TOWER HAMLETS Stroke Pathway Profile 2010

The profile brings together a wide range of information and analysis related to the stroke pathway in one reference document. In doing so it aims to provide a better understanding of the quality of stroke care in the local area enabling PCTs to support GPs to commission on the basis of need. Profiles should be interpreted in the context of local demography. For further information please refer to our Health Needs Assessment Toolkit or your Health Profile at http://hna.csl.nhs.uk/JSNA.aspx_www.healthprofiles.info



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This map presents the prevalence of stroke and transient ischaemic attack (TIA) at a general practice level alongside the level of socio-economic deprivation (according to the Index of Multiple Deprivation 2007) for small geographical areas (Lower Super Output Areas). It should be noted that in addition to level of deprivation, stroke prevalence may be related to other factors including age structure of the practice population.

Key Points:

- Hospital stroke admission rates in Tower Hamlets are significantly higher than the national average; residents in Tower Hamlets are 3.5 times as likely as residents in the PCT with the lowest admission rate to be admitted to hospital for a stroke before the age of 75 years
- Once admitted for a stroke, patients from Tower Hamlets spend a significantly shorter length of time in hospital than other patients in England. Length of hospital stay following a stroke for patients from Tower Hamlets was the shortest in England, over nine days less than the London average
- The high admission rate is coupled with a high number of early deaths from stroke; Tower Hamlets residents are nearly three times as likely as people living in the London PCT with the lowest stroke death rate to die from a stroke before the age of 75 years
- Hypertension, atrial fibrillation, smoking, binge drinking and obesity are risk factors for stroke. Despite significantly lower
 - levels of hypertension, atrial fibrillation, binge dinking and obesity, high levels of smoking exist which could, in part, account for the high rates of stroke admissions and deaths in Tower Hamlets
 Tower Hamlets patients who survive a stroke receive an average standard of primary care despite below average levels of primary care spend on cerebrovascular disease.

STROKE PATHWAY SUMMARY

The spine chart below shows how stroke data for this PCT compares with London and the rest of England. This PCT's results for each indicator are displayed as a circle. The average rate for England is shown by the red line in the centre of the chart. The range of results for all PCTs in England is shown as a grey bar. A red circle means that data for this PCT is significantly worse than the England average. A green circle shows that data for this PCT is significantly better than the England average; however, this may still indicate an important public health problem.

<u>Key:</u>	England Key:
Significantly better than England average	Regio

- O Not significantly different from England average
- Significantly worse than England average
- No significance can be calculated

Domain		Indicator	Local Number	Local Value	Eng Avg	Eng Worst	England Range	
Risk Factors	1	Hypertension prevalence, modelled	39,238	21.9	30.5	37.4	♦ ●	21.7
	2	Hypertension prevalence, recorded	20,981	8.2	13.4	16.7		8.0
	3	Atrial Fibrillation prevalence, recorded	1,315	0.5	1.4	2.3	♦ ●	0.4
	4	Adults who smoke	n/a	30.2	22.2	35.2	●	10.2
	5	Binge drinking adults	n/a	14.0	20.1	33.2		4.6
	6	Obese adults	n/a	14.4	24.2	32.8	♦ ●	13.2
Care	7	Stroke/TIA prevalence, modelled	3,431	1.9	2.5	3.7	O	1.4
	8	Stroke/TIA prevalence, recorded	2,047	0.8	1.7	2.4	♦ 0	0.7
	9	Blood pressure recorded in last 15months	1,963	97.4	96.8	94.8	♦ 0	98.2
	10	Blood pressure reading 150/90 mmHg or less	1,712	87.7	88.1	83.4	O	93.9
ary	11	Cholesterol recorded in last 15 months	1,799	91.6	91.4	85.9	♦ 0	94.2
Prim	12	Cholesterol reading 5 nmol/L or less	1,439	78.9	77.3	70.4	♦ 0	83.9
	13	Immunisation for influenza	1,550	88.5	89.0	83.0	0	92.5
	14	Anti-platelet / anti-coagulant therapy	991	94.8	94.1	92.2	♦ 0	96.2
	15	New patients referred for further investigation	346	90.8	90.2	82.8	♦ <mark>O</mark>	97.0
	16	Emergency hospital admissions for stroke all ages	138	92.5	76.7	127.3	• •	25.9
are	17	Emergency hospital admissions for stroke age <75yrs	82	66.6	43.7	80.3		13.3
ary C	18	Emergency hospital readmissions within 28 days of stroke	14	13.2	10.8	23.7	O\$	5.1
Seconda	19	Length of inpatient stay	165	8.8	17.1	26.6	♦ 0	8.8
	20	Stroke admissions who spent 90% of time on stroke unit	241	89.3	60.2	23.3	♦ 0	97.1
	21	Patients admitted for TIA who spent 90% of time on stroke unit	10	90.9	51.2	1.1	◆ O	100.0
Mortality	22	Mortality from stroke all ages	262	51.8	47.3	63.1	0	23.7
	23	Mortality from stroke age <75yrs	88	23.3	13.7	25.6		8.4
	24	Years of life lost due to mortality from stroke	88	24.2	16.5	35.8	• •	8.6
	25	Death in 30 days of emergency stroke admission	26	21,993	22,746	31,378	O\$	11,664
Spend	26	Overall spend on cerebrovascular disease	4,428,000	15.0	19.3	41.9	S	2.4
	27	Primary care spend on cerebrovascular disease	138,000	0.5	2.7	0.2	C	33.3
	28	Secondary care spend on cerebrovascular disease	4,290,000	14.6	16.9	40.4		1.1

1% aged 16yrs+ 2010 (ERPHO). 2 % registered GP patients on hypertension register 2009/10 (QOF). 3 % registered GP patients on arterial fibrillation register 2009/10 (QOF). 4-6 % adults, modelled estimate using Health Survey for England 2006-2008 (APHO Health Profiles). 7 % aged 16yrs+ 2010 (ERPHO). 8-15 % of registered GP patients on stroke register 2009/10 (QOF). 16-17 Directly age standardised rate per 100,000 European Standard population for hospital admission 2007/08 (HES). 18 Indirectly age standardised % of hospital discharges 2007/08 (NCHOD). 19 Total number and average number of days spent in hospital after stroke 2008/09 (HES). 20 % of patients admitted for stroke Q2-Q4 2009/10 (DH). 21 % of patients admitted for transient ischemic attack Q2-Q4 2009/10 (DH). 22 Directly age-standardised rate per 100,000 European Standard population 2006-2008 (NCHOD). 23-24 Directly age-standardised rate per 100,000 European Standard population 2006-2008 (NCHOD). 23-24 Directly age-standardised rate per 100,000 European Standard population 2006-2008 (NCHOD). 25 Infecting age-standardised rate per 100,000 European Standard population 2006-2008 (NCHOD). 25 Infecting age-standardised rate per 100,000 European Standard population 2006-2008 (NCHOD). 25 Infecting age-standardised rate per 100,000 European Standard population 2006-2008 (NCHOD). 25 Infecting age-standardised rate per 100,000 European Standard population 2006-2008 (NCHOD). 25 Infecting age-standardised rate per 100,000 European Standard population 2006-2008 (NCHOD). 25 Infecting age-standardised rate per 100,000 European Standard population 2006-2008 (NCHOD). 26 Infecting age-standardised rate per 100,000 European Standard population 2006-2008 (NCHOD). 26 Infecting age-standardised rate per 100,000 European Standard population 2006-2008 (NCHOD). 26 Infecting age-standardised rate per 100,000 European Standard population 2006-2008 (NCHOD). 27 European Standard population 2006-2008 (NCHOD). 27 European Standardised rate per 100,000 European Standard population 200

standardised rate per 100,000 European Standard population <75yrs 2006-2008 (NCHOD). **25** Indirectly age and sex standardised rate per 100,000 population 2007/08 (NCHOD). **26-28** £ per weighted head of population 2008/09 (DH).



SPEND AND OUTCOME

Standardised scores were calculated for each PCT for outcome (premature stroke mortality) and spend data (primary and secondary spend per head on cerebrovascular disease). A z score measures the distance of a value from the mean in units of standard deviation. A positive z score indicates that the value is either higher spend or better outcome than the national average whereas a negative z score indicates lower spend or worse outcome than the national average. A z score below -2 or above +2 indicates that the value is statistically significantly different from the national average (at 95% confidence level). The graph presents an overall picture of spend and mortality at a local level and does not, therefore, imply a causal relationship.



Quadrant analysis of cerebrovascular disease spend (2008/09) and premature mortality from stroke (2006-2008)



1 Barking and Dagenham PCT

- 2 Barnet PCT
- 3 Bexley Care Trust
- 4 Brent Teaching PCT
- 5 Bromley PCT
- 6 Camden PCT
- 7 City and Hackney Teaching PCT
- 8 Croydon PCT
- 9 Ealing PCT
- 10 Enfield PCT
- 11 Greenwich Teaching PCT
- 12 Hammersmith and Fulham PCT
- 13 Haringey Teaching PCT
- 14 Harrow PCT
- 15 Havering PCT
- 16 Hillingdon PCT

- 17 Hounslow PCT
- 18 Islington PCT
- 19 Kensington and Chelsea PCT
- 20 Kingston PCT
- 21 Lambeth PCT
- 22 Lewisham PCT
- 23 Newham PCT
- 24 Redbridge PCT
 - 25 Richmond and Twickenham PCT
 - 26 Southwark PCT
 - 27 Sutton and Merton PCT
 - 28 Tower Hamlets PCT
 - 29 Waltham Forest PCT30 Wandsworth Teaching PCT

 - 31 Westminster PCT

Sources: Hospital Episode Statistics; Compendium of Clinical and Health Outcomes, Clinical Health Outcomes Knowledge Base (NCHOD); Department of Health Analysis undertaken by PCT Intelligence Team, Commissioning Support for London

HEALTH INEQUALITIES

The chart below displays differences in stroke mortality based on local levels of deprivation. Small areas within each PCT are divided into quintiles according to the level of deprivation defined by the Index of Multiple Deprivation 2007. The darkest coloured bars indicate deaths from stroke in the most deprived areas, while the lightest coloured bars indicate stroke deaths in the least derived areas. The locations of these areas are displayed on the map on page 1.



Evidence suggests that gender differences in stroke exist in some local areas. Differences between males and females have previously been found for admission rates, deaths within 30 days of stroke and stroke mortality. The gender difference in stroke mortality is displayed above.

95% confidence interval: These indicate the level of certainty about each value on the graph. Longer/wide intervals mean more uncertainty

 $\mathbf{M} = Male$ $\mathbf{F} = F$

F = Female

-	
	Quintile 1: Most deprived
	Quintile 2
	Quintile 3
	Quintile 4
	Quintile 5: Least deprived

Sources: Hospital Episode Statistics; Compendium of Clinical and Health Outcomes, Clinical Health Outcomes Knowledge Base (NCHOD); Department for Communities and Local Government

Analysis undertaken by PCT Intelligence Team, Commissioning Support for London



Commissioning Support for London

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