

## Hull PCT Health Outcome and Expenditure Comparison for Chronic Obstructive Pulmonary Disease 2007-2008

### **Key findings**

- Respiratory system programmes in Hull have significantly higher spend compared to England, ranking 1<sup>st</sup> out of 16 PCT's in the Industrial Hinterlands cluster, requiring further investigation.
- Chronic obstructive pulmonary disease (COPD) programmes in Hull have significantly higher spend compared to England, requiring further investigation. Hull has worse outcome for bronchitis and emphysema and COPD compared to England, and this may require further investigation.
- COPD programmes rank 2<sup>nd</sup> for spend, 12<sup>th</sup> for outcome out of 16 PCT's in the Industrial Hinterlands cluster.

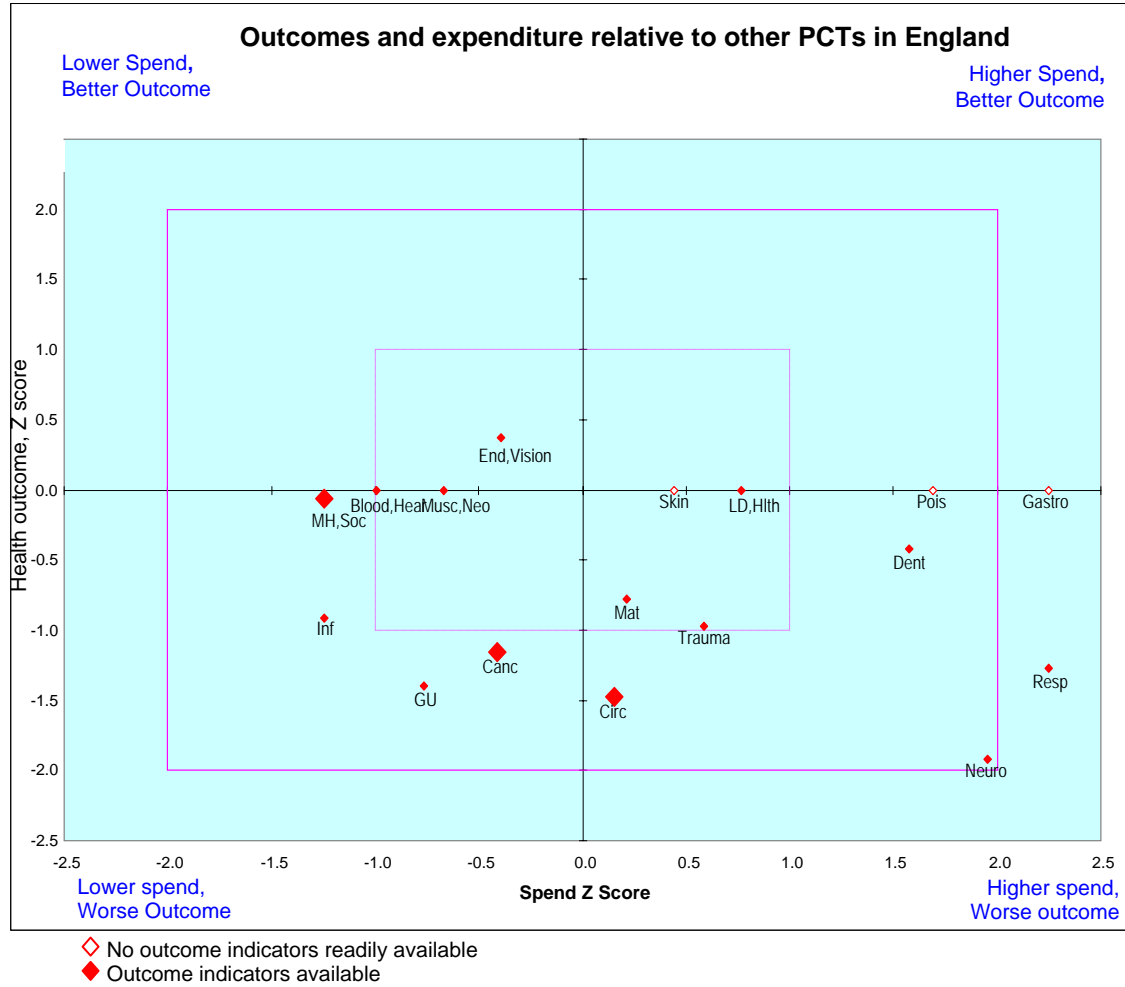
### **Introduction**

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 COPD, highlighted as a key priority goal for World Class Commissioning.

The Health Outcome and Expenditure Comparison Tool supplied by 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 individual 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 COPD performance is measured against an outcome defined as COPD prevalence for World Class Commissioning. Figures 1 and 2 display programme spend per head for 2007-2008 for Hull on all respiratory programmes against bronchitis and emphysema and COPD mortality under 75, directly aged-standardised rate, per 100,000 European Standard population, 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

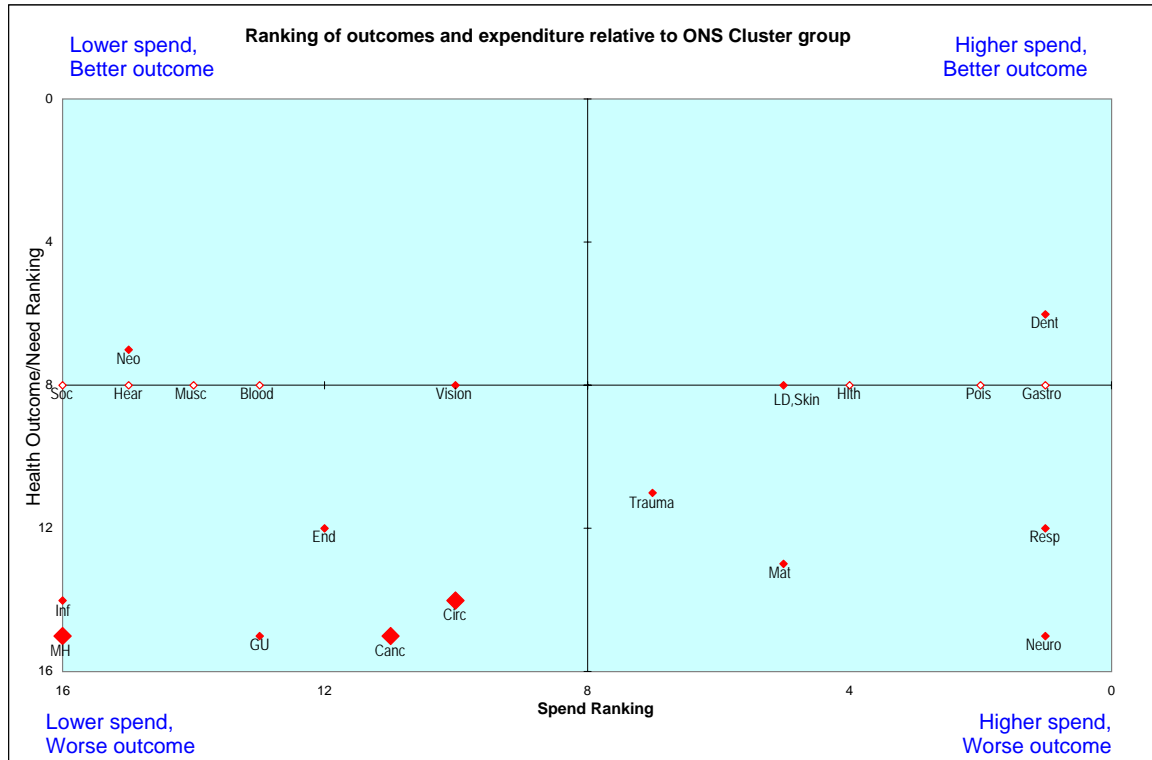
The quadrant chart categorises each programme into 4 quadrants in terms of expenditure and outcome relative to the England average. Each dot represents a programme budget category. The three largest spending programmes nationally (Mental Health, Circulatory Diseases and Cancer) are represented by larger 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 investigation. Approximately 30% of outcomes and expenditure will be outside this box.

Figure 1 indicates higher spend for Hull on respiratory system programmes compared to England. Programme spend per head for 2007-2008 on all respiratory system programmes for Hull was £93 compared to the England average £68. Spend lies outside two standard deviations of the England average, indicating with 95% confidence that programme spend is significantly higher than the England average, requiring further investigation. COPD Programme spend per head for 2007-2008 for Hull was £18 compared to the England average £11, giving a z score of 2.38, indicating significantly higher spend, requiring further investigation.

Figure 1 indicates worse outcome for Hull on bronchitis and emphysema and COPD morality compared to England. For 2005-2007 mortality from bronchitis, emphysema and COPD for Hull was 19 per 100,000 (under 75) compared to the England average 12 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. 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 respiratory system programmes are ranked 1<sup>st</sup> for spend in Hull out of 16 PCT's in the Industrial Hinterlands cluster. Hull's spend was £93 for 2007-2008 compared to the cluster average £80. COPD programme spend per head for 2007-2008 for Hull was £18, compared to the cluster average £14, ranking 2<sup>nd</sup> for spend.

Figure 2 indicates bronchitis, emphysema and COPD programmes are ranked 12<sup>th</sup> for outcome in Hull out of 16 PCT's in the cluster. For 2005-2007 mortality from bronchitis, emphysema and COPD for Hull was 19 per 100,000 (under 75) compared to the cluster average 18 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)