Hull PCT Health Outcome and Expenditure Comparison for Cancer 2009/2010

Key findings

- Whilst cancers and tumours programmes in Hull for 2009/2010 have lower spend compared to England, spend is not significantly different from the England average. Hull ranks 11th lowest for spend out of the 16 PCTs in the Industrial Hinterlands cluster.

- For 2009/2010 Hull has a worse outcome for breast screening compared to England, but not significantly different from the England average. Hull has the 15th worst outcome for breast screening out of the 16 PCTs 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 cancer, which has been highlighted as a key priority goal for World Class Commissioning, and given the high prevalence of behavioural and lifestyle risk factors for cancer and high cancer mortality rates, will remain a key priority following the NHS re-organisation.
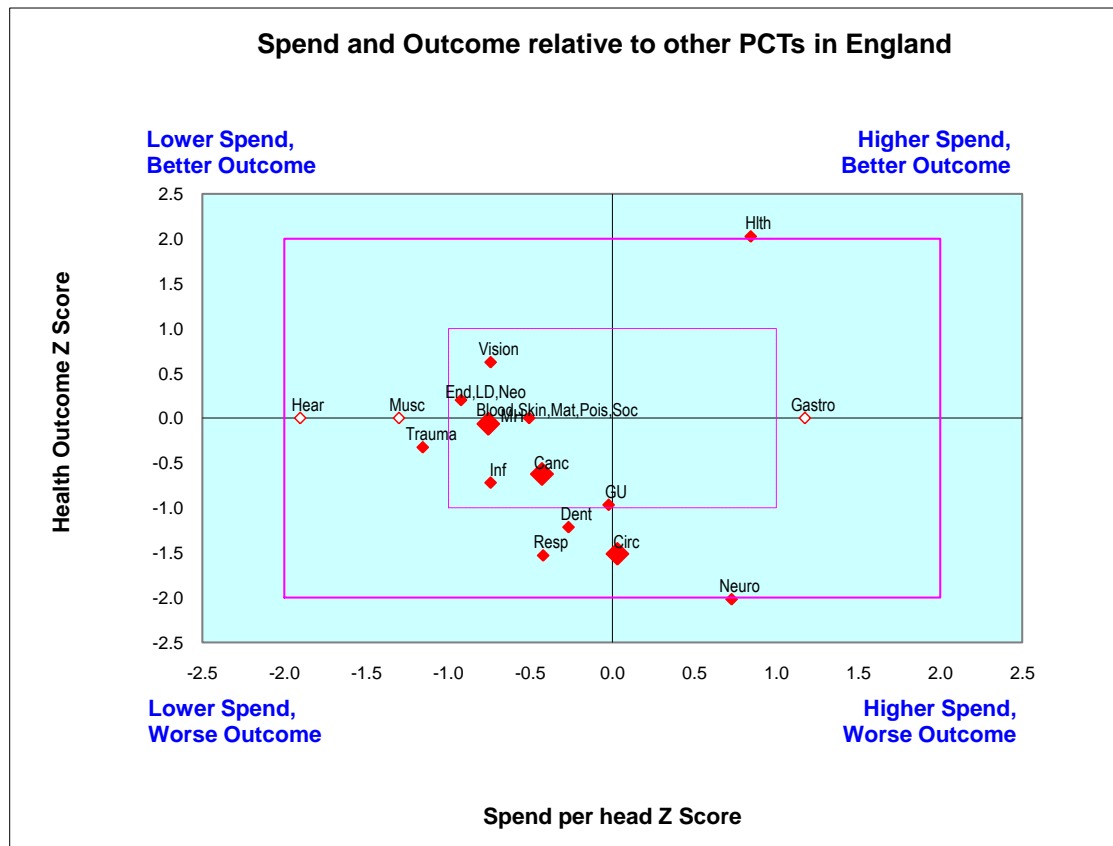
The Health Outcome and Expenditure Comparison Tool supplied by Yorkshire and Humber Public Health Observatory and Department of Health highlights better/worse outcomes for spend across individual programmes relative to the England average, and the Office for National Statistics (ONS) Industrial Hinterlands cluster rank for 2009/2010. The comparison tool displays two quadrant charts, which illustrate 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 in Hull due to its increased deprivation relative to England.

The outcome defined in the World Class Commissioning Strategy for cancer is 'proportion of women aged 53-70 years screened for breast cancer within the last three years'. The government is currently (March 2011) undertaking a consultation on appropriate public health outcomes ("Healthy Lives, Healthy People: Transparency in Outcomes. Proposals for a Public Health Outcomes Framework"). It is possible that the key outcome measures for Hull will change. The proposed indicators for cancer cover those relating to coverage of screening programmes, stage at diagnosis and premature mortality rates. Therefore, it is not known which indicator(s) will be selected for cancer. This report uses the WCC Strategy indicator.

Figures 1 and 2 display programme spend per head for 2009/2010 on all cancers and tumours programmes in Hull against proportion of women aged 53-70 years screened for breast cancer. The indicator has not been updated from the previous tool, which uses 2006-2008 data.

National Comparison

Figure 1: National Quadrant Chart

◇ No outcome indicators readily available
◆ Outcome indicators available

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		

The quadrant chart categorises each programme into four 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 solid pink 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 lower spend in Hull on all cancers and tumours programmes compared to England. Hull's programme spend per head for 2009/2010 was £100 compared to the England average £107. Spend is within one standard deviation of the England average, indicating no significant difference.

Figure 1 indicates worse outcome in Hull on proportion of women screened for breast cancer compared to England. For 2009/2010 the percentage of women aged 53-70 years screened for breast cancer in Hull was 72%, compared to the England average 77%. Outcome is within one standard deviation of the England average, indicating no significant difference.

ONS Cluster Comparison

Figure 2: ONS Cluster Quadrant Chart
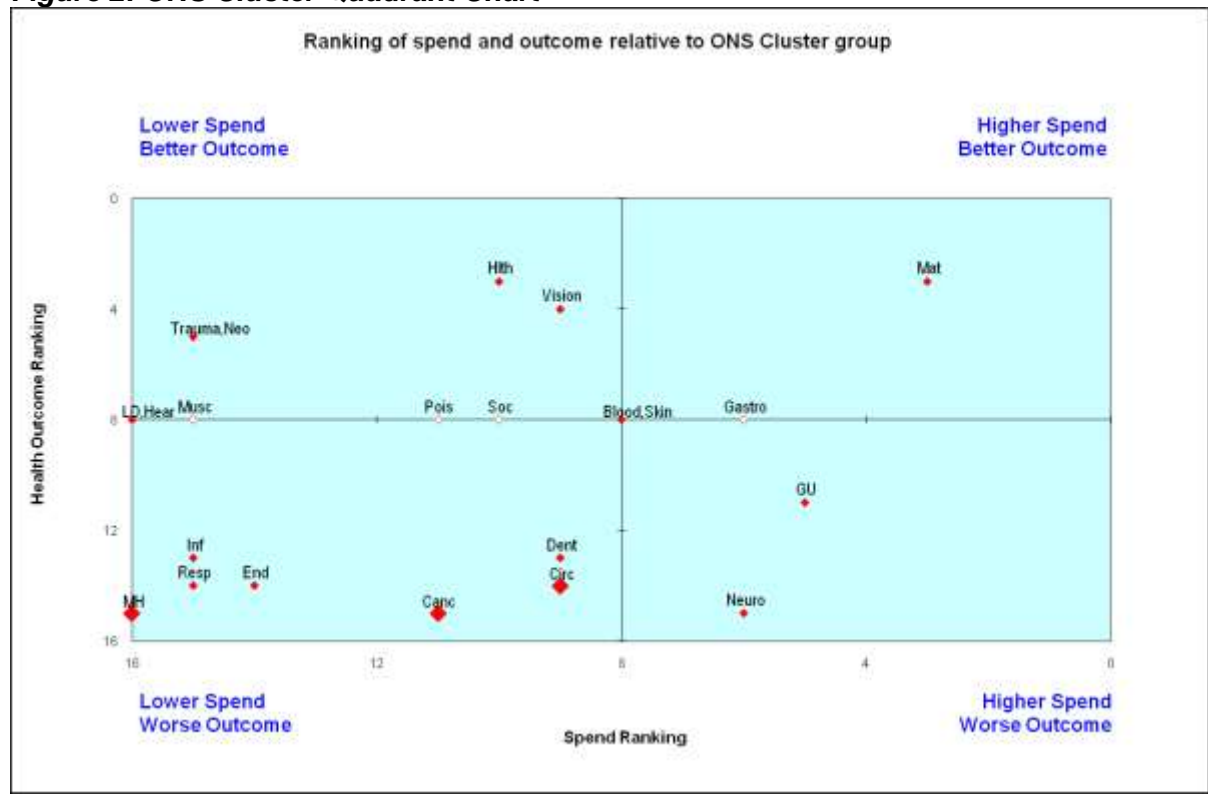
◇ No outcome indicators readily available
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Programme Area Abbreviations

Infectious Diseases	Inf	Hearing	Hear	Disorders of Blood	Blood
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The ONS cluster quadrant categorises each programme into four 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 denoting the highest spend or the best health outcome. Clusters are used to group PCTs together according to key characteristics common to the population in that grouping. Hull has been grouped in the Industrial Hinterlands cluster, however it is most unlike all the other PCTs within this cluster.

Figure 2 indicates all cancers and tumours programmes in Hull rank 11th lowest for spend out of the 16 PCTs in the Industrial Hinterlands cluster. Hull's spend per head for 2009/2010 was £100 compared to the cluster average £105. Hull's breast cancer programme spend per head for 2009/2010 was £7 compared to £9 for the Industrial Hinterlands.

For breast screening, Hull is ranked 15th lowest out of the 16 PCTs in the Industrial Hinterlands cluster. For 2006-2008 the proportion of women aged 53-70 years screened for breast cancer in Hull was 72% compared to the cluster average 77%. The indicator has not been updated from the previous tool, using 2006-2008 data.

Comparison with previous years

Table 1 displays outcome and expenditure analysis for the last three years. The quadrant chart for 2007/2008 uses 2007-2008 breast screening data, whilst the quadrant charts for 2008/2009 and 2009/2010 use 2008-2009 breast screening data. Hull's programme spend per head on all cancers and tumours programmes for 2007/2008 was £83, compared to £87 for 2008/2009 and £100 for 2009/2010. Spend is within one standard deviation of the England average for all three years. For 2007/2008 Hull ranked 11th lowest for spend out of the 16 PCTs in the Industrial Hinterlands cluster, compared to 13th for 2008/2009 and 11th for 2009/2010.

For 2007-2008 the proportion of Hull women aged 53-70 years screened for breast cancer was 63%, compared to 72% for 2008-2009. For 2007-2008 outcome is outside one standard deviation of the England average (lower than England), whilst for 2008-2009 outcome is within one standard deviation of the England average. Hull ranks 15th for outcome out of the 16 PCTs in the Industrial Hinterlands cluster for 2007-2008 and 2009-2010.

Table 1: Outcome and expenditure analysis

Hull	2007/08	2008/09	2009/10
Spend: all cancers and tumours programmes	£83	£87	£100
Outcome: women aged 53-70 years screened for breast cancer	63%	*72%	*72%

*2006-2008 data

Data Sources and Definitions for 2009/2010

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. 2006 - 2008. All ages. Persons	National Centre for Health Outcomes Development (NCHOD)
Cancers and Tumours	% of women aged 53 - 70 screened for breast cancer, 2009-2010	Healthcare commission
Endocrine, Nutritional and Metabolic	% of diabetic patients whose last HbA1c was 8 or less 2009-2010	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 2007/2008	Healthcare commission
Neurological	Mortality from epilepsy: Under 75 Directly age-standardised rates (DSR) per 100,000 European Standard population, 2006-2008 persons	National Centre for Health Outcomes Development (NCHOD)
Vision	Total sight tests per 100,000 population, 2009-2010	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, 2006 - 2008	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, 2006-2008	National Centre for Health Outcomes Development (NCHOD)
Dental Problems	Decayed missing and filled teeth 5 year olds 2007-2008	BASCD
Trauma and injuries	Mortality from accidents: Directly age-standardised rates (DSR) per 100,000 European Standard population, 2006-2008	National Centre for Health Outcomes Development (NCHOD)

PB category	Health Outcome Indicator	Data Source
Genitourinary	Deaths within 30 days admission, all genito urinary admissions excluding day cases, standardised rates, all ages FY 2008/2009	National Centre for Health Outcomes Development (NCHOD)
Maternity	% low birth weight births (live and still) <2500gms, 2008	National Centre for Health Outcomes Development (NCHOD)
Conditions of neonates	Neonatal infant mortality per 1,000 births (infants aged less than 28 days), 2006-2008	National Centre for Health Outcomes Development (NCHOD)
Healthy individuals	Smoking quit rates (successful quitters), per 100,000 population aged 16+ years, 2009-2010	The Information Centre for Health and Social Care, Lifestyles Statistics