



The impact of cancer service guidance on surgical workload volume: head and neck cancer perspective¹

National Cancer Intelligence Network Data Briefing

Background to head and neck cancer guidance

Head and neck (H&N) cancers is a grouping made up of many different cancers most of which are uncommon. The concentration of special senses in the head and neck means cancers affecting these areas can have a profound impact upon an individual's quality of life. Care pathways for H&N cancers can be complex with patients often needing intensive multi-modality treatments, rehabilitation and long-term support.

In 2004 NICE² (National Institute for Health and Care Excellence) produced site-specific Head and Neck Cancer Improving Outcomes guidance (H&N IO). NICE recommended the creation of site-specific multi-disciplinary teams (MDTs) and stressed the importance of high workload volume providers to improve outcomes and reduce inequalities in the care of head and neck cancer patients.

The move towards high volume hospitals in head and neck cancer surgery

Hospital trusts undertaking H&N cancer major surgery were divided into 3 workload bands: low, medium and high volume based on numbers of surgical procedures for the four year periods before and after the publication of the NICE guidance. In the second period, activity was concentrated in fewer trusts and the percentage of patients treated in low volume trusts declined significantly from 42% to 27% (Table 1).

Key messages

The publication of NICE H&N cancer guidance in 2004 was followed by a shift towards more centralised and specialised H&N cancer surgical services in England. A significant proportion of patients, however, are still treated in low workload hospitals.

Table 1. Number and percentage of trusts and patients treated by workload band and period of diagnosis

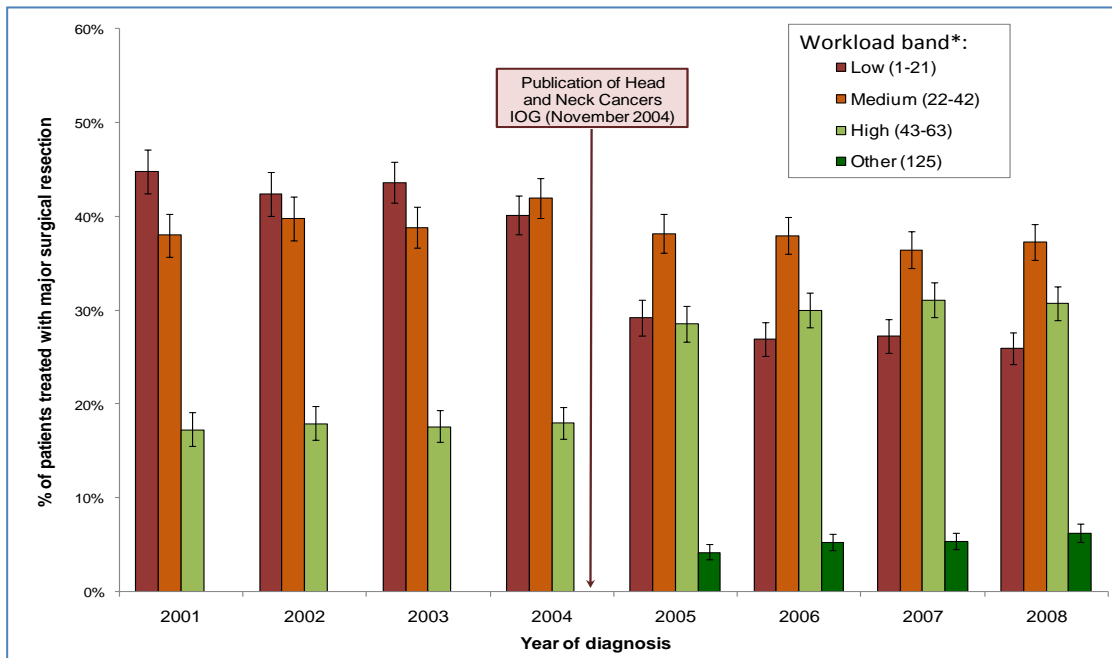
Annual median workload band*	Period 1: 2001-2004		Period 2: 2005-2008	
	Number (%) of trusts	Number (%) of patients treated	Number (%) of trusts	Number (%) of patients treated
Low (1-21)	102 (75.6%)	3200 (42.6%) [^]	84 (66.7%)	2570 (27.2%) [^]
Medium (22-42)	27 (20.0%)	2979 (39.7%) [^]	27 (21.4%)	3532 (37.7%) [^]
High (43-63)	6 (4.4%)	1325 (17.7%) [^]	14 (11.1%)	2843 (30.1%) [^]
Other	—	—	1 (0.8%)	495 (5.2%)

* 3 equal bands (low, medium and high) and 1 trust reported as 'other' with a very high median workload of 125 procedures a year
[^] Significant change from Period 1 to 2 (0.05 level)

Data source - National Cancer Data Repository new H&N cancer diagnoses linked to Hospital Episode Statistics surgery detail

Figure 1 highlights that some changes in patterns of surgical care were already taking place before 2004, but from 2005 onwards there has been a rapid and sustained change towards more patients having surgery in higher volume trusts. Four years after publication of the NICE guidance, almost 30% of patients were still being treated in low workload hospitals. However for some patients with smaller tumours requiring local resection and for patients poorly placed to travel, treatment at a local hospital might be most appropriate.

Figure 1. Head and neck cancer patients with major surgery by median workload band by year of diagnosis - England



Conclusions

The results demonstrate a trend towards more centralisation of H&N cancer surgery after publication of the NICE H&N cancer guidance in 2004. This suggests a greater impact of site specific rather than general cancer services guidance. As with other cancer sites, implementation of NICE H&N cancer guidance has been variable across the country and a significant proportion of patients were being treated in low workload hospitals in 2008.

¹Price G, Roche M, Wight R. *The impact of cancer service guidance on surgical workload volume: head and neck cancer perspective.* [Bulletin of The Royal College of Surgeons of England](#), Volume 96, Number 9, October 2014, pp. 300-303(4)

²National Institute for Health and Care Excellence. *Guidance on Cancer Services – Improving Outcomes in Head and Neck Cancers – The Manual.* London: National Institute for Health and Care Excellence;2004.

FIND OUT MORE:

The PHE Knowledge and Intelligence Team (KIT) South East is the lead KIT for head and neck cancer. <https://www.gov.uk/government/organisations/public-health-england>

Other useful resources within the NCIN partnership:

What cancer statistics are available and where can I find them?

<http://www.ncin.org.uk/publications/reports/>

Public Health England's National Cancer Intelligence Network (NCIN) is a UK-wide initiative, working to drive improvements in cancer awareness, prevention, diagnosis and clinical outcomes by improving and using the information collected about cancer patients for analysis, publication and research.