

## Hull PCT Health Outcome and Expenditure Comparison for Stroke 2007-2008

### **Key findings**

- Whilst circulation programmes in Hull have higher spend compared to England, spend is not significantly different from England. Hull ranks 10<sup>th</sup> for spend out of 16 PCT's in the Industrial Hinterlands cluster.
- Stroke programmes in Hull have higher spend compared to England, however the spend is not significantly different from England. Hull has worse outcome compared to England, and this may require further investigation.
- Stroke programmes rank 6<sup>th</sup> for spend, 14<sup>th</sup> for outcome out of 16 PCT's in the Industrial Hinterlands cluster.

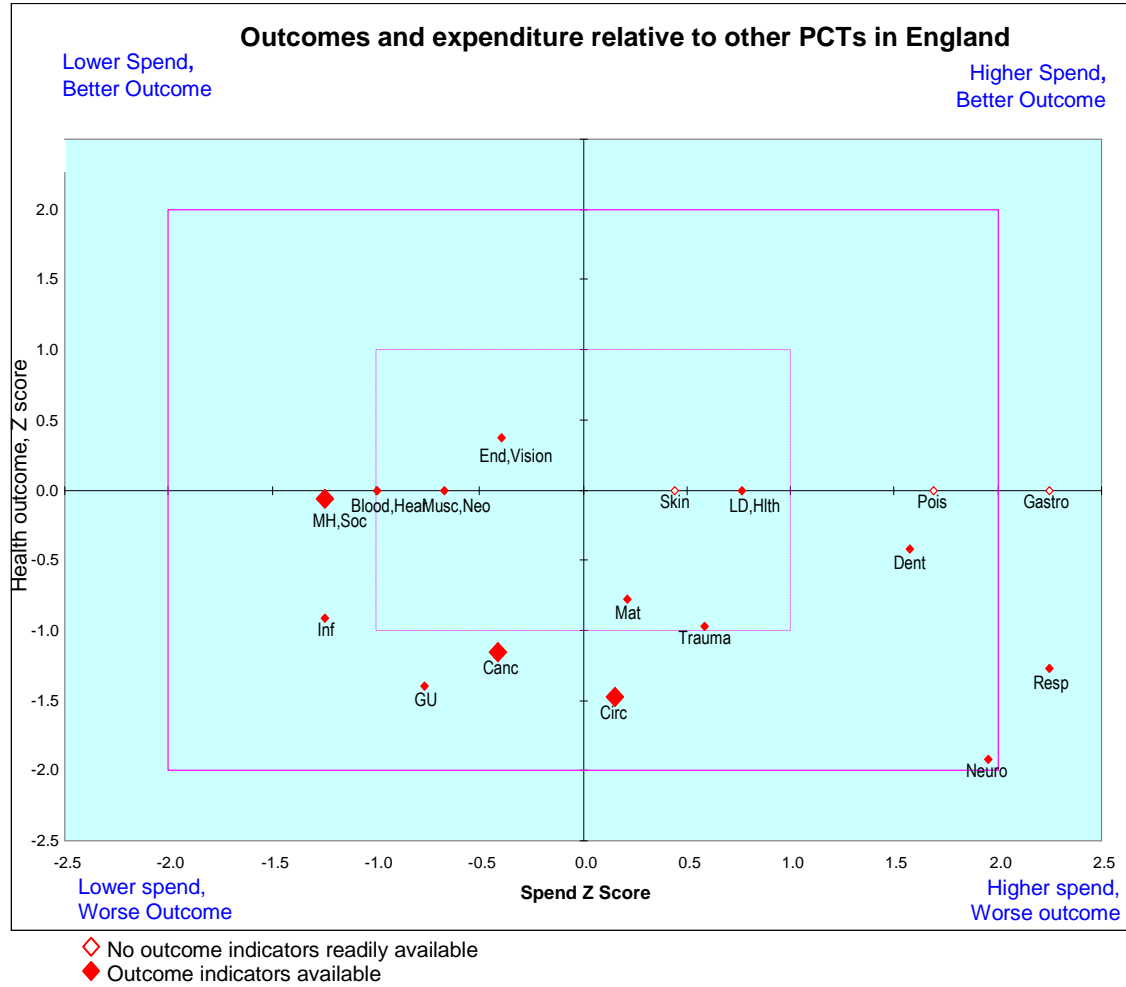
### **Introduction**

Programme budgeting is a well-established technique for assessing investment in health programmes rather than services. The purpose of this report is to provide an overall view of Hull PCT's health outcome and expenditure for stroke, one of the key priority goals set out for World Class Commissioning.

The Health Outcome and Expenditure Comparison Tool supplied by the Yorkshire and Humber Public Health Observatory and Department of Health highlights better/worse outcomes for spend across individual programmes relative to the England average, and The Office for National Statistics (ONS) Industrial Hinterlands cluster rank for 2007-2008. The comparison tool displays two quadrant charts, which select an independent outcome against overall spend on a programme. When comparing outcomes for Hull to England, it is likely that the prevalence of risk factors and mortality will be higher due to increased deprivation in Hull relative to England.

For stroke performance is measured against an outcome related to stroke mortality for World Class Commissioning. The outcome is defined as stroke mortality as a directly age-standardised rate, per 100,000 European Standard population, under 75. Figures 1 and 2 display programme spend per head per year for all circulation programmes against the stated outcome stroke mortality, 2005-2007.

Figure 1



#### Programme Area Abbreviations

Infectious Diseases	Inf	Hearing	Hear	Disorders of Blood	Blood
Cancers & Tumours	Canc	Circulation	Circ	Maternity	Mat
Respiratory System	Resp	Mental Health	MH	Neonates	Neo
Endocrine, Nutritional & Metabolic	End	Dental	Dent	Neurological	Neuro
Genito Urinary System	GU	GI System	Gastro	Healthy Individuals	Hlth
Learning Disabilities	LD	Musculoskeletal	Musc	Social Care Needs	Soc
Adverse effects & poisoning	Pois	Trauma & Injuries	Trauma		

## National Quadrant Chart

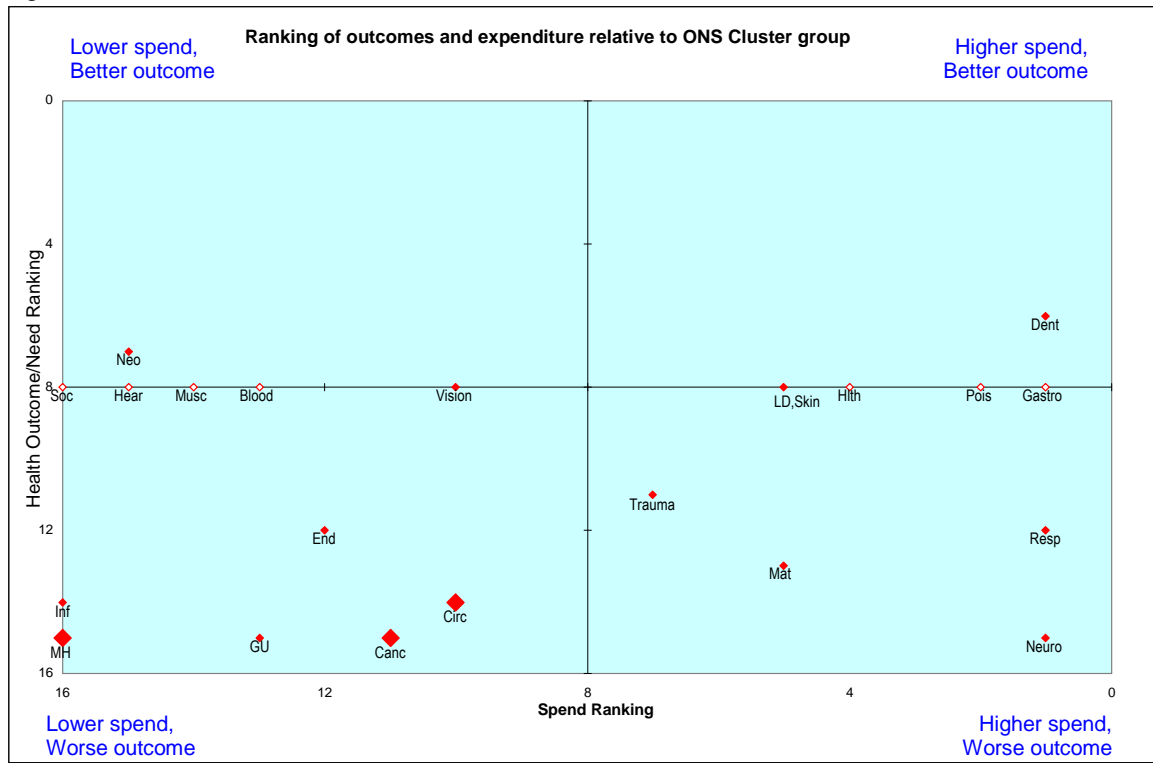
The quadrant chart categorises each programme into 4 quadrants in terms of expenditure and outcome relative to the England average. Each dot represents a programme budget category. The three largest spending programmes nationally (Mental Health, Circulatory Diseases and Cancer) are represented by larger dots. A z score is given to each programme measuring the distance of a value from the mean (average) in units of standard deviations. A programme outside the solid pink +/- 2 z scores box indicates that the data is significantly different from the England average. Approximately 5% of outcomes and expenditures will be outside this box.

If the programme lies to the left or right of the box, the programme is significantly different on spend and if it lies outside the top or bottom of the box the programme is significantly different on outcome. Programmes outside the box at the corners are significantly different from the England average for both spend and outcome. Programmes outside the dotted pink +/- 1 z score box, may require further exploration. Approximately 30% of outcomes and expenditure will be outside this box.

Figure 1 indicates higher spend for Hull on circulation programmes compared to England. Programme spend per head for 2007-2008 on all circulation programmes for Hull was £127 compared to the England average £125. Spend is within one standard deviation of the England average indicating no significant difference. Programme spend per head for 2007-2008 on stroke for Hull was £19 compared to the England average £17, giving a z score of 0.37, indicating no significant difference.

Figure 1 indicates worse outcome for Hull on stroke mortality compared to England. For 2005-2007 mortality from stroke for Hull was 21 per 100,000 (under 75) compared to the England average 15 per 100, 000 (under 75). Outcome lies outside one standard deviation of the England average, which may require further investigation.

Figure 2



Programme Area Abbreviations

Infectious Diseases	Inf	Hearing	Hear	Disorders of Blood	Blood
Cancers & Tumours	Canc	Circulation	Circ	Maternity	Mat
Respiratory System	Resp	Mental Health	MH	Neonates	Neo
Endocrine, Nutritional & Metabolic	End	Dental	Dent	Neurological	Neuro
Genito Urinary System	GU	GI System	Gastro	Healthy Individuals	Hlth
Learning Disabilities	LD	Musculoskeletal	Musc	Social Care Needs	Soc
Adverse effects & poisoning	Pois	Trauma & Injuries	Trauma		

## ONS Cluster Quadrant Chart

The ONS cluster quadrant categorises each programme into 4 quadrants in terms of expenditure and outcome relative to the ONS cluster group Industrial Hinterlands. Rather than producing z scores previously used in the national comparison quadrant, the spend and health outcomes are ranked, with 1 meaning highest spend or best health outcome. Clusters are used to group PCT's together according to key characteristics common to the population in that grouping. The ONS derive these groupings, known as clusters, from census data. Hull has been grouped in the Industrial Hinterlands cluster, however it is most unlike all the other PCT's within this cluster.

Figure 2 indicates circulation programmes are ranked 10<sup>th</sup> for spend in Hull out of 16 PCT's in the Industrial Hinterlands cluster. Hull's spend per head for 2007-2008 on all Circulation programmes for Hull was £127 compared to the cluster average £133. Programme spend per head for 2007-2008 on stroke for Hull was £19 compared to the Industrial Hinterlands cluster average £17, ranking 6<sup>th</sup> for spend.

Figure 2 indicates stroke programmes are ranked 14<sup>th</sup> for outcome in Hull out of 16 PCT's in the Industrial Hinterlands cluster. For 2005-2007 mortality from stroke for Hull was 21 per 100,000 (under 75) compared to the cluster average 19 per 100,000 (under 75).

### Data Sources and Definitions for 2007-2008

PB category	Health Outcome Indicator	Data Source
Infectious Diseases	Mortality from infectious and parasitic diseases. Directly Standardised Rate (DSR) per 100,000 European Standard Population. 2005 - 2007. All ages. Persons	National Centre for Health Outcomes Development (NCHOD)
Cancers and Tumours	% of women aged 50 - 70 screened for breast cancer, 2007/08	Healthcare commission
Endocrine, Nutritional and Metabolic	% of diabetic patients whose last HbA1c was 7.5 or less 2007/2008	Quality and Outcomes Framework, Information Centre
Mental Health	% of patients on enhanced CPA receiving follow up (face to face or telephone) within 7 days of discharge 2007/08	Healthcare commission
Neurological	Mortality from epilepsy: Under 75 Directly age-standardised rates (DSR) per 100,000 European Standard population, 2005 - 2007 persons	National Centre for Health Outcomes Development (NCHOD)
Vision	Total sight tests per 10,000 population, 2006-07	The Information Centre for Health and Social Care, Primary Care
Circulatory System	Mortality from coronary heart disease: Under 75s, directly age-standardised rates (DSR) per 100,000 European Standard population, 2005 - 2007	National Centre for Health Outcomes Development (NCHOD)
Circulatory System	Mortality from stroke: Under 75 Directly age-standardised rates (DSR) per 100,000 European Standard population, 2005 - 2007	National Centre for Health Outcomes Development (NCHOD)
Respiratory system	Mortality from bronchitis and emphysema and COPD: Under 75 Directly age-standardised rates (DSR) per 100,000 European Standard population, 2005 - 2007	National Centre for Health Outcomes Development (NCHOD)

<b>PB category</b>	<b>Health Outcome Indicator</b>	<b>Data Source</b>
Dental Problems	Decayed missing and filled teeth 5 year olds 2005/2006	BASCD
Trauma and injuries	Mortality from accidents: Directly age-standardised rates (DSR) per 100,000 European Standard population, 2005-07	National Centre for Health Outcomes Development (NCHOD)
Genitourinary	Deaths within 30 days admission, all genito urinary admissions excluding day cases, standardised rates, all ages FY 06/07	National Centre for Health Outcomes Development (NCHOD)
Maternity	% low birth weight births (live and still) <2500gms, 2007	National Centre for Health Outcomes Development (NCHOD)
Conditions of neonates	Neonatal infant mortality per 1,000 births (infants aged less than 28 days), 2005 - 2007	National Centre for Health Outcomes Development (NCHOD)