Abstract P12 Table 1. Potential risk factors for Hospital Admission

Variable	Significance
Age	NS
Sex	P = 0.09
Comorbidity score	NS
Stage	NS
Small cell vs. NSCLC	NS
Central vs. Peripheral tumour	NS
Presence or absence of pleural effusion	NS
Presence or absence of metastases	NS

peripheral after review of the diagnostic CT scan. The presence or absence of significant pleural effusion (>1.c.m. depth) and extra-thoracic metastases was noted. Simple non-parametric tests were used to identify any risk factors for HA.

Results 84 patients (mean age 70.3 years, 42 males) were suitable for inclusion, accounting for 98 HAs with median length of stay of 6 days. Of the 59 patients with HA, 63%, 22%, 6% and 9% experienced 1, 2, 3 or ≥4 HAs. The HA: patient ratio fell with time from 1.44 in 2009, 1.23 in 2010 to 0.86 in 2011. Survival figures were 13.1%, 28.6%, 23.8% and 34.5% for <3, 3–6, 6–9 and >9 months respectively. 76% of HAs occurred within 3 months of death.

The primary cause of HA was determined to be infection (33%), breathlessness (16%), neurological (14%), pain (10%), gastrointestinal symptoms (10%), others (17%). No obvious clinical risk factors for HA were found when comparing those patients having HA to those without HA (Table 1).

Conclusions HAs in incurable LC are common but difficult to predict.

Future strategies designed to prevent HA may need to focus more on social factors in addition to providing rapid treatment of infection and symptom palliation in the last 3 months of life.

Epidemiology

P13 IDENTIFYING PATIENTS WHO HAD SURGICAL RESECTION FOR NON-SMALL CELL LUNG CANCER USING LARGE DATASETS

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Introduction Surgical resection rates have become an important indicator of NHS Trust performance and efforts to increase them are on-going with the aim of improving overall survival. The National Lung Cancer Audit (NLCA) has collected data on primary lung cancer since 2004 and has now been linked with Hospital Episode Statistics (HES) for research into inequalities in access to treatment. How well these two large datasets capture surgical data is not known.

Methods We used the NLCA to identify all cases of NSCLC, excluding stage IIIB or IV, diagnosed between January 2004 and March 2010. We calculated the proportion of cases with a procedure date in the NLCA, and the proportion with a code in HES, for potentially curative surgery less than 6 months after or 3 months before diagnosis. We looked at the age, lung function, performance status, stage and survival according to where surgery was recorded. Given the increase in NLCA case ascertainment from approximately 19% in 2004 to 98% in 2009 we also looked for changes in our results over time.

Abstract P13 Table 1. Features and survival of people according to the database in which records of surgery were present

	Record of surgical procedure			
	Both	HES only	NLCA only	Neither
N= 60,196	n = 8,535 14%	n = 2,568 4%	n = 795 1%	n = 48,298 80%
Mean age (years)	67.4	66.8	67.8	72.6
Mean % predicted FEV1	77.1	74.7	74.2	63.8
Missing FEV1 (% of total)	54.6	77.8	68.7	81.8
Stage (% of non-missing)	67.2	56.4	58.4	36.2
1a or 1b				
2a or 2b	21.9	23.0	21.7	19.6
3a	10.9	20.6	19.9	44.2
Missing stage (% of total)	14.5	60.6	52.0	72.9
Performance status	92.3	86.2	85.5	47.9
(% of non-missing) 0–1				
2	6.4	10.2	9.0	24.1
3–4	1.2	3.6	5.5	27.9
Missing performance status	28.2	58.9	38.2	50.4
(% of total)				
Median survival (months)*	62	41	18	7
**Died within 30-days	2.6	4.4	5.8	N/A
of surgery (%)				
Died within 90-days	5.3	8.6	16.7	N/A
of surgery (%)				

*Survival is calculated from date of diagnosis not date of procedure; FEV1 Forced expiratory Volume in 1 second;
**HES date of procedure unless NLCA only

Results There were 60,196 people in the NLCA who met the inclusion criteria; 8,535 (14%) had a record of surgery in both databases. An additional 2,568 (4%) had a record of surgery in HES and 795 (1%) in the NLCA. The features of people who had surgery in HES only or the NLCA only were similar, however median survival was shorter, and the proportion that died soon after surgery was higher, in the NLCA only group compared with those with surgery records in both databases (table 1). The proportion with HES only records of surgery decreased from 6% (n = 215) in 2004 to 3% (n = 367) in 2009; the patterns of survival each year were similar to the overall results.

Conclusion The proportion of people who had potentially curative surgery differed according to the database used to identify surgical procedures. There are many possible explanations for our results; however use of either database alone is likely to under-estimate the proportion of people who had surgery and this should be taken into account in studies investigating access to surgery.

P14 SMALL-CELL LUNG CANCER IN ENGLAND: TRENDS IN SURVIVAL AND THERAPY

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