Urgent and Emergency Care Lung Cancer Initiative

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Humber & Yorkshire Coast Cancer Network

Unscheduled Care in Hull & East Riding

- Background
- Local evaluation
  - Sociodemographics
  - NHS Performance stats
  - Internal IT performance figures
  - Casenote review
  - Patient experience interview
  - Directory of service

Why does it matter?

All Persons	Screen detected	Two Week Wait	GP referral	Other outpatient	Inpatient elective	Emergency presentation	Death Certificate Only	Unknown	Total	Number of patients
Acute leukaemia		3%	17%	14%	4%	57%	0%	4%	100%	2,551
Bladder		32%	28%	15%	2%	18%	0%	4%	100%	7,665
Brain & CNS		1%	17%	14%	4%	58%	0%	6%	100%	4,147
Breast	21%	42%	12%	9%	0%	4%	0%	12%	100%	34,232
Cervix	14%	16%	25%	16%	2%	12%	0%	13%	100%	2,085
Chronic leukaemia		10%	30%	12%	2%	30%	1%	16%	100%	2,869
Colorectal		26%	24%	15%	4%	25%	1%	6%	100%	27,903
Kidney		20%	29%	18%	1%	24%	1%	6%	100%	5,172
Larynx		31%	32%	21%	1%	12%	0%	3%	100%	1,583
Lung		22%	20%	13%	1%	38%	1%	5%	100%	29,420
Melanoma		41%	29%	11%	1%	3%	0%	16%	100%	8,117
Multiple myeloma		13%	27%	15%	1%	38%	0%	6%	100%	3,145
Non-Hodgkin's lymphoma		16%	30%	17%	2%	28%	0%	7%	100%	7,777
Oesophagus		25%	21%	17%	10%	21%	1%	4%	100%	6,001
Oral		26%	28%	30%	1%	6%	0%	9%	100%	3,062
Other		14%	25%	15%	2%	36%	1%	7%	100%	27,730
Ovary		26%	22%	15%	1%	29%	1%	6%	100%	5,012
Pancreas		13%	18%	12%	2%	47%	1%	6%	100%	5,989
Prostate		20%	38%	16%	3%	9%	0%	14%	100%	28,362
Stomach		17%	21%	16%	7%	32%	1%	5%	100%	5,841
Testis		48%	14%	16%	2%	10%		10%	100%	1,569
Uterus		35%	31%	16%	1%	8%	0%	8%	100%	5,733
Total	**3%**	**25%**	**24%**	**14%**	**2%**	**23%**	**1%**	**8%**	**100%**	**225,965**

Inpatient Costs By Tumour Group

	In Patients	Day Cases	Total
Breast	£161,766,566	£29,547,803	£191,314,369
Colorectal	£237,498,834	£34,980,438	£272,479,272
Lung	**£205,589,816**	**£17,333,829**	**£222,923,645**
Upper GI	£187,176,356	£16,274,844	£203,451,200
Urology	£264,262,283	£34,909,932	£299,172,215
Haematology	£278,799,020	£103,878,769	£382,677,789
Gynaecology	£99,156,465	£13,701,543	£112,858,008
Neurology	£96,617,619	£3,710,744	£100,328,363
Head & Neck	£60,996,098	£2,432,666	£63,428,764
All Others	£316,267,883	£66,340,939	£382,608,822
TOTAL	£1,908,130,940	£323,111,507	£2,231,242,447

Excludes Regular Day Attenders (Total Costs £63m)

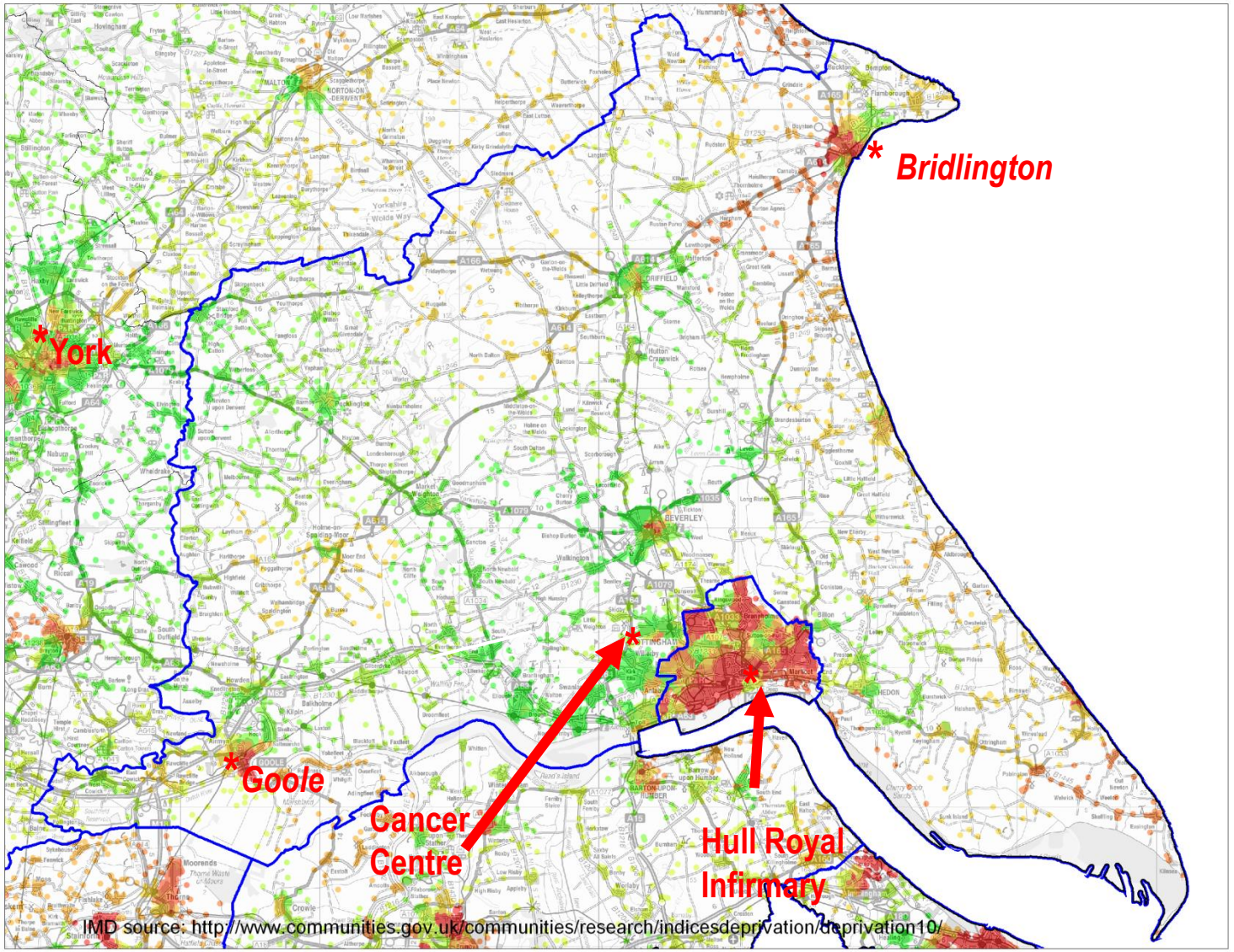
Findings

NCIN national cancer intelligence network

- **One year survival rates (%):**

	All routes	Emergency
• Breast	97	53
• Colorectal	73	48
• Lung	26	9
• Ovary	69	42
• Bladder	72	35
• Kidney	66	33
• Stomach	38	22

Index of Multiple Deprivation 2010
East Riding PCT & LA and surrounds



YHPHO
YORKSHIRE & HUMBER PUBLIC HEALTH OBSERVATORY

IMD 2010 Ranking
relative to England

- 0.9 to 1 Least deprived
- 0.8 to 0.9
- 0.7 to 0.8
- 0.6 to 0.7
- 0.5 to 0.6
- 0.4 to 0.5
- 0.3 to 0.4
- 0.2 to 0.3
- 0.1 to 0.2
- 0 to 0.1 Most Deprived

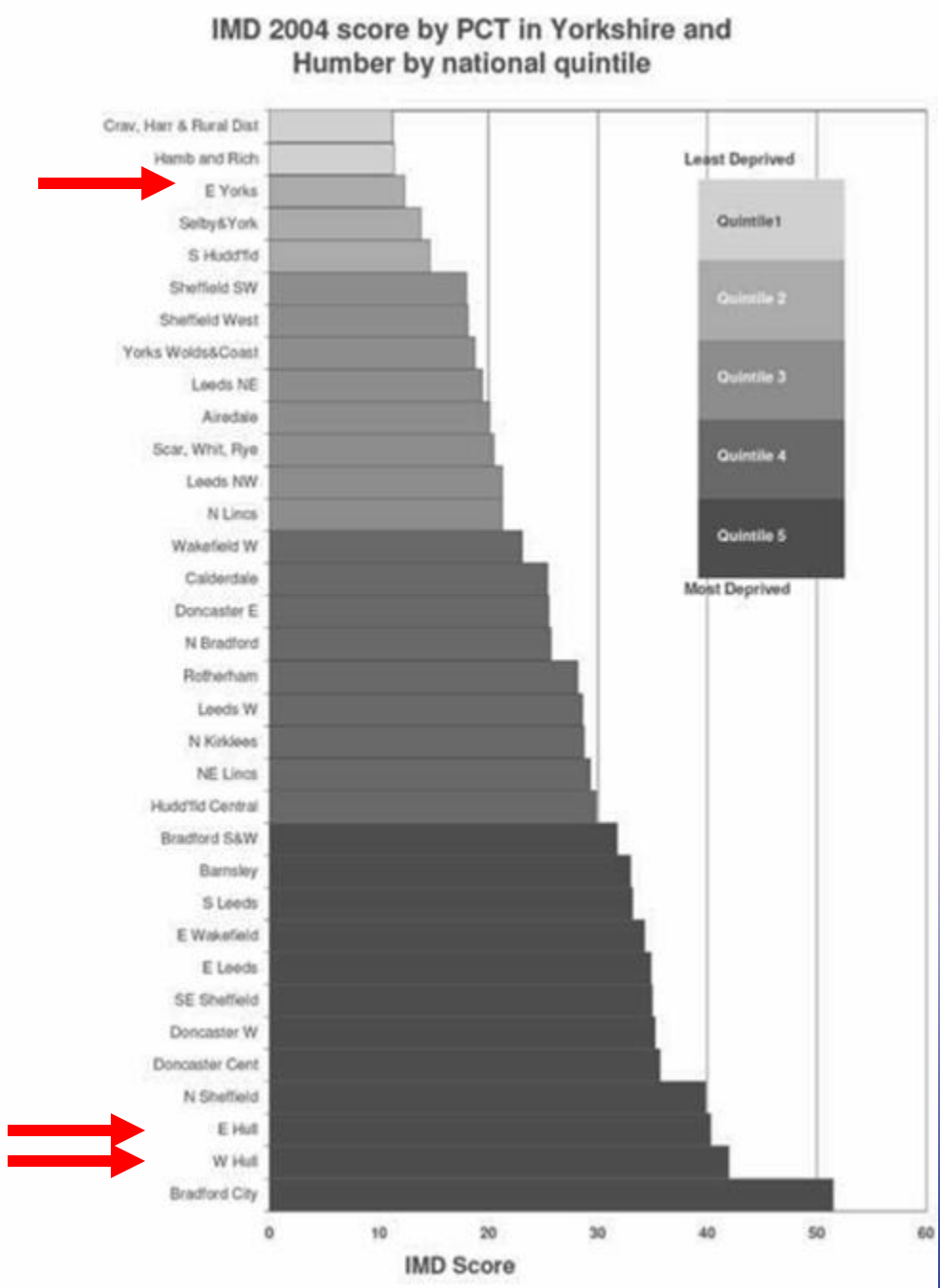
Postcode centroids coloured by IMD 2010. PCT & LA boundaries included.

Population 337,000 (ERY) + 262,000 (Hull)

Index of Multiple Deprivation 2004 Score

The overall IMD 2004 was constructed by combining the seven transformed domain scores, using the following weights:

- Income Deprivation (22.5%)
- Employment Deprivation (22.5%)
- Health Deprivation and Disability (13.5%)
- Education, Skills and Training (13.5%)
- Barriers to Housing and Services (9.3%)
- Crime (9.3%)
- Living Environment Deprivation(9.3%)



Within East Yorkshire there are hotspots in Lung Cancer incidence.....

	All age lung cancer SMRs (95% confidence intervals) 2004-08			
	Males		Females	
	SMR	(95% CI)	SMR	(95% CI)
Bransholme	**228.5**	(168.5 – 303.0)	**216.2**	(148.8 - 303.6)
Orchard Park and Greenwood	**185.3**	(127.5 - 260.2)	**218.6**	(145.2 - 315.9)
Rest of Hull	**165.2**	(151.6 - 179.8)	**162.0**	(146.1 - 179.1)
Goole	**204.1**	(158.2 - 259.2)	91.1	(57.1 - 137.9)
South East Holderness	116.0	(81.3 - 160.6)	**153.3**	(104.1 - 217.6)
Rest of ERoY	89.0	(81.4 - 97.2)	93.5	(84.2 - 103.5)

[1] Courtesy Robert Sheikh Iddenden, Public Health Sciences, NHS Hull

Age-and gender-specific percentages smoking in Hull's 2007, and East Riding of Yorkshire's 2009, health and lifestyle surveys[1]

Gender and area		Smoking prevalence (%)				
		Age group (years)				
		18-24*	25-44	45-64	65-74	75+
Males	Bransholme	**45.5**	**44.4**	**61.5**	36.4	20.0
	Orchard Park and Greenwood	**68.8**	**56.4**	**43.8**	27.3	**42.9**
	Rest of Hull	**41.1**	37.3	29.5	22.5	16.5
	Goole	13.3	37.0	14.3	10.7	0.0
	South East Holderness	**41.7**	16.7	19.1	10.0	5.9
	Rest of ERoY	17.3	22.4	16.9	10.4	3.7
Females	Bransholme	**46.2**	**57.1**	**60.9**	23.1	**40.0**
	Orchard Park and Greenwood	**43.5**	**79.1**	**56.3**	**46.2**	**62.5**
	Rest of Hull	32.3	31.1	26.8	20.0	10.2
	Goole	**40.0**	11.9	18.3	21.9	2.7
	South East Holderness	20.0	29.7	20.5	23.1	11.8
	Rest of ERoY	20.1	16.4	11.3	9.7	6.0

[1] Courtesy Robert Sheikh Iddenden, Public Health Sciences, NHS Hull

Unscheduled hospital care once diagnosis established

- Complications of treatment
- Comorbidities (COPD)
- The disease itself and specific complications of lung cancer
  - Pleural effusion
  - Pneumonia
  - Undiagnosed chest pain
  - Cord compression & brain metastasis
  - Because they are sick and need care
    - Social isolation and deprivation (also longer stays)
    - Less access to services
    - Geography and setting up care packages

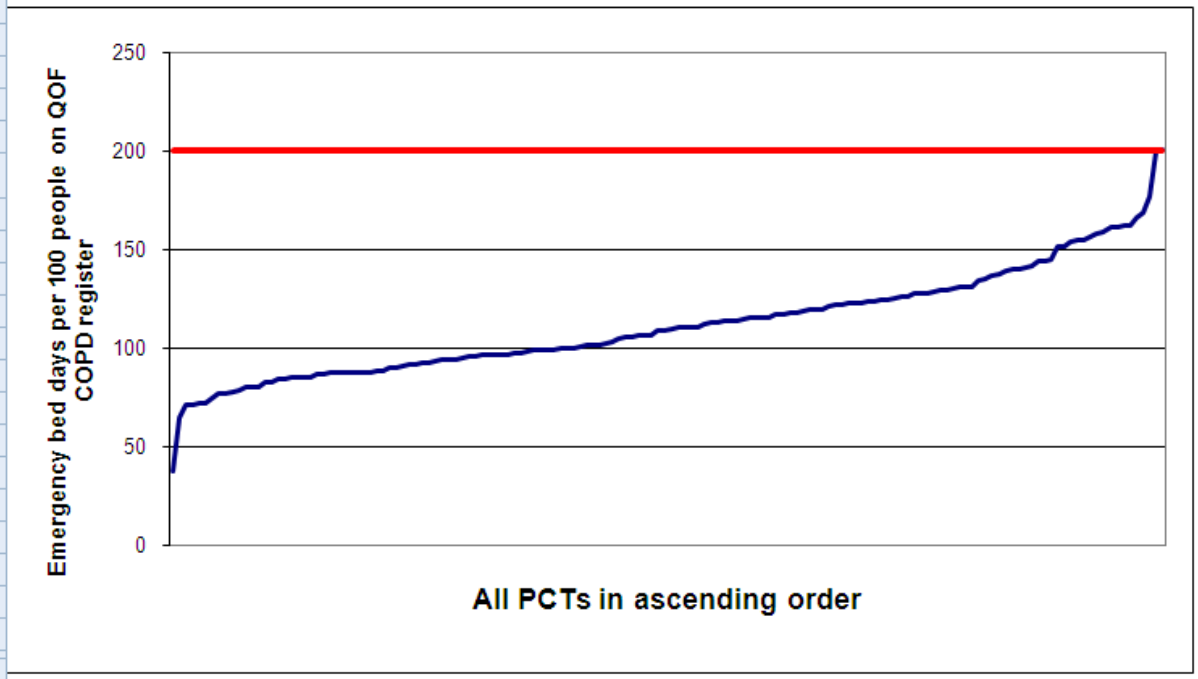
Local Performance

- LUCADA
  - Emergency presentation at diagnosis common (~40%)
  - Adverse performance score in >$^1/_4$ at diagnosis
- Comorbities are common and in themselves frequently result in unscheduled care
  - Majority have COPD
- Dr Foster
  - Excess length of stays in Hull, to an extent explained by deprivation
  - Readmission rates to hospital not greater than peers

4a. Primary Condition: COPD

Hull PCT

COPD



Red Line shows position of Hull PCT in relation to other PCTs

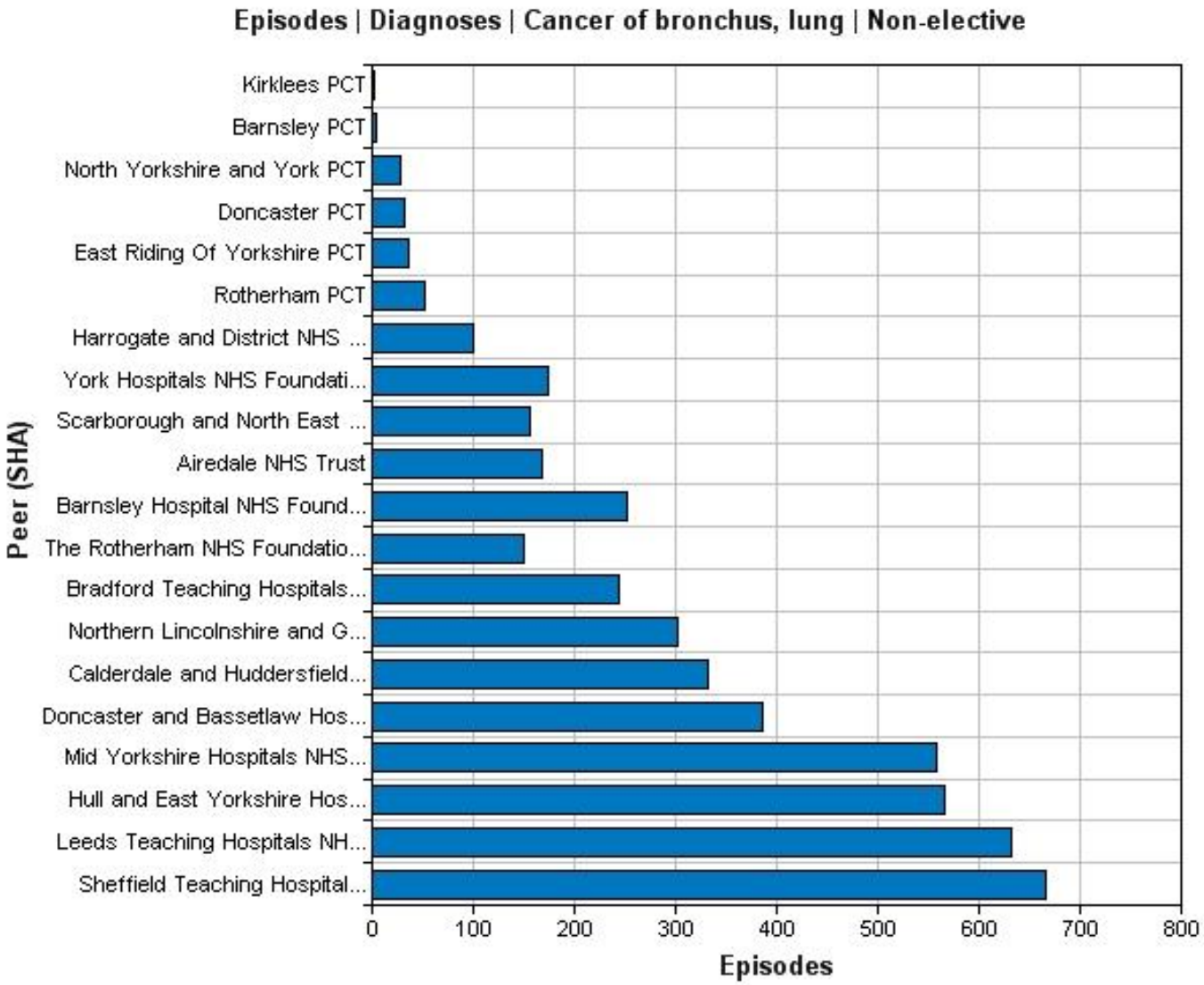
Chart: Emergency bed days per 100 people on the COPD QOF disease register by PCT.

- **Hull PCT: 201 EBDs per 100 people on the QOF COPD register for in 2006-07**

In 2006-2007

- **COPD contributed 9821 emergency bed days**
- **COPD contributed 862 emergency admissions**
- **The average length of stay for COPD was 9 days**

Source: *Hospital Episode Statistics (HES), The Information Centre for Health & Social Care*



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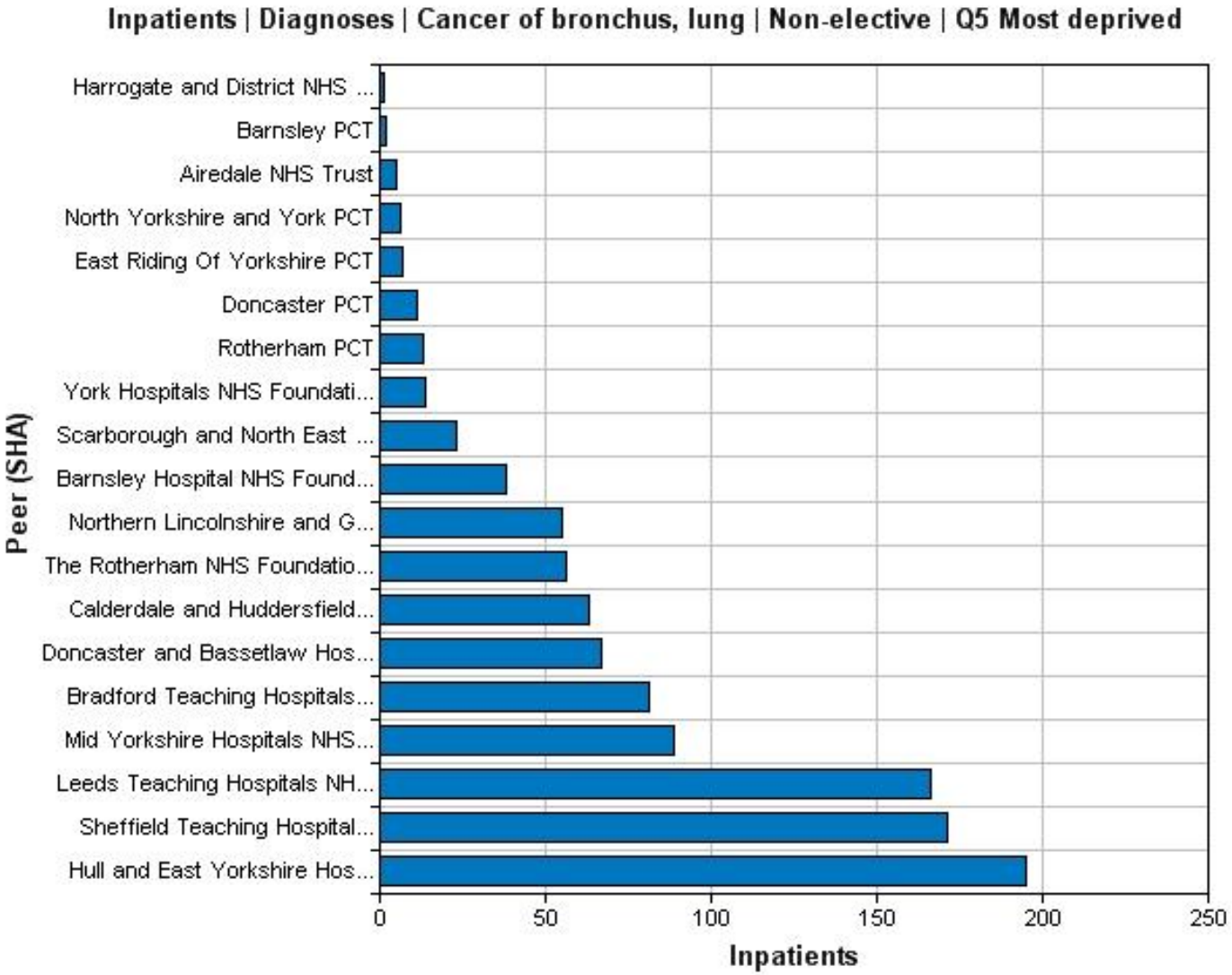

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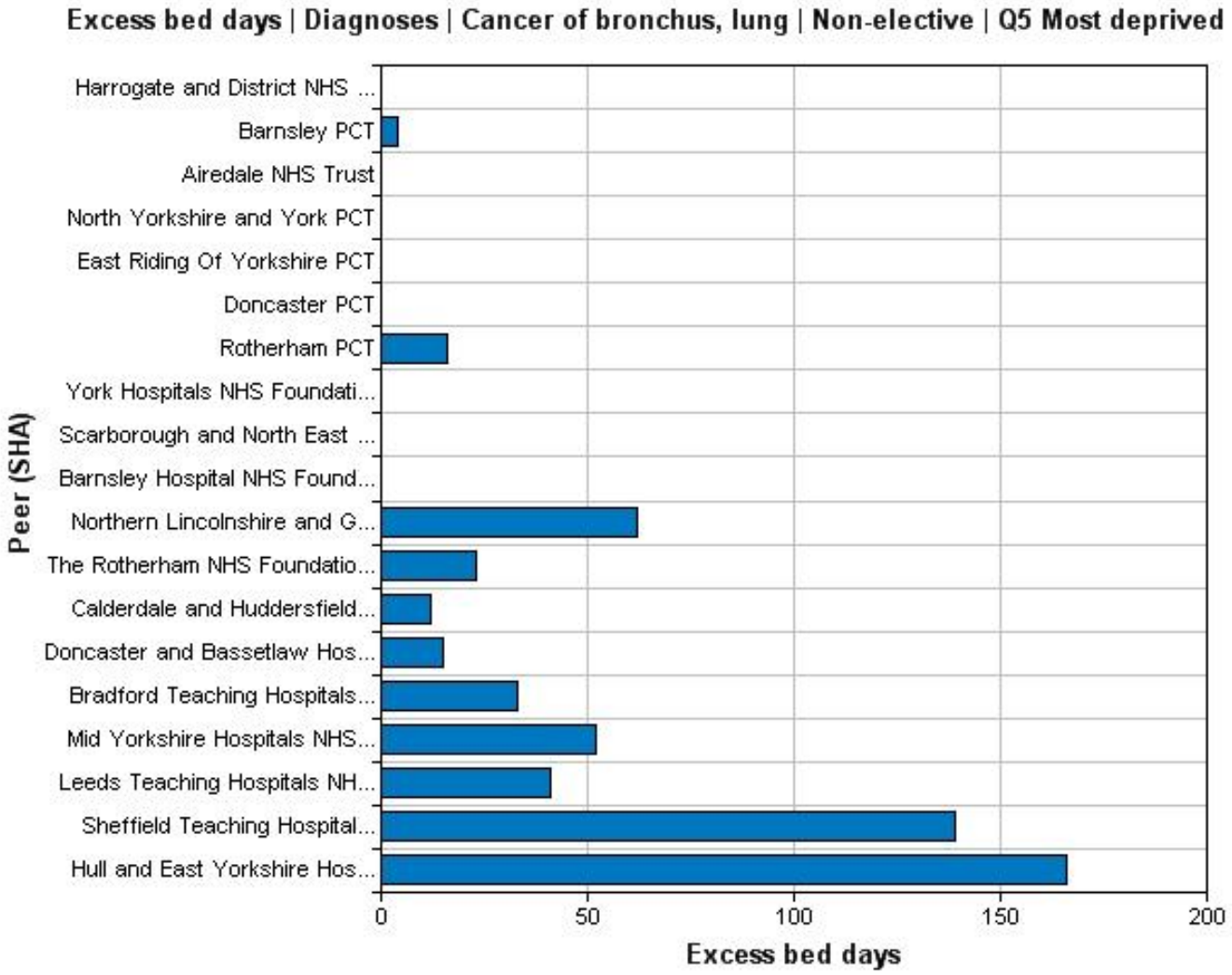

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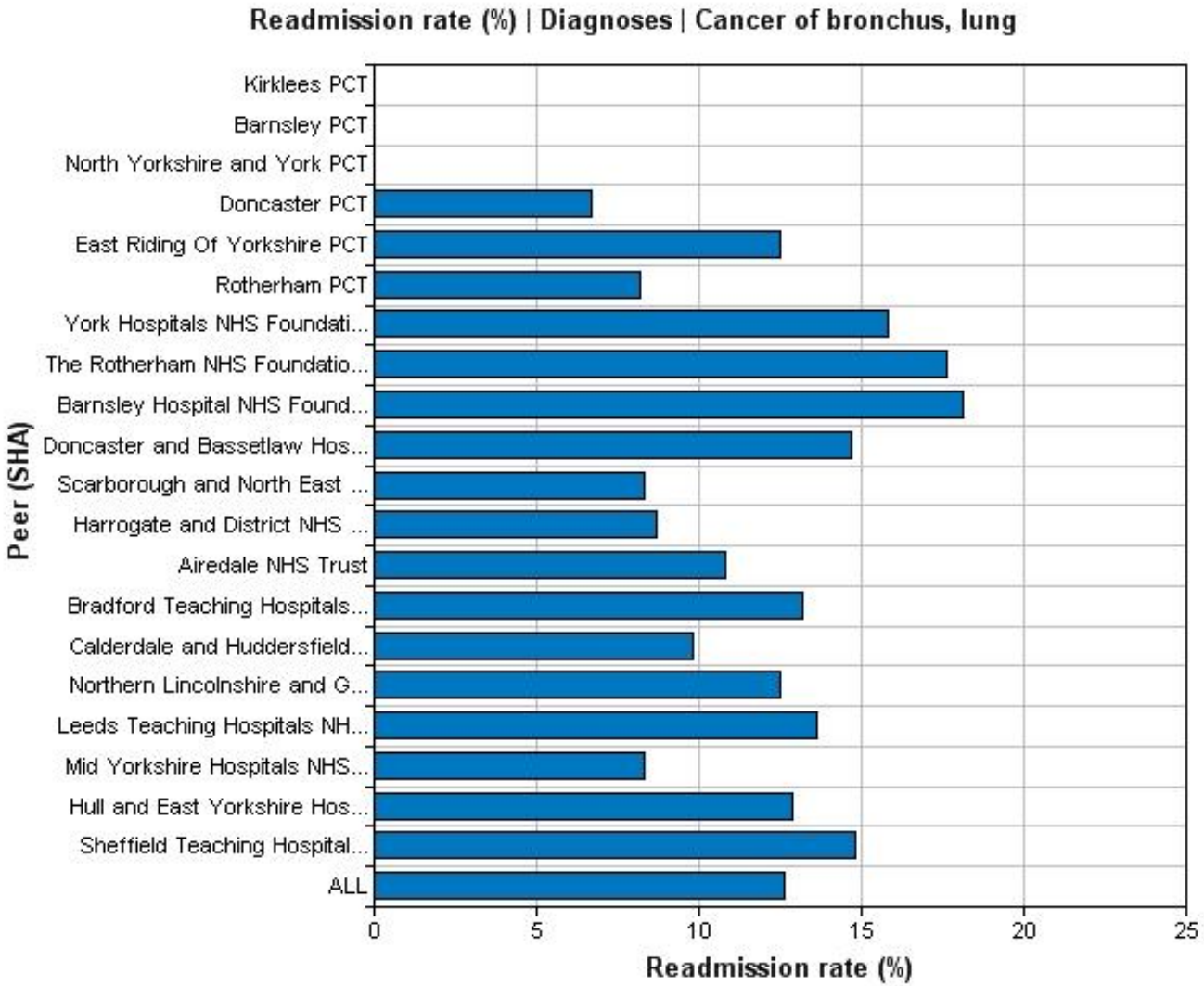

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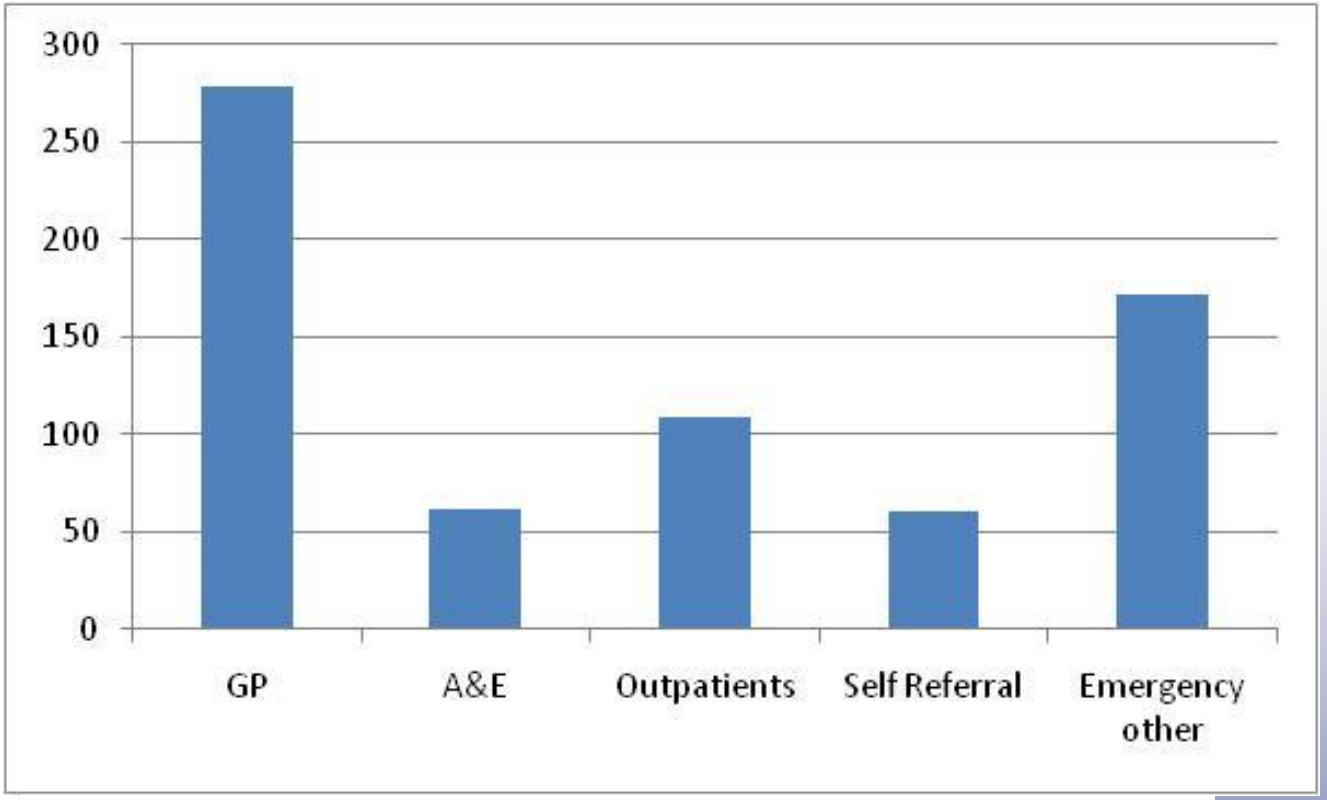
Performance by Admission Route

Number of Patients



- Majority of bed days are for patients admitted via unselected take, i.e. GP and A&E.
- Patient length of stays greater for GP and A&E admissions rather than specialist OPD or self referral.

Casenote review: symptoms

- 26 patients
- 15 patients (~60%) new diagnosis on acute admission
  - Neuro 5 (seizure, SOL, headache), SOB 5, haemoptysis 3, weight loss 3, back pain 2, dysphagia 1, asymptomatic 1
  - ~$^{1}/_{2}$ potentially diagnosable prior to emergency admission
- 11 patients with established diagnosis
  - SOB 5, back/bone pain 4, chest pain 3, generally unwell 3, dysphagia 1, abdo pain/ascites 1

Themes in delayed “sorting”

- **New Diagnosis**
  - Missing diagnosis or not recognising significance (2)
  - Test delays (2)
  - Outpatient opportunity (1)
  - Atypical presentation (1)
  - Different decision maker (3)

- **Established Diagnosis**
  - Not optimal location for sorting (3)
  - Complex diagnosis (3)
  - Cons review >24 hrs (8)
  - Infrequent decision maker (2)

Patient Experience

- Structured interview regarding
  - (a) reason for admission (from patient's perspective)
  - (b) how they accessed unscheduled care
  - (c) the pathway of admission

- to lead to a discussion around
  - (d) could anything have been done to prevent admission?
  - (e) or anything to improve admission process?

Patient Experience: Oncology

- **Self reported symptoms/problems (n=24 patients)**
  - **General deterioration/frailty x6 ***
  - **Chest Pain x5 (1 admitted with excess sensitivity to opiates)**
  - **SOB x4 (disease progression 3, anxiety 1)**
  - **Persistent vomiting x2 (1/2 chemo related)**
  - **Brain mets, hemiparesis x1**
  - **Haemoptysis x1**
  - **Exac COPD x1**
  - **Others; Eating/drinking/diarrhea (x2), bleeding 2^{ry} to thrombocytopenia (x1), jaundice (x1), palliative radiotherapy transport issues (x2)**

*** NB an underestimate, as I didn't interview the sickest patients**

Patient Experience: Oncology

- **Admission Route:**
  - Home direct to Oncology x11
    - Ward staff 5, CNS 3, doctor 1, ambulance 1, secretary 1
  - GP to oncology x3
  - Oncology clinic x2
  - Ambulance to oncology x2
  - Palliative care clinic x1
  - A&E x1
  - Resp Clinic to oncology x1
  - A&E, AAU, Resp, Oncology x1
  - Inter-hospital transfer x2 (1 elective via clinic)

Patient Experience: Oncology

- **Learning from patient experience, alternatives?**
  - ***Assessment prior to admission appears to be infrequent***
  - **Alternative location of care at outset**
    - **Hospice (Hull, 20 beds, other Hospices outside East Riding)**
    - **Better access, understanding of resources and use of specialist palliative care in community. e.g. daily visits by GPs for pain control, third visit by a GP told "she should be in hospital", daughter phoned CNS (why didn't GP get specialist advice in community?)**
  - **Alternative location of care at outset or more rapid discharge**
    - **Patient would like social care packages more readily to allow home care**
    - **Will this be sufficient as patient becomes more dependent? Will patients consider nursing homes?**
  - **Better use of resources**
    - **District nurse admit to A&E, Exac COPD moved to oncology as outlier**

Patient Experience: Oncology

- Learning from patient experience, alternatives?
  - But, also patient behaviour, putting off seeking help, hoping would get better (some possibly from healthcare workers as well). Resulting in out of hours crises. "I don't like bothering the doctors"
  - Not aware or forgetting to call CNS, DN or Macmillan.
    - information overload, too many people involved, "my son deals with the folder"
    - And some not aware at all.
  - Sent home prematurely, e.g. vomiting, IV to PO antiemetic and sent home same day (before mealtime).
  - Past experience of service, "every time I phone, its an answerphone and it takes hours for them to get back", "I ring the GP and am told to phone an ambulance".

Conclusions

- Assessment prior to admission
  - What assessment should occur in the community?
  - Shorter stays when admitted via specialist
- Inpatient pathway is not always efficient when accessed as emergency
  - Improved pathways and training of senior staff in Acute Trust
- Infrequent medical review or too frequent by different clinicians
  - Restructuring of ward level care (on-going)
- Patients would like care to be provided at home
  - Is there really capability & capacity to do this for very needy patients?
- Directory of services
  - Very one-sided, need community perspective
  - ?Awareness of community service (hospital staff & patients)
  - Sufficient capacity