnicity and participant SES, as described

‡p<0.05

*25 FEP participants of no fixed abode was excluded from analysis

^One FEP participant of no fixed abode was excluded from these analysis

Supplemental Figure 1: Rate of contact in Early Intervention Psychosis services by contact type



Legend

Referral rate: Number of referrals per 100,000 person-years

Acceptance rate: Number of referrals accepted by Early Intervention Psychosis services, per 100,000 person-years

Incepted rate: Number of accepted referrals who met epidemiological criteria, per 100,000 years

Incidence rate: Number of the incepted sample who received an OPCRIT-confirmed diagnosis for first episode psychosis, per 100,000 person years