

National Head & Neck Cancer Audit 2011



Seventh Annual Report

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The Healthcare Quality Improvement Partnership (HQIP) promotes quality in healthcare. HQIP holds commissioning and funding responsibility for the National Head and Neck Cancer Audit and other national clinical audits as part of the National Clinical Audit & Patient Outcomes Programme (NCAPOP).



Health and Social Care Information Centre (HSCIC) is England's central, authoritative source of essential data and statistical information for frontline decision makers in health and social care. The HSCIC managed the publication of the 2011 annual report.



British Association of Head & Neck Oncologists

The British Association of Head & Neck Oncologists (BAHNO) is a multi-disciplinary society for healthcare professionals involved in the study and treatment of head and neck cancer. The association was first constituted in 1967 as the Association of Head and Neck Oncologists of Great Britain. The stimulus for its formation was the need to encourage discussion and the sharing of knowledge between the various clinical and research specialties involved in the management of head and neck cancer.

National Head & Neck Cancer Audit 2011

Key findings for England and
Wales for audit period
November 2010 to October 2011

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Acknowledgements

The National Head and Neck Cancer Audit was commissioned and sponsored by the Healthcare Quality Improvement Partnership, HQIP¹ developed in partnership with BAHNO² (British Association of Head and Neck Oncologists) and managed by the Health and Social Care Information Centre (HSCIC)³

The project wishes to acknowledge the following who have supported the audit project and provided guidance during the data collection period from November 1 2010 to October 31 2011 to and during the compilation of this report:

The National Head and Neck Cancer Audit project team chaired by Richard Wight and Graham Putnam with project management from Julie Michalowski and Sharon Younger.

Simon Hodder Chair, Head and Neck Cancer Sub Group of the Cancer National Specialist Advisory Group (NSAG), Wales for the contribution from Wales to the audit.

The following groups have supported the audit, including; the Expert Panel, the Head and Neck Clinical Reference Group (now co-terminus with the National Cancer Intelligence Network (NCIN) Head and Neck Site Specific Clinical Reference Group).

The analysis for this report was undertaken by the Cancer Registries and special thanks must be given to Gabriele Price and her team from the Oxford Cancer Intelligence Unit (OCIU), Ceri White and his team from the Welsh Cancer Intelligence and Surveillance Unit and Arthur Yelland at HSCIC.

The following clinicians contributed to the seventh Annual Report Expert Panel, and thanks are due to the following representatives: Richard Wight (Chair), Graham Putnam (Vice Chair), ENT surgery Mark Watson and Stuart Winter; Oral and Maxillofacial surgery Cyrus Kerawala and Ceri Hughes; dietetics Sarah Cameron; clinical nurse specialist Kathleen Mais; speech and language therapy Anne Hurren and Jo Patterson.

Finally, thanks go to all those organisations that have participated in the audit so far and for the individual contributions of clinicians, managers and administrative staff whose significant efforts make the audit what it is. Thanks must also go to all those patients whose data contributes to bringing about improvements in the provision of care and outcomes for all those similarly afflicted by head and neck cancer.

Foreword

Head and Neck Cancer Audit 2011

The National Head and Neck Cancer Audit 2011 is, once again, a testimony to the hard work of clinical teams across the country and the national audit project team. Information has been collected on 6879 cases of head and neck cancer out of an estimated total of 7354 (nearly 94 per cent). The audit is now providing useful information, especially on variations in treatments being delivered in different parts of the country.

Taking England and Wales as a whole, further improvements have been observed in completeness of the data submitted, with increases in the proportion of patients with staging (now 82 per cent), performance status (now 59 per cent) and comorbidity (now 46 per cent) data.

However, the figures also reveal the scope for further improvement, especially in some cancer networks. I would urge cancer network directors, medical directors and head and neck cancer site specific groups to reflect on this – especially in the cancer networks with poor data completeness. These are named in the report. Commissioners will also wish to ensure that complete datasets are submitted.

Why does this matter? If we are to compare outcomes across cancer networks we need to be able to adjust for variations in the extent of disease at presentation. Equally, in order to assess progress towards earlier diagnosis we need to be able to measure stage at presentation.

This report highlights variations in management between cancer networks, both for early laryngeal cancer (radiotherapy versus endolaryngeal resection) and for oropharyngeal cancer. The relevant professional groups should now reflect on whether patients are being offered choice where two or more approaches are clinically appropriate.

In general, progress continues to be made but this audit clearly demonstrates the potential to deliver better outcomes by ensuring all patients receive what has already been defined as good practice.

Professor Sir Mike Richards, CBE

National Cancer Director



1. Executive Summary

- The audit this year has focused on reporting variation by cancer network. Commissioners should use this information to determine whether local providers meet the standards of care delivery they require for their patients. Commissioners should also compare the audit results with other sources of information such as Peer Review, to gain a broader picture of the quality of local head and neck cancer services.
- The Cancer Registry estimate of cases of head and neck cancer has risen to 7354, of which the audit has received 6879 - 93.5 per cent of the estimate. In England this equated to 93.3 per cent of the estimate and for Wales 97.3 per cent.
- Near universal contribution was seen in England and Wales, a single NHS organisation did not contribute Barking, Havering and Redbridge University Hospitals NHS Trust. [Further information in section 4.2.2](#)
- Data submission rates have improved across the breadth of the pathway, but again significant variation between cancer networks was seen.
- The submission of staging data reached 81.2 per cent, the highest figure to date, though three cancer networks had poor levels of recording. These were; Avon Somerset and Wiltshire, North West London and South East London. [Further information in section 4.5.1](#)
- Performance status has risen by 6.5 per cent to 58.6 per cent of submitted cases and comorbidity data submission rose 5.9 per cent to 45.5 per cent. [Further information on performance status in section 4.5.2](#) and [Further information on comorbidity in section 4.5.3](#)
- Significant variation exists between cancer networks in their ability to provide the three data items of: staging, performance status and comorbidity. Six cancer networks are to be congratulated for achieving over 75 per cent for all three items, whilst six had minimal or zero submissions: Arden, Avon Somerset and Wiltshire, Lancashire and South Cumbria, Merseyside and Cheshire, South East London and Surrey Sussex and Hants. [Further information in section 4.5.4](#)
- The audit endeavours to deliver risk adjusted outcomes, but to achieve this it is imperative that all cancer networks contribute high levels of staging, performance status and comorbidity data to facilitate this much anticipated output. We aim to produce risk adjusted outcomes from the best submitting cancer networks later this year in association with the OCIU, and this will be well publicised when available.
- For cases of early larynx cancer, wide variation was seen in the management of the condition. There was considerable variation between radiotherapy and endolaryngeal resection, with one or other treatment predominating in some cancer networks, with a treatment modality consistent with the distribution seen in the sixth Annual Report. This questions whether patients are really being given a choice of treatment for this condition. [Further information in section 4.3.1](#)
- In oral cavity tongue cancer, analysis by stage of both resection method and neck management confirms weakness of the current OPCS 4.6 coding structure as resective method; laser, harmonic scalpel, diathermy or knife cannot currently be recorded making it difficult to associate outcomes with surgical technique. [Further information in section 4.3.2](#)
- Oropharynx cancer showed variation between surgical and non-surgical management, with again some cancer networks seemingly favouring one treatment modality over another. Input from the radiotherapy statistics dataset (RTDS) should help define actual treatment given in more detail. [Further information in section 4.3.3](#)
- For advanced larynx cancer, there was little evidence in support of the widespread use of organ sparing chemoradiotherapy in T3 glottic cancer. [Further information in section 4.3.4](#)
- The submission of multi-professional data has improved greatly this year with much greater assurance of treatment delivery by the range of professionals involved in head and neck cancer care. 36.8 per cent of all cases in England were confirmed as having a Clinical Nurse Specialist (CNS) present at the breaking of bad news, and 55.3 per cent had CNS contact during treatment. Significant variation remains between cancer networks and their ability to confirm these important inputs into quality care delivery. [Further information in section 4.6](#)
- 50 per cent improvement was seen in the confirmation of dental assessment pre-treatment. [Further information in section 4.6.4](#)
- Assurance of speech and swallowing assessment has risen from 10.2 per cent to 22.6 per cent with seven organisations confirming this in over 60 per cent of patients. [Further information in section 4.6.5.1](#)
- Confirmation of dietetic input has risen to 23.1 per cent, a 10 per cent improvement from the sixth Annual Report. [Further information in section 4.6.6](#)

- Multi-disciplinary team (MDT) discussion has risen to 90.6 per cent (97.5 per cent of all cases with a recorded care plan). Four cancer networks reported over five per cent of cases as not having been discussed at an MDT. These were: Avon Somerset and Wiltshire, Lancashire and South Cumbria, Mount Vernon and South East London. [Further information in section 4.7.6](#)
- Confirmation from MDTs that discussion of resective pathology is taking place is reported for the first time for England (insufficient data was submitted from Wales). Of 1714 cases undergoing surgery, 82.5 per cent were recorded as having their resective pathology discussed. [Further information in section 4.5.1.2](#)
- Time from diagnosis to primary radiotherapy has fallen for the first time to 42 days, from the 44 day figure in the sixth Annual Report. Within cancer networks and providers, significant variation remains in this interval and further reduction will require focused effort. [Further information in section 4.7.9](#)
- Crude survival is again reported with a stark reminder that 20.5 per cent of all head and neck cancer patients are deceased within a year of diagnosis and 30 per cent by two years. Multi-professional support to this group of patients is an important element of high quality clinical care not only at the front end of the care pathway as the legacy of treatment for head and neck cancer requires prolonged support. [Further information in section 4.8](#)
- To assist readers in taking an overview of the variations between networks, a summation of seven data quality indicators can be found in [Appendix 7](#), and a summation of care quality, key access and outcome indicators by cancer network can be found in [Appendix 8](#).

2. What are the gaps in patient care and what should be done to improve care to patients?

2.1 How organisations are represented in the audit

With the exception of the table showing numbers of submitted patients registered with new head and neck primaries by anatomical site available [here](#), all tables show performance by contact organisation (the code submitted under Hospital Identifier contact organisation). Each table clearly identifies which organisation identifier is used.

Routes of submission of data vary between organisations which reflect the complex care pathways patients undertake. Who submits data and on behalf of whom can be seen [here](#)

In Wales, the data is submitted centrally and annually from the all Wales cancer data information system, CANISC

The tertiary centres - the Christie NHS Foundation Trust and Clatterbridge Centre for Oncology NHS Foundation Trust are not counted in the table showing numbers submitted of patients registered with new head and neck primaries by anatomical site, as it uses the Diagnosis Summary (submitting organisation) table. These two organisations do not diagnose patients and therefore they would have a null count, implying they have not participated in the audit. If their codes have been used as a contact organisation these trusts will be reported in treatment analyses.

In the new DAHNO 2012 system (for reporting in the eighth Annual Report onwards) participation will be measured both by MDT and the First Diagnosing Organisation field. Treatments will be reported by the provider codes identified on each record type. Users are strongly encouraged to complete the new MDT organisation field.

2.2 Which cancer networks have provided good data quality, and assurance of care?

For patients, carers, and commissioners of services it is helpful to weight the audit findings, both by the level of submission in their local cancer network, as well as to the level of assurance of care provided along the patient pathway.

To help this assessment across the range of tables in the seventh Annual Report, two summary tables have been provided.

The first table in [Appendix 7](#) records by cancer network the level of returns for seven key data items, with traffic light colour coding at the base of the table reflecting the level of attainment for each item. Significant variation between better submitting and poorer submitting cancer networks can be seen.

The second table in [Appendix 8](#) summarises assurance of care and access against a number of standards by cancer network along the patient pathway.

In interpreting the audits findings, readers are encouraged to look both at current performance and serial evidence of care delivery. In the eighth Annual Report the audit will seek to publish an assessment of how many individual patients per cancer network received all of the key elements of the patient pathway for the first time, using the enhanced data extraction facilities of the new DAHNO 2012 system.

2.3 What are the gaps in patient care and recommendations to improve care to patients?

2.3.1 Commissioners:

- Should use this report, previous annual reports and other sources of information such as Peer Review and The National Cancer Patients Experience Survey¹⁰ to look for evidence of excellence in the provision of care, and also areas where evidence of quality and assurance is lacking.
- Should look for evidence of multi professional care input across the breadth of the patient pathway, and where this is lacking, develop with cancer networks and providers concrete plans that these vital aspects of care can be delivered with assurance in the future.
- Should ensure patients have options for laser or radiotherapy where appropriate in early larynx⁵.
- Should ensure that provider units submit the full audit dataset for analysis by the national audit.

2.3.2 Cancer Networks:

- Should use the audit to explore clinical variations in the delivery of care.
- Should ensure progress is maintained for radiotherapy access times, with appropriate levels of resourcing for head and neck cancer patients following the slight improvement this year.
- Should ensure that adequate dental service provision remains a high priority. Dental assessment during and post treatment for head and neck cancer remains a key aspect of head and neck cancer care.
- Should ensure that commissioners make appropriate resourcing available. The role of the multi professional team is well established in the provision of high quality care and this should be maintained.
- Should ensure that equity of access is maintained for all patients.

2.3.3 Providers (Trusts, Foundation Trusts and Local Health Boards)

- Should review their pathology pathways to ensure the timely delivery of services as the pressure on pathology services is well recognised nationally.
- Should review their data submissions to ensure that data submission to the national audit is adequately supported.
- Should ensure that adequate levels of multi professional care are being delivered throughout the head and neck cancer pathway to patients and provide assurance of this to patient groups and commissioners.

2.3.4 MDTs

- Are encouraged to use all of these data resources to fully understand their contributions and those of their peers. The audit contains a wealth of data found within the electronic report.
- Should ensure all cases of head and neck cancer are discussed at an appropriate MDT to minimise the “not discussed at MDT” category and investigate those cases recorded as not discussed at MDT.
- Should ensure all post surgery pathology is discussed at MDT to enable appropriate adjuvant therapy to be initiated.
- Should ensure staging agreement is a key part of the MDT discussion.
- Should ensure all MDT members have a voice in team discussions to ensure that appropriate data on the patient pathway is recorded for audit purposes.

3. Background to head and neck cancer and comparative audit

For a broader introduction please refer to previous Annual Reports.

3.1 What is head and neck cancer and which anatomic sites does it include?

Head and neck cancer describes neoplasms arising from the mouth (oral cavity), voice box (larynx), throat / upper gullet (pharynx), salivary glands and related sites. Head and neck cancers are less common cancers, with approximately 8100 new cases diagnosed in England and Wales each year⁴. Over 90 per cent of all malignant head and neck tumours are squamous cell carcinomas (SCC). For the details of anatomical cancer sites covered by the head and neck cancer audit see [Appendix 2](#).

3.1.1 Impact and outcome of head and neck cancer

The disease burden of head and neck cancer is significant. Patients require intensive multimodality treatments and prolonged rehabilitation with long term support to achieve an adequate recovery. The disease significantly impacts on eating, drinking, speech, swallowing, smell, breathing, social interaction and work capabilities.

Head and neck cancers have significant mortality, for example, five year relative survival for larynx cancer is around 65 per cent. Better prognosis is associated with early detection, while late presentation and neck node metastasis drastically reduce long term survival.

3.2 Measuring clinical care and the role of standards from professional bodies

Core issues addressed in the National Head and Neck Cancer Audit are:

- delivery of appropriate primary treatment (including adjuvant therapy) in management of head and neck cancer by a multi-professional team, and delivery of care to agreed standards
- to assess in more detail, care provided by specialist nurses, dieticians and speech and language therapists

The British Association of Head and Neck Oncologists, (BAHNO) a multi-professional organisation, with facilitation by the HSCIC, published standards for the delivery of head and neck cancer care in 2009. The standards are referred to in this report and are highlighted in [grey](#). These standards can be accessed from the BAHNO website through the following link: <http://www.bahno.org.uk>

Welsh standards are shown in [blue](#).

3.3 Audit and its links to peer review – Clinical Lines of Enquiry

The National Institute for Health and Clinical Excellence NICE⁵ guidance on head and neck cancer⁶ in England and Wales was published in 2005. Supporting measures have been subsequently issued and updated.⁷ It provides recommendations for good practice and areas addressed include a head and neck cancer network and multidisciplinary teams (MDTs), referral, diagnosis and assessment, treatment services, post-treatment follow-up and care, prevention, patient centred care and palliative care. In Wales, National Standards for Head and Neck Cancer Services 2005⁸ define core aspects of service that should be provided for cancer patients.

Head and Neck Clinical Lines of Enquiry (CLEs)⁹ were introduced into the 2011 – 2012 National Cancer Peer Review process, in order to provide a greater focus within Peer Review on clinical issues. For 2011 – 2012 there were five national metrics, taken from the National Head and Neck Cancer Audit Report, and three metrics reliant on local data. Preliminary analysis of the reports from peer review teams on these CLEs indicated a number of themes. In particular the CLEs highlighted:-

- inequities of provision in pre-operative/pre-treatment dietetic assessment
- some inequities in being offered choice of primary surgical voice restoration
- inadequacy in provision of pre-operative/pre-treatment dental assessment
- difficulties of clinical nurse specialist (CNS) capacity to see all new patients and the challenges of recording this patient contact.

Further detail on these findings will be included in the National Cancer Peer Review Programme Report 2011 – 2012.

The above findings both support the importance of audit of improvement in these areas as well as identifying that the levels of assurance in the annual reports reflect service difficulties.

The 2012 – 2013 metrics for Clinical Lines of Enquiry have been modified to contain six national metrics, all of which are taken from the National Head and Neck Cancer Audit Report. A list of the updated six National indicators for 2012 can be found in [Appendix 4](#) and they are shown throughout the report in [green](#). Local indicators have been discontinued.

The National Cancer Patients Experience Survey¹⁰ (which is referred to in the report) acts as a further source of information and will be used as a comparator of more diverse patient outcomes in future reports.

Commissioners of services can now triangulate these different information sources in conjunction with more detailed audit findings to better assess the quality of their local services.

3.4 Improving available information - Joint working with the National Cancer Intelligence Network (NCIN)¹¹ and lead Cancer Registry –Oxford Cancer Intelligence Unit (OCIU)

The NCIN Head and Neck Site Specific Clinical Reference Group (SSCRG)¹¹ acts both as the linkage between professional bodies and the audit. It also supports a separate work programme to gain more value from combining different data sources into a common repository. It is supported by a lead Cancer Registry which for head and neck is Oxford (OCIU).

To date, this has combined data from the audit with registry data and hospital episode statistics (HES). During 2012 information will be available on radiotherapy episode statistics to allow for the first time an in depth assessment of radiotherapy treatment in head and neck cancer. In the eighth Annual Report this will be a focus within pathways of care.

OCIU provides long term cumulative analysis of information from the National Head and Neck Cancer audit and provides leadership for the audit analysis in conjunction with the Welsh Cancer Intelligence and Surveillance Unit.

A number of publications under the NCIN banner can be found on the OCIU website www.ociu.nhs.uk.

These include reports on incidence, deprivation, travel times to treatment centres, impact of age on surgical intervention and bulletins on different head and neck cancer sites.

3.5 More in-depth analysis of the sixth Annual Report Audit cohort

Following closure of the submission period for the sixth Annual Report, a further 143 cases and a further 266 treatment episodes were submitted. The latter is likely to reflect cases that had not completed their care pathway at the point of the submission close.

Further more detailed analyses of the sixth and cumulative cohorts included the following :-

- Post operative radiotherapy by initial procedure
- Post operative radiotherapy by stage
- One year crude death rates in fourth and fifth cohorts by Cancer Network
- Cumulative age and sex distribution by anatomic site group (fourth, fifth and sixth cohorts)
- Deprivation by anatomic group in England and Wales

The analysis summary will be available in 2012 on the audit website <http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/cancer/head-and-neck>

3.6 Accessing analyses through the submission year iView

The HSCIC has developed iView¹² a tool for organisations to view performance against a number of the analyses reported in the annual report. Data is extracted from the DAHNO system on a quarterly basis and imported into iView. In order for organisations to see their performance in year it requires them to enter their data into DAHNO in a timely fashion. Historically, the bulk of data in DAHNO is entered within the last eight weeks (by August 2011 only ten per cent of the year's data had been entered) resulting in iView being of limited value in year to organisations. More contemporaneous entry will both improve data quality and provide better feedback.

3.7 Enhancing the audit submission process

3.7.1 DAHNO system development

During 2011 / 2012 the Expert Panel met to re-define the questions the audit is endeavouring to answer for the next two to three years (a list will be available on the audit website in summer 2012). Following on from this, the data items required were identified and a new system built based on these requirements. The emphasis in the new DAHNO 2012 system¹³ is to capture key data at the point of the first multidisciplinary team (MDT) meeting and treatment. The burden on the user, in terms of data entry, has significantly been reduced by this approach. Multiple primaries can now be collected, along with an enhanced number of anatomical sites.

3.7.2 Linking with third party suppliers

All third party suppliers (Somerset Cancer Register, Infoflex, Dendrite) have been provided with documentation of the new system file structure, data items and definitions and reference data, early on in the development process. The audit project manager has also been in contact with system suppliers to resolve queries and explain the new requirements. Users have been encouraged to contact their system supplier to ascertain timescales for development, testing and deployment. No problems have been reported to the audit project team in terms of being able to deliver the third party systems by the audit submission deadline.

3.7.3 Submission feedback and error reporting

The new DAHNO 2012 system will provide feedback on data quality and providers will be able to export data that has been entered into a CSV file. As the system is collecting data key to the MDT, the data quality reports will be issued to the MDT organisation, who should take responsibility for the quality of data across the patient pathway, irrespective of whether they have entered all the data. If the MDT organisation field is not completed, the reports will default to the first diagnosing organisation.

There has been enhanced error reporting on CSV file uploads, to enable users to fully understand issues they have with uploading data.

3.7.4 Registering to access DAHNO 2012

A new user registration process has been developed which is fully electronic, including the Caldicott Guardian sign-off. A copy of the User Registration form and details of the process can be found on the audit website www.ic.nhs.uk/canceraudits

3.8 Key changes in DAHNO for the 2011–2012 collection year

New or modified data item	Data Items removed
Chest x-ray performed prior to treatment?	GP Practice code
CT Chest performed prior to treatment?	Date referral request received
CT Primary/Neck performed prior to treatment?	Primary care communication sent
MRI Primary performed prior to treatment?	Clinical trial-patient status
PET Scan performed prior to treatment?	Staging certainty categories
MDT organisation	Date patient advised of cancer diagnosis
Has patient had pre treatment nutritional assessment?	Image request date
Date of discharge (surgery)	Date image report
Was resective pathology discussed at MDT?	Diagnostic procedure
Treatment type	Pathology specimen type
Was patient assessed post treatment by SALT?	Pathology specimen type
	Excision margin
	Specimen nature
	Discharge destination
	Pathology specimen type
	SVR: 3, 5,7 10,11,12
	Date of palliative decision
	CNS: 1, 2, 3, 5, 7, 8, 9

3.9 Revisiting the goals of the audit and future outlook

3.9.1 Improving data submission to achieve casemix adjusted survival

Since its inception the audit has sought to deliver casemix adjustment of outcomes. As identified in previous reports this requires high levels of submission of key items including performance status, co-morbidity and stage across all cancer networks.

Whilst in all three of the above items there have been significant rises in submission, further work is required in a number of cancer networks to achieve the required levels of submission.

The submission of performance status and co-morbidity by annual report is shown in the figures below. Individual provider performance for the current year can be found [here](#).

Figure 3.9.1a
England and Wales - average submission of performance status by Annual Report year (per cent)

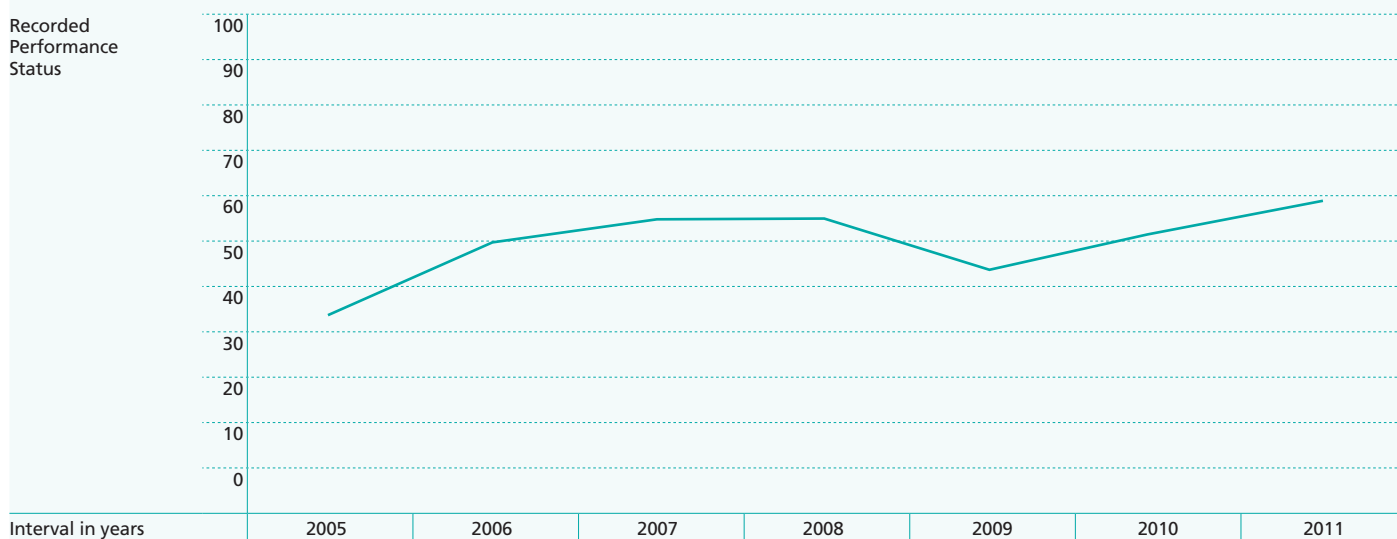
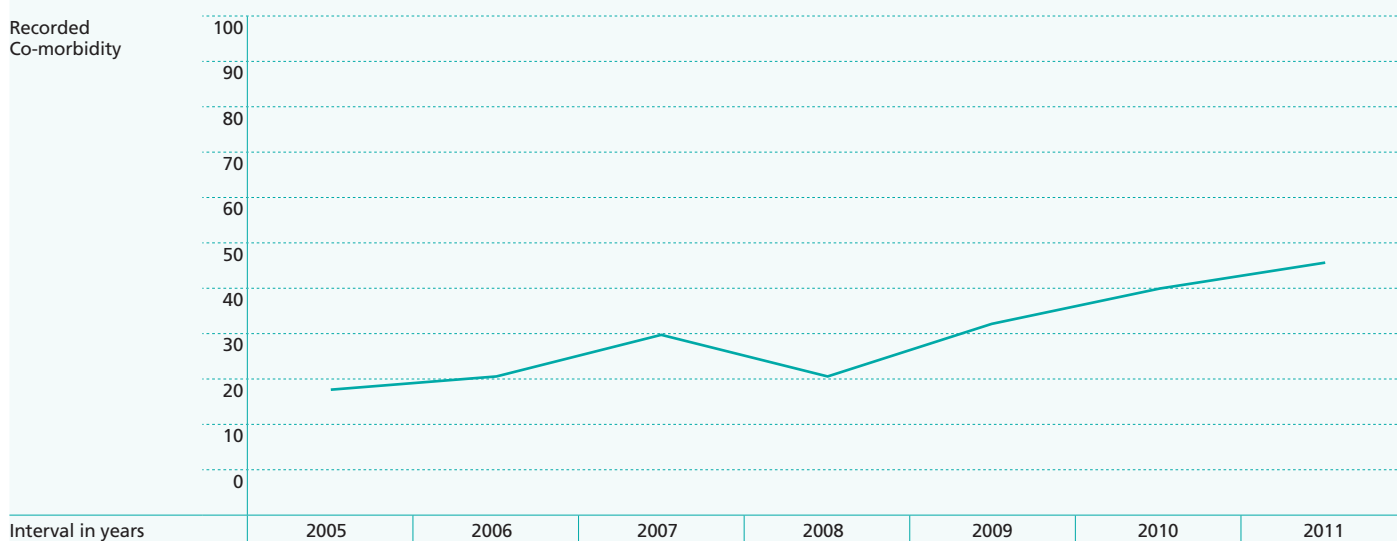


Figure 3.9.1b
England - submission of co-morbidity status by Annual Report year (per cent)



Pre-treatment staging is now consistently above 75 per cent overall but remains below this level in 13 out of 31 cancer networks, limiting the ability to make comparisons between them. The serial return by audit year can be found in [Appendix 5](#). The returns before 2008 are distorted by the small numbers of cases submitted in some cancer networks. Subsequent trends show a large number of cancer networks consistently making high levels of stage submission, but identify some, where further work is needed to enable this important casemix adjustment tool to be improved.

The audit will seek to publish a casemix adjustment model from cancer networks with a high level of submission with OCIU during 2012–2013.

3.9.2 The contributory role of the Head and Neck SSCRG

The joint DAHNO/NCIN Head and Neck Site Specific Group (HAN SSCRG) contains members representing head and neck professional bodies as well as containing members of charitable patient groups and patient liaison. The professional group representatives are present to both steer the future direction of the audit, as well as reflecting the views of the constituent organisations in future iterations of the audit and to raise areas for improvement within the audit. Colleagues are encouraged to liaise with these members to enhance the audit process. Details of the current representatives can be found in [Appendix 7](#).

3.9.3 Future opportunities for the audit

A number of exiting opportunities will become available to support the audit in the next three years. The first of these is the Radiotherapy Data Set (RTDS¹⁴ formerly RES), which is now a mandated return from all radiotherapy centres in England via automated feeds to the National Cancer Data Repository. From this, confirmation of treatment by radiotherapy will enhance the audit process. Within time the ability of using fractionation information, supplemented by DAHNO audit information, will be used to compare the outcomes of different regimens in selected patient populations.

From April 2012 chemotherapy episode data (Systemic Anti-Cancer Treatments SACT¹⁵) will commence collection and similarly be provided from chemotherapy prescribing systems, enhancing the ability to cross link chemoradiotherapy regimens with audit data.

The audit to date has accumulated over 1580 cases of major salivary gland cancer and during 2012-2013 a more detailed analysis of this rare cancer site will be made, confirming the concept of the audit as a high quality clinical database helping to understand variation in treatment patterns.

A number of professional groups have suggested that the audit progresses to collect information on treatment complications (e.g. flap failure rates). To enable this, uniformly accepted definitions are required to ensure consistency of recording as well as agreed standards that would be expected. Professional bodies need to lead on this development work, to which the audit can then respond.

4. Findings

4.1 Introduction

The following analysis was performed by the Cancer Registries on data extracted from the DAHNO application database. The data extract period includes patient records with a date of diagnosis between 1 November 2010 and 31 October 2011. Comparative information presented from previous reports uses published information and tables, and is not from cumulative or updated files unless stated.

4.2 Analysed data

6879 patient diagnoses have been included in the analysis, representing data on 6792 patients. This represents 6443 cases from England (93.3 per cent of the estimated case number) and 436 cases from Wales (97.3 per cent of the estimated case number). Overall submissions have increased by 6.5 per cent with 421 additional cases compared to the sixth Annual Report¹⁶ giving an overall 93.5 per cent of the case load estimate of 7354 in England and Wales. This report, therefore, represents a comprehensive overview of head and neck cancer care.

The calculation of estimates of cases is based upon historic Cancer Registry submissions, taking figures from the cancer registrations of the average case load from 2008 – 2010. The continued rise in recorded cases of oropharynx cancer is the greatest contribution to the significant increase in the case estimate used in the seventh Annual Report. Incidence information from the National Cancer Intelligence Network shows year-on-year, a steady increase in incidence of oropharynx cancers, which reflect a rise in cases caused by human papilloma virus. Estimates also rose in larynx, oral cavity and major salivary gland cancer.

The level of case ascertainment is lowest in salivary gland cancer at 65.3 per cent and whilst this may reflect differences in the patient pathway, (where definitive diagnosis frequently occurs following resective surgery rather than in the diagnostic workup) colleagues are encouraged to submit all cases.

A more detailed analysis by anatomic sub-site group and of the 87 patients with more than one tumour in the index period can be found in [Appendix 1](#).

4.2.1 Is data quality improving?

This year's data confirms a continued trend of a broader submission of information throughout the patients' journey.

For over 75 per cent of the total patients, there is a record of the actual treatment provided.

Of the total patients registered it would be expected that up to eight per cent of them would not have reached the point in their pathway where treatment would be agreed, and when this adjustment is applied between 75 and 83.7 per cent of patients have a treatment record.

As will be shown later in the report, there has been a doubling in the assurance provided in a number of aspects of multi professional care.

4.2.2 Which subsites of head and neck cancer have been reported?

6879 cases were presented for analysis, with a date of diagnosis between 1 November 2010 and 31 October 2011. These comprised 2035 (110.2 per cent of estimate) oropharyngeal cancers, 2028 (81.5 per cent) oral cavity cancers, 1776 (92.7 per cent) laryngeal cancers, 467 (118 per cent) hypopharyngeal cancers, 169 (82.2 per cent) nasopharyngeal cancers and 404 (65.3 per cent) major salivary gland cancers.

Overall cumulative submissions have now exceeded 28,000 from all seven annual reports.

A detailed breakdown of registrations by anatomic sub-site is included in [Appendix 2](#).

For the first time, the audit has reported that the number of oropharyngeal cancers has exceeded all the other major site groups. This reflects the shifting patterns of likely causation of head and neck cancer, where the traditional smoking and drinking causation has been supplanted by other factors such as Human Papilloma Virus (HPV). It is expected that the incidence of oropharynx cancer will continue to rise and the audit now contains data on over 6500 oropharynx cases.

The distribution of tumours across the anatomical subsites shows a consistent distribution, within 1-2 per cent of previous submissions.

4.2.3 Which head and neck cancer histological diagnoses have been reported?

Again a significant submission of histological diagnoses has been made. 84.3 per cent of total cases had histology recorded, an increase of seven per cent from last year's submission.

An overview of pathological diagnoses submitted is summarised below:-

	Undifferentiated carcinoma	Small cell carcinoma	Squamous carcinoma (NOS)	Keratinising squamous carcinoma	Verrucous carcinoma	Non-keratinising squamous carcinoma	Squamous cell Carcinoma variants*	Adeno-carcinoma NOS
	M8020/3	M8041/3	M8070/3	M8071/3	M8051/3	M8072/3	SCC VAR	M8140/3
Total	50	36	4943	264	22	27	28	76

	Adenoid cystic carcinoma	Muco-epidermoid carcinoma	Acinic cell carcinoma	Carcinoma ex pleomorphic adenoma	Other salivary variants**	Other	Blank	Total
	M8200/3	M8430/3	M8550/3	M8941/3	SAL VAR			
Total	77	83	38	13	47	92	1083	6879

***Squamous cell Carcinoma variants**

Adenoid squamous carcinoma **M8075/3**
Spindle cell squamous carcinoma NOS **M8074/3**

****Other salivary variants**

Salivary duct carcinoma **M8500/3**
Polymorphous low grade adenocarcinoma **M8525/3**
Adeno-squamous carcinoma **M8560/3**
Epithelial-myoepithelial carcinoma **M8562/3**
Basal cell adeno-carcinoma **M8147/3**

Fuller details of the above can be found in [Appendix 3](#).

Review of the SNOMED codes to describe the cancer histology shows a wide variety of cancer types. In the current data set, it seems likely that a few primary carcinomas were miscoded as metastases. In 53 cases M8070/6 squamous cell carcinoma, metastatic, NOS was used to describe the tumour. Pathologists and data entry staff are encouraged to ensure accurate coding to facilitate subsequent analysis.

As expected in larynx, oral cavity, oropharynx and hypopharynx squamous cell carcinoma not otherwise specified (M80703) predominates making up 76.3 per cent of cases at these sites and 85.3 per cent of histology recorded.

In nasopharynx, whilst squamous cell carcinoma not otherwise specified (NOS) was again the commonest pathology, non-keratinising tumours contributed 21.3 per cent of submitted histological diagnoses.

In oral cavity, a range of salivary pathologies were present with 22 cases of muco-epidermoid carcinoma, 24 cases of adenocarcinoma and 16 cases of adenoidcystic carcinoma.

Major salivary gland cancers showed a wide diversity of histological diagnoses including tumours arising from glandular tissue and a quarter of cases were squamous cell carcinoma NOS suggesting metastasis to the parotid from skin disease.

4.3 Pathways of Care

This year further selections of pathways have been studied in more detail and are presented below. A new report has examined the pathway in advanced laryngeal cancer.

4.3.1 The treatment of early stage laryngeal cancer

Early larynx cancer encompasses T1 N0 and T2 N0 squamous carcinoma. Radiotherapy, microlaryngeal endoscopic excision (with or without laser) and open surgery are all accepted treatments, though the latter is rarely performed in the UK. For early stage larynx cancer, many clinicians consider that from published results, radiotherapy and endoscopic surgery have similar survival and voice outcomes and that treatment choice has been driven by individual clinical preference, with variation across specialty discipline and geographic location, both within and between countries.

There is a significant difference in cost between the use of endoscopic laser surgery and radiotherapy, with laser surgery costing approximately half that of radiotherapy for early stage cases in a recent paper by Higgins¹⁷. The laser treatment was also considered more effective. If a recurrence developed then salvage costs were also potentially lower, as further laser surgery may be feasible. Although this paper reflects a Canadian experience the cost comparisons are probably relevant to health care delivery in the UK.

For more details on the different impacts of radiotherapy and microlaryngeal endoscopic resection please refer to the sixth Annual Report.

ENT-UK Head and Neck believe that all patients with early larynx cancer in the UK should be given the choice of radiotherapy or endoscopic surgery for suitable cancers.

For the seventh Annual Report an examination has been made of the use of microlaryngeal resection by cancer centre and cancer network across England in Wales.

- Of the increased number, 756 cases of early laryngeal cancer submitted, (631 in the sixth Annual Report) 501 had treatment recorded. Of these, radiotherapy was the predominant treatment (72.9 per cent) compared to endolaryngeal resection (27.1 per cent), showing a small increase in the proportion of patients undergoing surgery. (22.7 per cent having surgery in sixth Annual Report)
- A wide variation is again noted between providers and cancer networks in the distribution of cases recorded as receiving radiotherapy or endolaryngeal resection. In a number of cancer networks all early larynx cases are recorded as having received radiotherapy as the first definitive treatment:-
 - o Kent and Medway
 - o South West London
 - o South West Wales
 - o Surrey, West Sussex and Hants
 - o Sussex
- Across the three Welsh cancer networks only two patients are recorded as receiving endolaryngeal resection compared to 31 with radiotherapy. This equates to 4.3 per cent of patients undergoing endolaryngeal resection, compared to the 18.9 per cent in England. The reasons for the marked difference in practice between England and Wales are unclear.
- Whilst a small number of cancer networks had a similar or greater number treated by endolaryngeal surgery, only nine cancer networks and eight centres treated five or more patients by endolaryngeal resection.
- The audit cannot examine whether the cases submitted were suitable for either treatment modality.

Figure 4.3.1
Larynx cases where the first treatment was microlaryngeal resection or radiotherapy

Contact Network	Early larynx cases	Microlaryngeal/ Laser Cold Steel Removal	%	Radiotherapy	%	No treatment record
3 Counties	16	5	31.3	6	37.5	5
Anglia	41	1	2.4	24	58.5	23
Arden	8	1	12.5	4	50.0	3
Avon, Somerset and Wiltshire	13	2	15.4	6	46.2	5
Central South Coast	29	3	10.3	17	58.6	9
Dorset	17	3	17.6	9	52.9	5
East Midlands	56	16	28.6	22	39.3	18
Essex	25	1	4.0	11	44.0	13
Greater Manchester and Cheshire	45	2	4.4	19	42.2	24
Greater Midlands	38	2	5.3	25	65.8	11
Humber and Yorkshire Coast	14	11	78.6	1	7.1	2
Kent and Medway	18	0	0.0	13	72.2	5
Lancashire and South Cumbria	19	1	5.3	9	47.4	9
Merseyside and Cheshire	44	13	29.5	16	36.4	15
Mount Vernon	17	4	23.5	3	17.6	10
North East London	14	1	7.1	5	35.7	8
North London	20	4	20.0	3	15.0	13
North of England	71	20	28.2	28	39.4	23
North Trent	33	12	36.4	13	39.4	8
North West London	10	3	30.0	5	50.0	2
Pan Birmingham	22	5	22.7	11	50.0	6
Peninsula	21	5	23.8	11	52.4	5
South East London	9	1	11.1	7	77.8	1
South West London	23	0	0.0	21	91.3	2
Surrey West Sussex and Hants	8	0	0.0	4	50.0	4
Sussex	22	0	0.0	9	40.9	13
Thames Valley	16	1	6.3	11	68.8	4
Yorkshire	40	17	42.5	21	52.5	3
England	709	134	18.9	334	47.1	241
North Wales	14	1	7.1	8	57.1	5
South East Wales	22	1	4.5	16	72.7	5
South West Wales	11	0	0.0	7	63.6	4
Wales	47	2	4.3	31	66.0	14
England and Wales	756	136	18.0	365	48.3	255

MDTs should examine whether patients are given the choice of either treatment modality in appropriate circumstances, and that local facilities and training are in place to facilitate this.

The audit will re-examine this topic in future reports

- More information by cancer centre can be found [here](#).

4.3.2 Oral cavity – Cancer of tongue

The oral tongue is the most common oral sub site for squamous cell cancer to develop. Of the 2028 cases of oral cancer submitted this year 880 were identified in the oral tongue (43.4 per cent of oral cavity total) with a further 615 cases in the tongue base (defined anatomically in the oropharynx). Overall, cancer of the tongue as an organ accounted for 1495 cases, 21.7 per cent of the total number of tumours submitted.

This section relates to those 880 cases of cancer affecting the oral tongue (anterior 2/3). In recent years the management of these tumours has largely been surgical. There is anecdotal evidence that surgical techniques have been subtly changing with an increased use of laser excision, felt to be associated with better functional outcomes, which when combined with an operating microscope provides good control of margins. Where tumours involve the floor of mouth in addition to the tongue, a through and through excision may be carried out requiring reconstruction often with a free tissue transfer.

A further issue is how to manage the neck, with the incidence of occult metastasis felt to be around 20 per cent in clinically and radiographically negative necks, many teams prefer to carry out a prophylactic staging neck dissection. If a micro-vascular reconstruction is planned then this is easy to achieve, as there is a requirement to expose the neck blood vessels prior to anastomosis of the flap.

In those patients where micro-vascular reconstruction is not required the pros and cons of carrying out a neck dissection are more difficult to balance. A Medical Research Council (MRC) funded trial (SEND)¹⁸ is currently trying to identify whether it is possible to define criteria to select patients requiring elective neck dissection.

In the sixth Annual Report we attempted for the first time to analyse treatment trends in this area but the quality of the surgical data was insufficient to develop this fully. With good quality surgical data it should be possible for the National Head and Neck Cancer audit to inform this debate.

- Of the 880 cases of cancer affecting the oral tongue there are 515 records of surgery representing 58.5 per cent of cases. In addition 78 patients were indicated as having primary radiotherapy.

Figure 4.3.2
Oral cavity – Cancer of tongue

Stage distribution of oral tongue cancers having surgery.	Stage at diagnosis						Total
	T1	T2	T3	T4	TX	Not recorded	
Pathological T (below)							
pT1	131	30	3	0	2	10	176
pT2	17	70	3	3	1	6	100
pT3	0	5	8	2	0	1	16
pT4	1	2	3	17	0	2	25
TX	3	4	0	1	4	0	12
pT Not recorded	74	57	14	6	3	32	186
Oral Tongue total	226	168	31	29	10	51	515

Pathological N (below)	Stage at diagnosis						Total
	N0	N1	N2	N3	NX	Not recorded	
pN0	153	8	4	0	3	14	182
pN1	19	6	2	0	1	1	29
pN2	19	8	31	0	4	2	64
pN3	0	0	1	1	0	0	2
NX	32	1	0	0	10	5	48
pN Not recorded	113	20	19	1	7	30	190
Oral Tongue total	336	43	57	2	25	52	515

- The majority of oral tongue cancers were T1 tumours at diagnosis (43.9 per cent). After pathological staging 18 tumours were upstaged from T1 and 33 were down staged to T1 from a higher T category. 74 tumours did not have post-surgery staging recorded.
- Only 60 tumours with advanced stage T3 and T4 underwent primary surgical treatment. This may reflect the difficulty in functional reconstruction in this group of patients, which may influence patient choice and MDT decision making.
- 65.2 per cent of patients undergoing surgery were staged pre operatively as N0. 38 were subsequently upstaged. However there was no record of pN stage in 113 patients making further interpretation difficult. Only 2 patients with advanced N3 neck disease were recorded as undergoing neck surgery.
- Of those 422 patients having tongue resection there are 243 recorded neck dissections (57.6 per cent of the total) having a tongue procedure. Of the 238 neck dissections reported 66 were comprehensive, 13 were modified dissections and 164 were selective.
- 153 patients were staged pre operatively as N0 and underwent a neck dissection and were pathologically N0 after surgery. 38 patients who were staged as N0 pre operatively and underwent neck dissection were upstaged to pN1 or pN2. This represents an occult metastasis rate of at least 1:5 indicating that even with pre treatment radiological staging, assessment of the neck can be uncertain¹⁹.
- A review of surgical resection of tongue tumours demonstrates the following records:

Operative Procedure	Count of procedures
Excision Lesion of Tongue	191
Partial glossectomy	219
Total glossectomy	24
Total patients	422

- From the current data it has not been possible to make a clear assessment of laser procedures used to resect tongue lesions. There are recognised coding issues in OPCS with regard to the coding of laser excisions. There is currently no direct code for a laser excision lesion of tongue, but any excision code can be made a laser excision by a prefix code. This increases the complexity of trying to record operative data for audit purposes. To try and understand this problem further the National Cancer Intelligence Network, along with others, is currently looking at OPCS coding issues in an attempt to produce a set of codes more representative of current clinical practice.

- There were 71 records of a reconstructive procedure of which 28 were recorded as reconstruction with a flap, 42 with a radial forearm free flap, two with a pectoralis major flap and one with primary closure. Two patients having both a free and pedicled flap.
- 248 patients were recorded as having a Speech and Language Therapy (SALT) contact and 257 dietetic input.

4.3.3 Oropharynx cancer

A discussion on the change in management of oropharynx cancer was presented in the sixth Annual Report. In summary, management of oropharynx cancer has traditionally been by radiotherapy or by extensive surgery. More recent management strategies have utilised chemoradiotherapy and trans oral laser surgery to treat the disease.

Recent publications have identified a rising incidence of potentially HPV related oropharynx cancer and details of this trend in the UK can be found in a recent National Cancer Intelligence Network (NCIN) bulletin²⁰. Management of the HPV positive sub group of patients has led to treatment protocols being adjusted.

Continuing on the themes from the fifth and sixth Annual Reports, which looked at variations by cancer network of chemoradiotherapy rates for management of this disease, there was a suggestion that there was geographical variation in treatment provided and this has been further studied in more detail in this seventh Annual Report cohort. Of the 1476 patients with treatment records, over twice as many received non-surgical treatment (878 cases), compared to surgical treatment (433 cases). 165 patients received supportive or palliative treatments. The results of treatment by network are shown below in table 4.3.3. There was again a dichotomy between cancer networks with predominately non-surgical treatment e.g. Dorset, North of England, North Trent, Peninsula and Surrey, West Sussex and Hants compared to cancer networks where surgery predominated as first treatment e.g. Merseyside and Cheshire, Thames Valley and South East Wales.

In this seventh Annual Report we have analysed surgery occurring as first definitive treatment, prior to chemoradiotherapy and in patients where surgery followed chemoradiotherapy, to try and delineate patients having therapeutic neck dissection and those having either primary transoral or primary major resective surgery. There is currently a debate within the clinical community as to the exact role of transoral laser surgery for oropharyngeal cancer.

- While the presumptive incidence of HPV related cancers appears to be rising and that these patients are assumed to be younger population, the audit has not seen a reduction in the median age at presentation to date. (59 years)

- Stage distribution of oropharyngeal cancer:-

	T1	T2	T3	T4	TX	Not recorded	Total
N0	100	155	54	90	3	11	413
N+	233	397	203	379	22	37	1271
NX	14	5	4	4	5	1	33
Not recorded	6	1	4	6	2	299	318
Total	353	558	265	479	2	299	2035

- In 165 patients (8.2 per cent of the total) supportive or palliative treatments were initiated, reflecting that advanced stage oropharynx cancer can occur at presentation. 379 cases were staged as T4 N+ at diagnosis and 62 as M1.
- The Expert Panel noted that the on-going PET-NECK²¹ trial might have impacted on the distribution of treatments with centres proposing more chemoradiotherapy as well as instigating neck surgery prior to this.
- In the seventh cohort an analysis of surgical procedure demonstrates that in 248 patients a therapeutic neck dissection has been performed, with the most common type being comprehensive in 114 cases. With increasing evidence of the ability of selective neck dissection with adjuvant treatments to control neck disease it is surprising that comprehensive dissections (46 per cent) still seem to be so common.
- An examination of those patients undergoing major primary surgical procedures suggests that 29 patients had transoral resection, though the inadequacies of the OCPS coding system may mean that the frequency of these procedures were under-recorded if they had been entered as a tonsillectomy alone. A further 92 patients were recorded as having more extensive resection.

- Of procedures performed prior to chemoradiotherapy, the majority were comprehensive or selective neck dissections (in 61 patients). 26 patients underwent major surgery followed by adjuvant radiotherapy or chemoradiotherapy showing these now to be relatively uncommon initial procedures from the information submitted.
- Of patients undergoing surgery after chemoradiotherapy only 13 operations have been identified, which is likely to represent an under-reporting of secondary neck dissection.
- The audit will continue to examine this topic in future reports as well as looking at what factors influence the geographic variation noted. The audit looks forward to utilising Radiotherapy Episode Statistics (RES), which should be available for the eighth report. A working group from the HAN SSCRG is liaising with OPCS to seek a modification of their coding structure to better reflect current clinical practice.

Figure 4.3.3

Oropharynx cases by cancer network where the first treatment was surgery, radiotherapy or chemoradiotherapy

Contact Network	Total	Active treatment	Surgery	non surgery	Radiotherapy	Chemotherapy	Chemoradiotherapy	Support/Palliative	No record treatment
3 Counties	61	46	21	25	13	4	8	5	10
Anglia	120	78	9	69	35	9	25	10	32
Arden	33	25	10	15	2	4	9	2	6
Avon, Somerset and Wiltshire	73	44	17	27	10	5	12	7	22
Central South Coast	49	46	16	30	4	15	11	2	1
Dorset	41	35	6	29	8	3	18	1	5
East Midlands	111	79	34	45	17	11	17	11	21
Essex	56	26	10	16	9	4	3	6	24
Greater Manchester and Cheshire	116	32	11	21	9	12	0	3	81
Greater Midlands	72	49	11	38	14	18	6	10	13
Humber and Yorkshire Coast	37	31	13	18	5	3	10	2	4
Kent and Medway	39	25	5	20	12	1	7	0	14
Lancashire and South Cumbria	81	47	9	38	31	3	4	9	25
Merseyside and Cheshire	146	75	38	37	20	5	12	15	56
Mount Vernon	26	17	8	9	2	1	6	4	5
North East London	43	24	9	15	12	1	2	3	16
North London	75	29	9	20	8	5	7	9	37
North of England	138	95	18	77	29	10	38	21	22
North Trent	64	43	5	38	15	18	5	1	20
North West London	29	25	8	17	9	6	2	2	2
Pan Birmingham	73	37	13	24	14	7	3	5	31
Peninsula	84	62	21	41	22	9	10	10	12
South East London	32	32	7	25	7	18	0	0	0
South West London	42	39	7	32	9	1	22	0	3
Surrey West Sussex and Hants	67	40	6	34	10	19	5	4	23
Sussex	47	25	4	21	6	6	9	5	17
Thames Valley	55	31	18	13	8	2	3	0	24
Yorkshire	78	50	12	38	21	4	13	12	16
England	1888	1187	355	832	361	204	267	159	542
North Wales	33	26	9	17	0	1	16	3	4
South East Wales	76	67	48	19	5	3	11	3	6
South West Wales	38	31	21	10	2	5	3	0	7
Wales	147	124	78	46	7	9	30	6	17
England and Wales	2035	1311	433	878	368	213	297	165	559

4.3.4 Advanced laryngeal cancer

Advanced stage laryngeal cancer encompasses higher T category tumours (T3 and T4) and any larynx cancers with nodes or distant metastases (e.g. T2 N1). A range of treatment modalities are applicable²² with increasing prominence of non surgical chemoradiotherapy protocols, so called laryngeal preservation treatments i.e. that the larynx remains *in situ*. There is a lack of data on the longer term function of the larynx following this approach on both speech and swallowing function.

Partial laryngeal surgery, either by transoral laser microlaryngeal surgery or partial open surgery, is an alternate approach. Open surgery is more popular in continental Europe than in the United Kingdom with relatively small numbers of partial open procedures being performed.

The reasons for this are often attributed to patient factors (e.g. pulmonary function) and training exposure. Total laryngectomy may be applicable particularly if there is extensive cartilage invasion.

Unfortunately, a group of patients present with either extensive disease or significant co-morbidities that are not amenable to curative treatments, and will be managed by palliative treatments or supportive care.

In response to contributors to the audit requesting a study of the differences in practice across MDTs in the management of advanced laryngeal cancer, and in particular the treatment of T3 glottic cancer, the following analyses have been undertaken.

4.3.4.1 Advanced stage laryngeal cancer

Stage distribution of advanced glottic and supraglottic laryngeal cancer:-

N Group	T1	T2	T3	T4
N0			181	130
N+	17	63	77	111

- 579 cases were staged as advanced laryngeal cancer, with 53.7 per cent being node negative. 29 cases (5.0 per cent) were staged M1.
- 125 cases were coded as C32.9 larynx not otherwise specified, reflecting typically transglottic tumours, which extend across different laryngeal subsites.
- Of 579 patients, 448 had treatment recorded of which 380 underwent active treatment and 68 (15.2 per cent) had supportive or palliative care.
- In those actively treated, similar numbers had surgical (193 cases) or non-surgical treatment (187 cases). Of the non-surgical cases, radiotherapy predominated (55.6 per cent), whilst 46 chemoradiotherapy cases were recorded and a further 37 were recorded as having chemotherapy as first treatment. These figures show that in almost a quarter of non-surgical treatments, organ sparing chemoradiotherapy protocols were instigated, whilst in those stated as having chemotherapy alone it is not sure whether this is a data quality issue or represents neo adjuvant chemotherapy prior to other treatments. Detailed analysis by cancer network is difficult due to small numbers of cases being treated by these two modalities.

4.3.4.2 Advanced stage laryngeal cancer- T3 glottic cancer

- For this analysis both tumours that were T3 N0 and T3 N+ glottic cancers were included, totalling 162 cases.
- Of the subset of T3 cases with treatment recorded (124 cases), representing 76.5 per cent of the total T3 cases, 109 had active treatment and 15 cases (10.2 per cent) had palliative or supportive treatment.

- In active treatment non-surgical modalities (62 cases), were more common than surgery (47 cases) as first treatment, with 37 having radiotherapy and 14 chemoradiotherapy. In a further 11 patients, chemotherapy was recorded as a first treatment and it is possible that this was part of the chemoradiotherapy regimen. The revised DAHNO system has a specific treatment choice for chemoradiotherapy, which it is hoped will lead to improved data quality.
- Numbers by cancer network are too small to examine variation in treatment patterns and it would require collation over successive audit cohorts to progress this analysis further. Cumulative data will be reconsidered in the eighth Annual Report.
- From this year's data there is little evidence to support the notion that in T3 glottic carcinoma organ sparing chemoradiotherapy protocols are in widespread usage despite the anecdotal reporting of by clinical teams.

4.4 Where head and neck cancer care happens

4.4.1 Estimate of total number of patients with new head and neck primaries of the larynx, oral cavity, pharynx and major salivary glands in the index period by cancer network

Figure 4.4.1 includes an estimate of the expected number of cases of larynx, oral cavity, oropharynx, hypopharynx, nasopharynx and major salivary gland cancers per year in England and Wales. The estimate has been taken as the average number of new head and neck primaries that were registered by cancer registries in England and Wales for the period 2008 - 2010.

Cancer registry data provides an estimate of new cases, which allows for incident cases not attending at hospital. Although cancer networks serve a geographically defined population, they may also see cross border referrals.

Figure 4.4.1
Estimate of total number of patients with new head and neck primaries in the index period

Submitting Network	DAHNO Registrations	Cancer registry numbers	
		Estimate	%
3 Counties	210	176.3	119.1
Anglia	358	338.7	105.7
Arden	103	109.3	94.2
Avon, Somerset and Wiltshire	225	224.0	100.4
Central South Coast	225	251.3	89.5
Dorset	123	112.7	109.2
East Midlands	373	551.7	67.6
Essex	166	179.7	92.4
Greater Manchester and Cheshire	397	427.3	92.9
Greater Midlands	291	227.0	128.2
Humber and Yorkshire Coast	125	139.3	89.7
Kent and Medway	163	213.7	76.3
Lancashire and South Cumbria	232	224.0	103.6
Merseyside and Cheshire	424	370.3	114.5
Mount Vernon	122	135.7	89.9
North East London	155	197.0	78.7
North London	229	190.7	120.1
North of England	473	483.7	97.8
North Trent	245	275.7	88.9
North West London	109	212.0	51.4
Pan Birmingham	240	306.0	78.4
Peninsula	247	259.3	95.2
South East London	146	210.3	69.4
South West London	162	174.7	92.7
Surrey West Sussex and Hants	184	133.0	138.3
Sussex	172	165.0	104.2
Thames Valley	179	266.3	67.2
Yorkshire	365	351.7	103.8
England	6443	6906.3	93.3
North Wales	92	105.0	87.6
South East Wales	208	218.3	95.3
South West Wales	136	124.7	109.1
Wales	436	448.0	97.3
England and Wales	6879	7354.3	93.5

4.4.1.1 Number of patients registered with new head and neck primaries of the larynx, oral cavity, oropharynx, hypopharynx, nasopharynx and major salivary glands in the index period by cancer network.

Four cancer networks submitted less than 70 per cent of estimated cases, East Midlands, North West and South East London and Thames Valley

15 English cancer networks increased their case submission, with the greatest rise occurring in North London, North of England, and Pan Birmingham correcting, in the latter, a fall seen in the sixth report.

Of the remaining English cancer networks some had no change, however East Midlands, North East London and Thames Valley showed a significant fall in case submission.

All cancer networks in Wales increased their submission with the biggest rise in South East Wales.

Case numbers submitted across Wales rose significantly, from 74 per cent of estimate to 97 per cent.

A number of high performing cancer networks showed submissions significantly higher than estimate. The reasons for this remain unclear. Whilst cross boundary migration can elevate numbers of cases, in those with the highest levels above estimate adjacent cancer networks also show high levels.

Cases submitted by cancer network ranged from 103 in Arden (estimate 109 cases) to a high of 473 in North of England (estimate 484 cases).

4.4.2 Submission by cancer network and submitting provider of patients with new head and neck primaries in the index period.

A number of organisations submit data on behalf of other providers and these can be seen [here](#) in the routes of submission table.

All organisations are encouraged to submit data throughout the index year which both assists in ensuring inclusion but also can support improved data quality.

Number of cases submitted in the index period by provider organisation can be found [here](#).

The following NHS trust identified by cancer network returns to CASU (Clinical Audit Support Unit within the HSCIC) as providing head and neck cancer care, only contributed a single case in the index period.

Barking, Havering and Redbridge University Hospitals NHS Trust

This organisation has missed an opportunity to provide assurance to local head and neck cancer patients, provider boards and the upcoming Peer Review process of the quality of their services. Cancer networks, Medical Directors and Chief Executives should examine the causes of poor submission and seek to rectify these at the earliest opportunity.

4.4.2.1 Where cancer care happens – has it changed since the inception of the audit?

At the inception of the audit, 143 hospitals in England were identified as delivering an aspect of head and neck cancer care by surveying cancer networks. Since the first annual report a number of hospitals have merged with the formation of new NHS trusts, and the current report is by trust / local health board. The impact of the recommendations of Improving Outcomes Guidance in centralising treatment services is now becoming clearer and there has been a rationalisation of organisation providing major head and neck cancer surgery in some cancer networks.

In the 2011-2012 peer review round 54 UAT and UAT/Thyroid MDTs were identified in England.

The current number of providers identified by cancer networks as delivering an aspect of head and neck cancer care is 145, with 142 involved in the diagnostic pathway, 58 delivering major head and neck cancer surgery, 50 delivering radiotherapy and 58 delivering chemotherapy. [as at February 2012].

Access to details of centres and their activities click [here](#).

4.5 Are factors relevant to risk adjustment being recorded?

4.5.1 Where is the audit in recording the distribution of stage?

- Recording of staging has improved further with 81 per cent of registered cases having a T and N category recorded. The number of cases using both Tx and Nx has fallen with reduction in Nx by a third.

- In Wales 87 per cent of patients had stage recorded and in England the figure was 81 per cent.
- The 5583 cases with T and N recorded equates to 87.3 per cent of cases with a recorded care plan.

Figure 4.5.1.a Submitted diagnoses by year where T and N recorded

	04-05*	05-06	06-07	07-08	08-09	09-10	10-11
Diagnoses submitted	1042	1443	2035	4038	5597	6458	6879
Cases with T and N staging recorded	673	776	1550	2936	3942	5079	5583
Per cent of staging	64.8	53.8	76.2	72.7	70.4	79.0	81.2

*England only

Comprehensive staging data from all submitters is a key factor to support risk adjusted outcomes and it is encouraging that ever more teams are submitting this key information. Staging is a defining parameter, which facilitates a description of disease extent in a uniform manner, to allow valid comparison between cases.

Recording cancer site and accurate stage is a key medical responsibility, with best practice suggesting that this should be clearly documented and captured at the MDT. Staging remains a key influence on outcome. It is important that this improves to achieve 100 per cent of cases staged, to allow valid comparisons to be made. (BAHNO Standard)

Counts and percentage of cases with recorded pre-treatment T and N staging by contact trust reflect where care was delivered. Providers have been colour banded to represent completeness of staging information:

4.5.1.1 Submission by Cancer Network and Contact Provider of patients with new head and neck primaries in the index period, where cases had pre-treatment recorded T and N staging category

Key for Figure 4.5.1.1

- = 85 per cent or more T and N recorded
- = 61 per cent to 84 per cent T and N recorded
- ▲ = Less than or equal 60 per cent T and N recorded

Figure 4.5.1.1

Submission by cancer network and contact provider of patients with new head and neck primaries in the index period where cases had recorded T and N staging category

Code	Diagnosing Contact Organisation Name	Total	Both T and N recorded		Where both T and N recorded, category cannot be evaluated	
			N	N	%	TX
		N	N	%		
RTE	Gloucestershire Hospitals NHS Foundation Trust	105	94	90 ●	2	6
RWP	Worcestershire Acute Hospitals NHS Trust	85	62	73 ■	1	12
RLQ	Wye Valley NHS Trust	23	8	35 ▲	0	2
N29	3 Counties total	213	164	77 ■	3	20
RGT	Cambridge University Hospitals NHS Foundation Trust	115	102	89 ●	0	1
RQQ	Hinchingbrooke Health Care NHS Trust	1	1	100 ●	0	1
RGQ	Ipswich Hospital NHS Trust	11	8	73 ■	0	0
RGP	James Paget University Hospitals NHS Foundation Trust	11	10	91 ●	0	0
RM1	Norfolk and Norwich University Hospitals NHS Foundation Trust	169	162	96 ●	2	2
RGN	Peterborough and Stamford Hospitals NHS Foundation Trust	45	40	89 ●	0	2
RCX	The Queen Elizabeth Hospital, Kings Lynn NHS Foundation Trust	4	2	50 ▲	0	0
RGR	West Suffolk Hospitals NHS Trust	2	2	100 ●	0	0
N37	Anglia total	358	327	91 ●	2	6
RKB	University Hospitals Coventry and Warwickshire NHS Trust	103	74	72 ■	0	4
N12	Arden total	103	74	72 ■	0	4
RVJ	North Bristol NHS Trust	57	15	26 ▲	0	1
RD1	Royal United Hospital Bath NHS Trust	21	8	38 ▲	0	1
RBA	Taunton and Somerset NHS Foundation Trust	57	48	84 ■	0	5
RA7	University Hospitals Bristol NHS Foundation Trust	90	50	56 ▲	1	4
N28	Avon, Somerset and Wiltshire total	225	121	54 ▲	1	11
RHU	Portsmouth Hospitals NHS Trust	95	86	91 ●	0	0
RNZ	Salisbury NHS Foundation Trust	7	7	100 ●	0	0
RHM	University Hospital Southampton NHS Foundation Trust	107	100	93 ●	3	0
RYR16	Western Sussex Hospitals NHS Trust (St Richards)	16	11	69 ■	1	1
N31	Central South Coast total	225	204	91 ●	4	1
RBD	Dorset County Hospital NHS Foundation Trust	12	11	92 ●	0	0
RD3	Poole Hospital NHS Foundation Trust	107	107	100 ●	0	0
RDZ	The Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust	5	5	100 ●	0	0
N27	Dorset total	124	123	99 ●	0	0
RJF	Burton Hospitals NHS Foundation Trust	26	24	92 ●	0	0
RTG	Derby Hospitals NHS Foundation Trust	77	72	94 ●	0	2
RNQ	Kettering General Hospital NHS Foundation Trust	2	0	0 ▲	0	0
RNS	Northampton General Hospital NHS Trust	36	27	75 ■	1	6
RX1	Nottingham University Hospitals NHS Trust	148	140	95 ●	0	0
RWD	United Lincolnshire Hospitals NHS Trust	19	13	68 ■	1	1
RWE	University Hospitals of Leicester NHS Trust	62	56	90 ●	1	0
N39	East Midlands total	370	332	90 ●	3	9
RDD	Basildon and Thurrock University Hospitals NHS Foundation Trust	28	24	86 ●	0	0
RDE	Colchester Hospital University NHS Foundation Trust	35	34	97 ●	0	0
RQ8	Mid Essex Hospital Services NHS Trust	25	25	100 ●	0	1
RAJ	Southend University Hospital NHS Foundation Trust	78	76	97 ●	1	2
N38	Essex total	166	159	96 ●	1	3
RMC	Bolton NHS Foundation Trust	26	26	100 ●	4	2
RW3	Central Manchester University Hospitals NHS Foundation Trust	26	15	58 ▲	3	0
RJN	East Cheshire NHS Trust	9	0	0 ▲	0	0
RBT	Mid Cheshire Hospitals NHS Foundation Trust	32	24	75 ■	0	0

Figure 4.5.1.1 (continued)

Submission by cancer network and contact provider of patients with new head and neck primaries in the index period where cases had recorded T and N staging category

Code	Diagnosing Contact Organisation Name	Total	Both T and N recorded		Where both T and N recorded, category cannot be evaluated	
			N	N	%	TX
RW6	Pennine Acute Hospitals NHS Trust	137	115	84	0	1
RM3	Salford Royal NHS Foundation Trust	33	4	12	0	0
RWJ	Stockport NHS Foundation Trust	32	26	81	0	1
RMP	Tameside Hospital NHS Foundation Trust	37	3	8	0	0
RBV	The Christie NHS Foundation Trust	2	0	0	0	0
RM4	Trafford Healthcare NHS Trust	15	7	47	2	0
RM2	University Hospital of South Manchester NHS Foundation Trust	8	4	50	0	0
RRF	Wrightington Wigan and Leigh NHS Foundation Trust	35	28	80	0	1
N02	Greater Manchester and Cheshire total	392	252	64	9	5
RJD	Mid Staffordshire NHS Foundation Trust	11	6	55	0	1
RXW	Shrewsbury and Telford Hospital NHS Trust	74	71	96	0	2
RNA	The Dudley Group of Hospitals NHS Foundation Trust	14	13	93	0	1
RL4	The Royal Wolverhampton Hospitals NHS Trust	108	105	97	1	2
RJE	University Hospital of North Staffordshire NHS Trust	84	49	58	0	8
N35	Greater Midlands total	291	244	84	1	14
RWA	Hull and East Yorkshire Hospitals NHS Trust	92	84	91	0	0
RJL	Northern Lincolnshire and Goole Hospitals NHS Foundation Trust	33	20	61	0	1
RCC	Scarborough and North East Yorkshire Health Care NHS Trust	2	2	100	0	0
N07	Humber and Yorkshire Coast total	127	106	83	0	1
RVV	East Kent Hospitals University NHS Foundation Trust	56	7	13	0	0
RWF	Maidstone and Tunbridge Wells NHS Trust	67	65	97	0	0
RPA	Medway NHS Foundation Trust	19	18	95	0	1
RPC	Queen Victoria Hospital NHS Foundation Trust	26	23	88	2	2
N34	Kent and Medway total	168	113	67	2	3
RXL	Blackpool Teaching Hospitals NHS Foundation Trust	57	31	54	0	0
RXR	East Lancashire Hospitals NHS Trust	71	63	89	0	0
RXN	Lancashire Teaching Hospitals NHS Foundation Trust	72	52	72	1	10
RTX	University Hospitals of Morecambe Bay NHS Foundation Trust	31	15	48	0	1
N01	Lancashire and South Cumbria total	231	161	70	1	11
REM	Aintree University Hospitals NHS Foundation Trust	315	221	70	1	11
REN	Clatterbridge Centre For Oncology NHS Foundation Trust	1	0	0	0	0
RJR	Countess of Chester Hospital NHS Foundation Trust	11	4	36	0	0
RQ6	Royal Liverpool and Broadgreen University Hospitals NHS Trust	41	27	66	0	0
RVY	Southport and Ormskirk Hospital NHS Trust	10	5	50	0	0
RBN	St Helens and Knowsley Hospitals NHS Trust	12	9	75	0	1
RWW	Warrington and Halton Hospitals NHS Foundation Trust	6	6	100	0	0
RBL	Wirral University Teaching Hospital NHS Foundation Trust	34	28	82	0	0
N03	Merseyside and Cheshire total	430	300	70	1	12
RC1	Bedford Hospital NHS Trust	22	21	95	0	2
RWH	East and North Hertfordshire NHS Trust	50	34	68	0	0
RC9	Luton and Dunstable Hospital NHS Foundation Trust	29	29	100	0	0
N20	Mount Vernon total	101	84	83	0	2
RF4	Barking Havering and Redbridge University Hospitals NHS Trust	4	2	50	1	1
RNJ	Barts and The London NHS Trust	93	63	68	5	11
RQX	Homerton University Hospital NHS Foundation Trust	8	6	75	0	0
RGC	Whipps Cross University Hospital NHS Trust	50	37	74	1	0
N23	North East London total	155	108	70	7	12
RVL	Barnet and Chase Farm Hospitals NHS Trust	104	99	95	3	0
RAP	North Middlesex University Hospital NHS Trust	0	0	0	0	0
RQW	The Princess Alexandra Hospital NHS Trust	8	8	100	0	0
RRV	University College London Hospitals NHS Foundation Trust	117	100	85	1	1
N22	North London total	229	207	90	4	1
RLN	City Hospitals Sunderland NHS Foundation Trust	108	108	100	1	2
RXP	County Durham and Darlington NHS Foundation Trust	35	35	100	0	0

Figure 4.5.1.1 (continued)

Submission by cancer network and contact provider of patients with new head and neck primaries in the index period where cases had recorded T and N staging category

Code	Diagnosing Contact Organisation Name	Total	Both T and N recorded		Where both T and N recorded, category cannot be evaluated	
			N	N	%	TX
RNL	North Cumbria University Hospitals NHS Trust	58	54	93	0	0
RTF	Northumbria Healthcare NHS Foundation Trust	1	1	100	0	0
RTR	South Tees Hospital NHS Foundation Trust	119	116	97	3	2
RTD	The Newcastle Upon Tyne Hospitals NHS Foundation Trust	152	150	99	0	0
N36	North of England total	473	464	98	4	4
RFF	Barnsley Hospital NHS Foundation Trust	4	4	100	0	0
RFS	Chesterfield Royal Hospital NHS Foundation Trust	20	20	100	0	0
RP5	Doncaster and Bassetlaw Hospitals NHS Foundation Trust	48	47	98	0	0
RHQ	Sheffield Teaching Hospitals NHS Foundation Trust	138	137	99	1	1
RFR	The Rotherham NHS Foundation Trust	35	35	100	0	0
N08	North Trent total	245	243	99	1	1
RC3	Ealing Hospital NHS Trust	1	1	100	0	1
RYJ	Imperial College Healthcare NHS Trust	64	26	41	0	2
RV8	North West London Hospitals NHS Trust	55	42	76	1	1
N21	North West London total	120	69	58	1	4
RR1	Heart of England NHS Foundation Trust	58	33	57	0	0
RXK	Sandwell and West Birmingham Hospitals NHS Trust	48	37	77	4	6
RRK	University Hospital Birmingham NHS Foundation Trust	115	83	72	2	4
RBK	Walsall Hospitals NHS Trust	16	2	13	0	0
N11	Pan Birmingham total	237	155	65	6	10
RBZ	Northern Devon Healthcare NHS Trust	3	1	33	0	0
RK9	Plymouth Hospitals NHS Trust	71	37	52	0	4
REF	Royal Cornwall Hospitals NHS Trust	56	55	98	8	11
RH8	Royal Devon and Exeter NHS Foundation Trust	71	57	80	2	2
RA9	South Devon Healthcare NHS Foundation Trust	45	44	98	1	0
N26	Peninsula total	246	194	79	11	17
RJ1	Guys and St Thomas NHS Foundation Trust	146	84	58	1	1
N24	South East London total	146	84	58	1	1
RVR	Epsom and St Helier University Hospitals NHS Trust	4	3	75	0	1
RAX	Kingston Hospital NHS Trust	1	1	100	0	0
RJ7	St Georges Healthcare NHS Trust	137	132	96	0	7
RPY	The Royal Marsden NHS Foundation Trust	22	22	100	0	0
N25	South West London total	164	158	96	0	8
RTK	Ashford and St Peters Hospitals NHS Foundation Trust	8	2	25	0	1
RN5	Basingstoke and North Hampshire NHS Foundation Trust	7	3	43	0	0
RDU	Frimley Park Hospital NHS Foundation Trust	5	0	0	0	0
RA2	Royal Surrey County Hospital NHS Trust	146	112	77	1	4
RTP	Surrey and Sussex Healthcare NHS Trust	13	5	38	0	1
N32	Surrey West Sussex and Hants total	179	122	68	1	6
RXH	Brighton and Sussex University Hospitals NHS Trust	87	80	92	7	6
RXC	East Sussex Healthcare NHS Trust	55	50	91	2	1
RYR18	Western Sussex Hospitals NHS Trust (Worthing and Southlands)	28	23	82	2	1
N33	Sussex total	170	153	90	11	8
RN3	Great Western Hospitals NHS Foundation Trust	19	10	53	0	0
RD7	Heatherwood and Wexham Park Hospitals NHS Foundation Trust	21	13	62	1	0
RD8	Milton Keynes Hospital NHS Foundation Trust	18	1	6	0	0
RTH	Oxford University Hospitals NHS Trust	86	70	81	0	3
RHW	Royal Berkshire NHS Foundation Trust	48	44	92	1	1
N30	Thames Valley total	192	138	72	2	4
RAE	Bradford Teaching Hospitals NHS Foundation Trust	74	74	100	5	1
RWY	Calderdale and Huddersfield NHS Foundation Trust	27	27	100	2	0
RCD	Harrogate and District NHS Foundation Trust	5	4	80	0	0
RR8	Leeds Teaching Hospitals NHS Trust	85	80	94	0	0
RXF	Mid Yorkshire Hospitals NHS Trust	94	87	93	1	0

Figure 4.5.1.1 (continued)

Submission by cancer network and contact provider of patients with new head and neck primaries in the index period where cases had recorded T and N staging category

Code	Diagnosing Contact Organisation Name	Total	Both T and N recorded		Where both T and N recorded, category cannot be evaluated	
			N	%	TX	NX
RCB	York Teaching Hospital NHS Foundation Trust	78	72	92 ●	1	0
N06	Yorkshire total	363	344	95 ●	9	1
	England total	6443	5203	81	86	179
7A1	Betsi Cadwaladr University LHB	92	63	68 ■	1	1
NWW	North Wales total	92	63	68 ■	1	1
7A6	Aneurin Bevan LHB	70	67	96 ●	4	1
7A4	Cardiff and Vale University LHB	78	72	92 ●	4	1
7A5	Cwm Taf LHB	60	60	100 ●	3	1
SEW	South East Wales total	208	199	96 ●	11	3
7A3	Abertawe Bro Morgannwg University LHB	108	98	91 ●	1	11
7A2	Hywel Dda LHB	28	20	71 ■	0	2
SWW	South West Wales total	136	118	87 ●	1	13
	Wales total	436	380	87	13	17
	England and Wales total	6879	5583	81	99	196

In this year's report the colour banding requirements have been upgraded, with red representing a poor return with less than 60 per cent of submitted cases staged and green representing 85 per cent of cases or greater staged.

- In 11 English cancer networks 85 per cent or greater recording of TNM category was achieved with a number of providers obtaining 100 per cent. Two Welsh cancer networks achieved 85 per cent or higher and four providers exceeded this level.
- Three cancer networks had poor recording of staging:-
 - o Avon Somerset and Wiltshire
 - o North West London
 - o South East London
- In [Appendix 5](#) a summary of percentage of cases by cancer network with T and N staging is shown by each year of the audit. Clinicians have expressed strong views that they wish to see risk adjusted mortality but a high level of staging is fundamental to this process. All providers not achieving 100 per cent staging are encouraged to revisit their MDT processes and to make improvement in this area a high priority for the eighth Annual Report collection year now in progress.
- In this (and previous) annual reports it is noted that in 13 providers a significant number of cases are recorded as Tx or Nx (primary tumour and regional lymph nodes cannot be assessed), and all organisations are encouraged to reduce cases where Tx or Nx is used, to improve data quality. In the sixth Annual Report 467 cases were recorded Tx or Nx. This has decreased to 268 cases this year (4.2 per cent of those patients with a care plan) a significant improvement over last years 7.2 per cent.

From the improved staging it has been possible to categorise over 80 per cent of submissions into early or late stage disease. More detailed information by subsite of cases that are N+ve can be found [here](#). This acts as a useful source of information to support treatment planning and education²³.

Site	Early		Late		Unknown		Total
	N	%	N	%	N	%	
Larynx	774	43.6	643	36.2	359	20.2	1776
Oral Cavity	847	41.8	807	39.8	374	18.4	2028
Oropharynx	254	12.5	1438	70.7	343	16.9	2035
Hypopharynx	53	11.3	350	74.9	64	13.7	467
Nasopharynx	19	11.2	109	64.5	41	24.3	169
Major Salivary Glands	104	25.7	134	33.2	166	41.1	404
Total	2051	29.8	3481	50.6	1347	19.6	6879

Recording cancer site and accurate stage is a key medical responsibility, with best practice suggesting that this should be clearly documented and captured at the MDT. It is important that the use of Tx and Nx be avoided wherever possible. Staging remains a key influence on outcome. It is important that this improves to achieve 100 per cent of cases staged in any high quality database collection, to allow valid comparisons to be made.

Percentage of new cases of head and neck cancer discussed at MDT where recorded T, N, M staging category is evident. (CLE 2 National)

4.5.1.2 Post surgical staging

Figure 4.5.1.2a
Submission by cancer network of patients who underwent surgery where recording of pre-treatment and post resective pathological staging is identified in the index period

Network	All cases where pre-treatment T and N recorded	Cases where pre-treatment T and N recorded who had surgery	Pre-treatment T and N, who had surgery and nos and per cent where pathological T and N recorded	
	N	N	N	%
3 Counties total	164	79	15	19
Anglia total	327	56	6	10.7
Arden total	74	37	18	48.6
Avon, Somerset and Wiltshire total	121	42	26	61.9
Central South Coast total	204	76	21	27.6
Dorset total	123	42	40	95.2
East Midlands total	332	138	83	60.1
Essex total	159	29	17	58.6
Greater Manchester and Cheshire total	252	52	30	57.7
Greater Midlands total	244	72	45	62.5
Humber and Yorkshire Coast total	106	56	31	55.4
Kent and Medway total	113	31	28	90.3
Lancashire and South Cumbria total	161	24	16	66.7
Merseyside and Cheshire total	300	107	26	24.3
Mount Vernon total	84	28	1	3.6
North East London total	108	42	26	61.9
North London total	207	76	44	57.9
North of England total	464	164	127	77.4
North Trent total	243	110	93	84.5
North West London total	69	29	2	6.9
Pan Birmingham total	155	49	37	75.5
Peninsula total	194	72	45	62.5
South West London total	158	52	49	94.2
Surrey West Sussex and Hants total	122	39	38	97.4
Sussex total	153	38	24	63.2
Thames Valley total	138	69	68	98.6
Yorkshire total	344	159	78	49.1
England total	5203	1808	1034	57.2
North Wales total	63	26	9	34.6
South East Wales total	199	136	73	53.7
South West Wales total	118	71	42	59.2
Wales total	380	233	124	53.2
England and Wales total	5583	2041	1158	56.7

Six cancer networks (compared to three last year) are to be congratulated by having exceeded over 85 per cent of surgical cases having post-surgery T and N categories recorded:-

- Dorset
- Kent and Medway
- North Trent
- South West London
- Surrey West Sussex and Hants
- Thames Valley.

Whilst five cancer networks failed to achieve 20 per cent of T and N recording post-surgery:-

- 3 Counties
- Anglia
- Mount Vernon
- North West London
- South East London.

Provider level data is available [here](#).

MDTs should discuss pathological staging in all cases that have undergone surgery. This is both important to accurately define stage as well as identifying if adjunctive treatment is required. The MDT provides an ideal environment to capture this key information and recording of accurate stage is a key medical responsibility. Staging remains a key influence on outcome.(CLE local 3)

Looking in more detail at concordance between pre and post surgical staging by T and N category, there were only a small number of cases where the tumour was up or down staged for T category and a less than expected change in

N stage category. This suggests good interpretation of staging imaging prior to treatment.

Figure 4.5.1.2b

Comparison of stage at diagnosis and post surgery staging - larynx/oral cavity/oropharynx/hypopharynx and major salivary gland

Site	Post T (below)	Stage at diagnosis						Total
		T1	T2	T3	T4	TX	Not recorded	
Larynx	T1	66	7	1	0	0	2	76
	T2	5	13	3	0	0	2	23
	T3	0	2	30	8	0	2	42
	T4	1	1	13	56	0	5	76
	TX	3	1	0	1	1	0	6
	Not recorded	95	38	35	54	1	48	271
	Larynx total	170	62	82	119	2	59	494
Oral Cavity	T1	218	51	6	7	2	20	304
	T2	26	145	4	19	1	7	202
	T3	0	8	14	5	0	3	30
	T4	3	8	7	100	0	5	123
	TX	7	8	0	4	4	1	24
	Not recorded	131	124	21	53	6	77	412
	Oral Cavity total	385	344	52	188	13	113	1095
Oropharynx	T1	71	9	2	1	1	6	90
	T2	10	51	4	3	2	9	79
	T3	0	4	16	9	1	3	33
	T4	1	2	1	13	0	3	20
	TX	2	4	3	2	0	1	12
	Not recorded	64	69	23	35	7	29	227
	Oropharynx total	148	139	49	63	11	51	461
Hypopharynx	T1	6	1	0	0	0	0	7
	T2	1	1	1	1	0	0	4
	T3	0	1	4	4	0	0	9
	T4	1	2	5	21	0	2	31
	TX	0	2	3	1	0	1	7
	Not recorded	7	5	5	19	3	4	43
	Hypopharynx total	15	12	18	46	3	7	101
Nasopharynx	T1	1	0	0	0	0	0	1
	T2	0	2	0	0	0	0	2
	T3	0	0	2	0	0	0	2
	T4	0	0	0	3	0	0	3
	TX	0	0	0	1	0	0	1
	Not recorded	3	2	2	3	0	2	12
	Nasopharynx total	4	4	4	7	0	2	21
Major Salivary Glands	T1	19	2	0	0	2	5	28
	T2	0	18	2	0	2	4	26
	T3	0	3	4	3	3	6	19
	T4	0	0	0	9	0	4	13
	TX	1	2	0	2	0	2	7
	Not recorded	10	17	11	15	7	37	97
	Major Salivary Glands total	30	42	17	29	14	58	190
Total	T1	381	70	9	8	5	33	506
	T2	42	230	14	23	5	22	336
	T3	0	18	70	29	4	14	135
	T4	6	13	26	202	0	19	266
	TX	13	17	6	11	5	5	57
	Not recorded	310	255	97	179	24	197	1062
	Total	752	603	222	452	43	290	2362

Cases included: diagnoses with surgery recorded

4.5.2 Distribution of performance status at point of treatment decision

Figure 4.5.2

Larynx; Oral cavity; Oropharynx; Hypopharynx; Nasopharynx; Major Salivary Gland Distribution of performance status at point of treatment decision

Performance status	Percentage of 5353 recorded values
0. Able to carry out all normal activity without restriction	35.6
1. Restricted in physically strenuous activity	21.0
2. Able to walk and capable of all self care but unable to carry out any work	8.1
3. Capable of only limited self care	4.4
4. Completely disabled	0.9
5. Not recorded	30.1
Total	100.0

- Assessment of performance status continues its slow improvement (52.1 – 58.6 per cent, England only).
- 6391 patients had at least one care plan (a care plan represents the point in the patient pathway where a plan of treatment is proposed and thus an appropriate point to assess and record a patient's fitness).
- 5353 patients had a record of performance status. Excluding those with a value of five (not recorded), 3743 patients had a performance status assessment which is 54.4 per cent of the total registrations of all subsites. This equates to 58.6 per cent of patients with a recorded care plan (compared to 52.1 per cent in the sixth Annual Report).
- To facilitate risk adjustment further training on performance status and improved completeness is required. Detailed information by contact organisation reflecting both levels of submission and category of performance status by anatomic group can be found [here](#).
- The figures for the first seven annual reports (12568 patients with values from 0-4) suggest that the majority of patients (81.2 per cent) have a normal performance status (values 0-1). The apparent lack of sensitivity of performance status to separate by category different patient groups, questions whether performance status will provide adequate discrimination for risk adjustment. For more detail on the cumulative analysis click [here](#).

4.5.3 Presence or absence of significant co-morbidity at index point of diagnosis (ACE-27) - England only

- Co-morbidity values were not submitted from Wales, findings below are from England only.
- Of the 5955 English patients with at least one recorded careplan, 2712 had co-morbidity values recorded. This is 45.5 per cent of patients with a care plan.
- Co-morbidity recording has improved slowly in successive reports, rising a further six per cent this year.

Figure 4.5.3.1

Summary of recorded co-morbidity-all subsites

Grade	Percentage of 2712 recorded values
Grade 0 - No co-morbidity	47.2
Grade 1 - Mild decompensation	27.5
Grade 2 - Moderate decompensation	18.1
Grade 3 - Severe decompensation	7.2
Total	100

- Co-morbidity has been shown to have an important impact in assessing risk and to be an important predictor of outcome. All MDTs are encouraged to collect co-morbidity data. The ACE 27 proforma can be found in the appendix 2 of the fifth Annual Report.
- To facilitate risk adjustment further training on co-morbidity and improved completeness is required. Detailed information by contact organisation reflecting both levels of submission and category of performance status by anatomic group can be found [here](#).
- Cumulative analysis of comorbidity status now includes information on over 9000 patients. This shows that 75 per cent of head and neck cancer patients have no or mild decompensation. This dispels the view that the majority of head and neck patients have significant comorbid disease at diagnosis. However previous work has identified in the minority of patients with significant comorbidity that this has a major impact on outcome. Further detail can be found [here](#).
- The figures in this year's report demonstrate again that predominantly head and neck cancer patients show no or mild decompensation (75 per cent). However, the percentage of those with moderate or severe decompensation in larynx, oral cavity, oropharynx and hypopharynx varies from 23.4 per cent in oropharynx to 35.5 per cent in hypopharynx.
- Successive annual reports have shown variation in the severity of decompensation in hypopharyngeal cancer. This may reflect bias as a consequence of incomplete data and a small sample size.

4.5.4 Summary by cancer network of records containing staging, performance status and co-morbidity for larynx and oral cavity cancer.

- Of the 6443 submitted cases in England, around 5928 would have been expected to have reached the care plan stage of the patient pathway, only 2211 cases (37.3 per cent) cases contained the three values of staging, performance status and co-morbidity.
- Significant variation exists between cancer networks in their ability to provide this information. Six cancer networks achieved over 75 per cent submission with the highest being in South West London (97 per cent), the others being Central South Coast, Essex, North London, North of England and South West London. Whilst Arden, Avon Somerset and Wiltshire, Lancashire and South Cumbria, Merseyside and Cheshire South East London, and Surrey, Sussex and Hants had minimal or zero submission of all three items. Details by cancer network can be found [here](#).
- Additional information can also be found within the data quality report-[Appendix 7](#).

- It is disappointing that these cancer networks are largely at a level of completeness identical to that in the sixth Annual Report.
- These three items are core factors that facilitate accurate casemix adjustment, a key desirable output from the audit. The lack of submitted data makes it currently impractical to present casemix adjusted outcomes.
- The audit intends to explore separately whether information from the best submitting cancer networks can be used to develop a model for risk adjustment.

The influence of factors such as staging, co-morbidity and performance status can have a significant effect upon treatment outcomes. Therefore all MDTs are strongly encouraged to collect these data set items to facilitate future risk adjustment.

4.5.5 Deprivation analysis: Distribution of diagnosis, treatment and outcome by socio-economic Lower Super Output Areas, derived from the postcode in England and Wales.

4.5.5.1 Summary of registrations by deprivation in England and Wales

This information was extensively discussed in the sixth Annual Report and further work will be undertaken on the cumulative information and reported later in the year.

4.6 Assurance of multi-professional care received by patients in England

It is well recognised that non-medical professionals play important roles in the support and rehabilitation of cancer patients. This was emphasised in the Improving Outcomes Guidance, and BAHNO Standards, as well as being highlighted by lay membership of the audits and NCIN Clinical Reference Group.

It should be noted that Wales do not submit data on nursing and speech and language therapy as it is not collected in the CANISC system. All analyses in those sections therefore refer to cases submitted from England only. Data was received from Wales on dietetic assessment.

A number of common themes across speech and language, dietetics, and clinical nurse specialist support are evident:-

- Speech and language therapists, dieticians and clinical nurse specialists are to be congratulated for their efforts in participating in the audit process.

- The Expert Panel recognises that for these professionals there is frequently little administrative support and that it is on a personal basis that audit submission occurs. That a number of teams have contributed across all aspects of multi-professional care challenges others to match this commitment.
- From the submissions received, assurance of the quality of these important aspects of care can be made in a greater number of providers. It allows others to benchmark themselves against this data and will hopefully commit them to engage in the process to assure their local populations of the quality of services they provide.

4.6.1 Clinical nurse specialist (CNS) support along the head and neck cancer patient journey

The CNS acts as a source of both support and information for patients and their carers, both at initial consultation, when bad news of the diagnosis is broken and throughout the course of their treatment. Head and neck cancer patients often come from the lower socioeconomic strata of society with a concomitantly low level of social support and education. Their understanding of complex treatment options and their ability to cope during treatment is often poor²⁴. These patients often rely on the CNS to provide further explanations of the implications of their disease and the treatment options.

Interactions between the patient (and/or their carers) and the CNS are complex and multifactorial, including activities such as information giving, practical support, benefits advice, psychological support and help with decision making.

- The number of units with a head and neck clinical nurse specialist has grown since publication of Improving Outcomes Guidance in Head and Neck Cancers (NICE, 2004⁵). The document recommends that the CNS should play a constant role along the treatment journey, starting at diagnosis. Anecdotally, patients value very highly their contact with and support of their CNS. This is borne out by several patient surveys.
- In the 2010 National Cancer Patients Experience Survey¹⁰ 77 per cent of patients of the total head and neck responders (2196 of 2856 patients) confirmed that they had been given the name of a CNS during their care pathway. This is comparable with other non head and neck cancers reported in the survey.
- The CNS community decided that its focus for the seventh Annual Report would look into the breaking of bad news and CNS contact prior to commencement of treatment.

4.6.1.1 Clinical nurse specialist and the breaking of bad news

- 2374 patients (36.8 per cent) of all cases in England were confirmed as having a CNS present at the breaking of bad news. This represents a significant improvement compared to the 25.9 per cent seen in the sixth Annual Report.
- There was significant variation in the level of assurance provided by different cancer networks. 4 confirmed that over 70 per cent of patients had a CNS or designate present at the breaking of bad news, with the highest performing cancer networks achieving this in 90.3 per cent of cases. Details by cancer network can be found in the key indicators table in [Appendix 8](#) and by provider [here](#).
- Eight cancer networks were unable to provide assurance that even 20 per cent of patients were seen by a CNS at the breaking of bad news. These eight cancer networks have significant work to do to match the highest performing cancer networks.

Cancer networks where > 70 per cent of patients were seen by a CNS or designate at the breaking of bad news	Cancer networks where < 20 per cent of patients were seen by a CNS or designate at the breaking of bad news
Dorset	Anglia
Essex	Avon, Somerset and Wiltshire
North London	Kent and Medway
South West London	Lancashire and South Cumbria
	Merseyside and Cheshire
	South East London
	Surrey West Sussex and Hants
	Yorkshire

- Patient representatives feel it is imperative that a CNS is available from diagnosis to all patients with cancer. Addressing the issue of the lack of appropriate professional support should be seen as a priority requirement. For all patients and particularly those undergoing treatment (curative or palliative) the CNS plays an important role in supporting choice of treatment.

4.6.1.2 What evidence has been submitted of actual clinical nurse specialist provision prior to the commencement of first treatment?

- 2362 of the 4270 patients with treatment records were confirmed as seeing a CNS or designate prior to treatment. This represents a further increase when compared to the sixth Annual Report.
- 12 cancer networks provided assurance that over 70 per cent of patients were seen by a CNS, with the highest performing cancer networks achieving this in over 95 per cent of patients.

- Two cancer networks reported less than five per cent of patients being supported by a CNS in this key part of the pathway. Details by provider and cancer network can be found [here](#).

Cancer networks where > 70 per cent of patients were seen by a CNS or designate prior to treatment	Cancer networks where < 20 per cent of patients were seen by a CNS or designate prior to treatment
3 Counties	Humber and Yorkshire Coast
Arden	South East London
Dorset	
Essex	
Greater Manchester and Cheshire	
Greater Midlands	
Mount Vernon	
Pan Birmingham	
Peninsula	
Surrey West Sussex and Hants	
Sussex	
Thames Valley	

The date each new head and neck cancer patient first has contact with a clinical nurse specialist should be routinely recorded. (CLE National 4)

Patients diagnosed with head and neck cancer should be offered a consultation with the head and neck specialist nurse within one week of diagnosis. (Welsh Standard)

100 per cent of patients should be seen by a specialist head and neck liaison nurse (e.g. Macmillan), whose contact details should be provided to all patients at the earliest opportunity in all cases (BAHNO Standard)

The collection of information on care by clinical nurse specialists is an opportunity to give assurance to patients and commissioners that appropriate clinical nurse specialist support is being provided.

Active involvement of clinical nurse specialists in the audit process is to be encouraged and supported by all MDTs

4.6.4 Dental health assessment in head and neck cancer care²⁵

The Expert Panel members recognise that it is important to maintain good dental health throughout treatment for all anatomic subsites to reduce the incidence of post treatment complications such as osteoradionecrosis and accelerated dental decay. A restorative dentist is a core member of the head and neck team and should be involved in care prior to the first definitive treatment.

- A dental assessment is recorded in 12.6 per cent of the 6443 English patient registrations (812 patients), and 19.0 per cent of the 4270 of patients with treatment plans. This represents an improvement of nearly 50 per cent compared to the sixth Annual Report.
- The percentage of patients receiving dental assessment varies by anatomic sub site, from 26.6 per cent in oropharynx to 11.4 per cent in nasopharynx.
- Reporting in this area varied considerably by cancer network. The best performing achieved submission rates of nearly 50 per cent (North of England and South West London) and the worst, less than five per cent (Anglia, Kent and Medway, Merseyside and Cheshire, North London, North West London, South East London and Surrey, West Sussex and Hants).
- More detailed results by provider and cancer network can be found [here](#).
- It is encouraging that greater assurance of dental health assessment is now evident. The Expert Panel noted that there are apparent shortages of restorative dentists working with head and neck cancer patients. The importance of these specialists as core members of an MDT is recognised in Improving Outcomes Guidance and BAHNO Standards.

Dental health during and after treatment for head and neck cancer is a significant contributor to patient well being. MDTs are strongly encouraged to provide information to confirm that care is being provided. 100 per cent of patients should be assessed by a suitably qualified dental practitioner before and after their main treatment (BAHNO Standard)

Percentage of cases of head and neck cancer confirmed as having any pre-operative/pre-treatment dental assessment. (CLE Local 3)

4.6.5 Speech and language (SALT) input to head and neck cancer care

4.6.5.1 Pre-treatment speech and swallowing assessment

A pre-treatment speech and swallowing evaluation is now recommended in a number of international guidelines in the work up to treatment intervention for all patients with an anticipated functional change. It is a well established part of the laryngectomy care pathway.

- A pre-treatment speech and swallowing assessment is recorded for 22.6 per cent of registrations with treatment records (911 of 4031 patients). This has improved from the last report, where only ten per cent had an assessment.
- Pre-treatment speech and swallowing assessments were evenly distributed across the tumour sites of larynx, oral cavity, oropharynx, hypopharynx (ranging from 20.0-27.3 per cent). The nasopharynx group had the lowest number of treatment records (16.2 per cent).
- 42 trusts in England provided confirmation that at least five patients had been seen by a speech and language therapist. No information was available for Wales. The highest reporting organisation provided assurance for 86.6 per cent of patients.

The following seven organisations provided assurance that at least 60 per cent of patients having treatment received a pre-treatment speech and swallowing assessment. (These organisations submitted more than twenty cases with speech and swallowing information). Details by trust and cancer network can be found [here](#).

The Newcastle Upon Tyne Hospitals NHS Foundation Trust
University Hospitals Coventry and Warwickshire NHS Trust
Plymouth Hospitals NHS Trust
Sandwell and West Birmingham NHS Trust
Southend University Hospital NHS Foundation Trust
University Hospitals Bristol, NHS Foundation Trust
Worcestershire Acute Hospitals NHS Trust

The submission of this item needs to be encouraged by all MDTs to more accurately reflect the care being provided.

4.6.5.2 Laryngectomy patients

- For those undergoing laryngectomy the speech therapist plays an important role in supporting choice in the method of restored speech.
- The aim for this seventh collection year was for speech and language therapists (SALTs) to prioritise data collection on pre-operative SALT assessment.

- 179 patients were recorded as having a laryngectomy or laryngectomy and pharyngectomy as their first treatment. The number of laryngectomies still appears under recorded, however salvage laryngectomy after failed earlier treatments is not included in the audit, and this may influence this perception.
- A pre-treatment speech and language therapy assessment is recorded for 41 per cent (n=71) of the laryngectomy registrations. This is a marked improvement on the last report, which only recorded a figure of just 7 per cent.
- 42 entries recorded the primary communication method for laryngectomees. This is the first report where a substantial amount of data has been collected for this domain. Primary SVR was the most common method (76 per cent n=32), followed by electrolarynx (14 per cent n=6). Only one entry was recorded for each of the other methods: secondary SVR, mouthing, oesophageal voice and writing.
- There are a number of reasons for the present figures. In order to improve the accuracy of SALT contacts recorded on DAHNO, SALTs need to have adequate administrative support and access to the necessary IT. There should be good communication between the data manager and SALT with an agreed strategy for data inputting, and other data fields need to be completed, particularly for laryngectomy in order to extract SALT contacts. SALT contacts should be checked as part of data cleaning before submission. Somerset Cancer Registry (SCR) software is now used by a third of NHS trusts. It is important that collection within SCR is both compatible with the national audit requirements and transferrable to it.
- For the coming year a focus on recording pre-treatment SALT assessments in all head and neck cancer patients needs to be made, (not just those for laryngectomy patients) to better reflect SALT contribution to head and neck cancer patient care.

4.6.6 Dietetic input into the patient pathway

- Dietetic assessment is a key part of patient care and impacts on complications following treatment²⁶. It aims to encompass both pre-treatment nutritional status as well as types of nutritional support provided.
- While current numbers are not felt to be complete, the year on year increase in data entry is encouraging. Improvements have been seen in the volume on entries in most nutritional data items.
- 652 patients had both normal estimated body weight and observed body weight recorded, of these 122 (18.7 per cent) were considered to be below their normal estimated body weight by more than ten per cent at presentation. This varied by anatomic site (excluding major salivary gland) from 15.3 per cent in larynx to 29.4 per cent in hypopharynx.

- 2084 records from England contain a pre or post treatment dietetic assessment (32.3 per cent of all patients).
- In Wales, 197 (45.2 per cent) patients had contact with a dietician during the patient pathway.
- 45 trusts in England provided confirmation that at least five patients had a pre-treatment dietetic assessment. Details on the percentage of new cases of head and neck cancer by provider confirmed as having any pre-operative/pre-treatment dietetic assessment can be found [here](#).
- Of 4031 patients with a recorded first date of treatment, 932 had pre-treatment dietetic assessment (23.1 per cent a 9.4 per cent improvement compared to the sixth report). The highest reporting organisations provided assurance of pre-treatment assessment in over 80 per cent of patients.
- The following eight providers in England and three Local Health Boards in Wales who submitted more than five cases with dietetic information, provided assurance that at least 60 per cent of patients having treatment received a dietetic assessment:-
- The most frequent nutritional interventional procedure was gastrostomy (660 episodes), with percutaneous placement PEG (440) again being the commonest method for placement, with a rising proportion of radiologically placed RIG (190 compared to 41 in the sixth Annual Report), open (6) and laparoscopically placed (11) being less frequent. There were 84 episodes of naso-enteral tube placement.
- 978 patients (22.9 per cent of patients) excluding major salivary gland were recorded as having seen a dietician after completion of treatment, a rise of 13.3 per cent. By anatomic sub-site this was highest in oropharynx, which reflects the impact of major treatment in this group.

Dietetic support is important through all parts of the patient pathway, particularly in those undergoing any form of treatment where the morbidity of the treatment can be reduced by appropriate intervention. MDTs are encouraged to confirm the dietetic care provided. 100 per cent of patients should be seen by a dietician prior to the commencement of treatment (BAHNO Standard).

Fig 4.6.6
Organisations providing assurance of dietetic input to patient care

Organisations (who submitted more than 5 cases) providing assurance that more than 60 per cent of patients received dietetic assessment during their care pathway

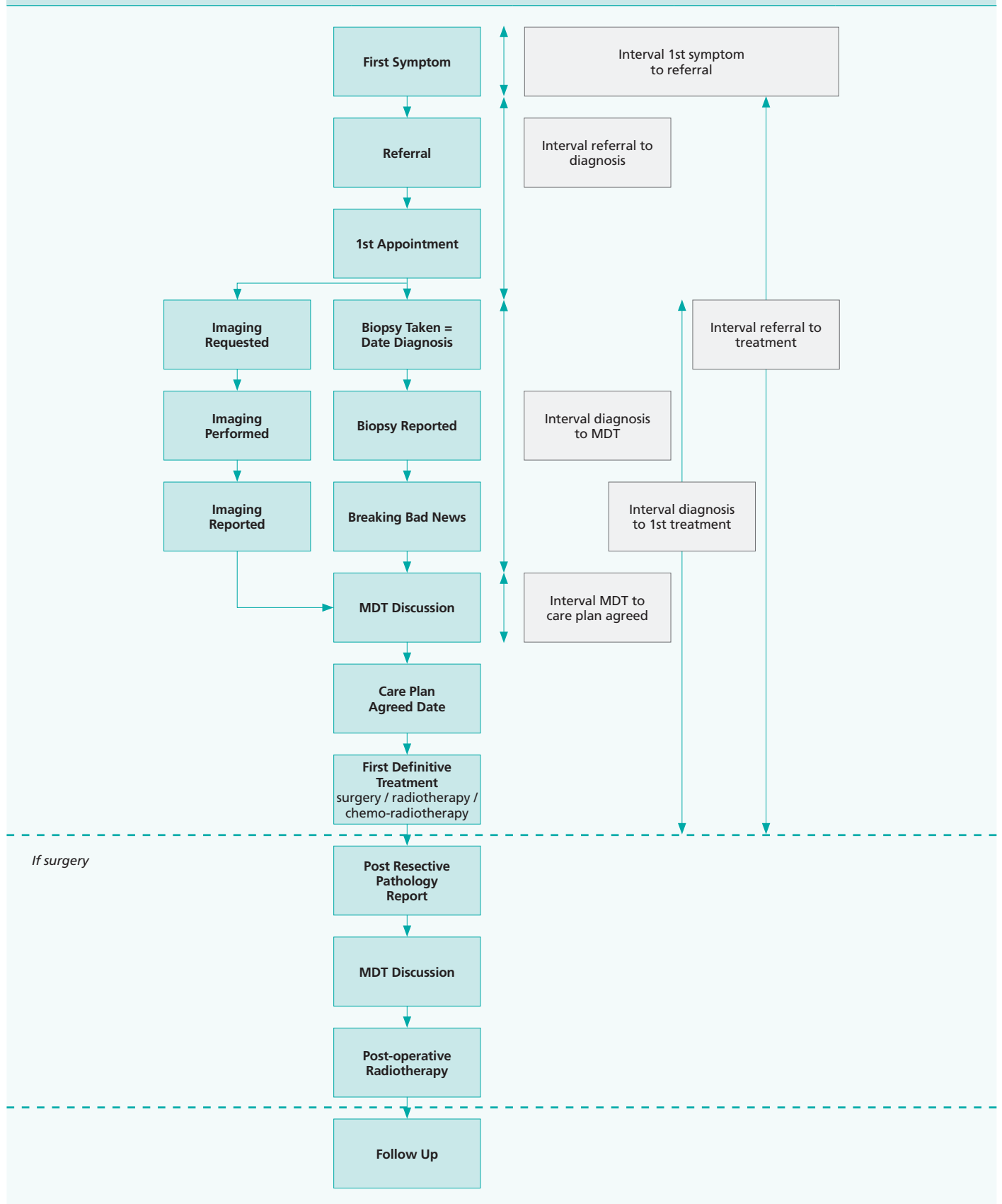
Worcestershire Acute Hospitals NHS Trust
Wye Valley NHS Trust
Mid Essex Hospital Services NHS Trust
Southend University Hospital NHS Foundation Trust
Plymouth Hospitals NHS Trust
Western Sussex Hospitals NHS Trust (Worthing and Southlands)
East Sussex Healthcare NHS Trust
Sandwell and West Birmingham NHS Trust
Aneurin Bevan LHB
Cardiff and Vale University LHB
Cwm Taf LHB

The date each new head and neck cancer patient first has contact with a dietician should be routinely recorded. (CLE National 5)

- 963 events in 653 patients (10.2 per cent of patients with care plans) were recorded for patients having artificial nutritional support. This represents a significant rise with over 400 more events recorded compared to the sixth Annual Report. It is encouraging that this information is starting to flow, allowing a better understanding of nutritional support. MDTs are encouraged to further pursue this.

4.7 Receiving timely care

Figure 4.7
Is care getting more timely? The patient journey in head and neck cancer analysed data



4.7.1 Interval first symptom to referral

- The pathway of care for head and neck cancer includes the interval from the patient first being aware of symptoms to referral to a specialist team. By definition the period of patient symptoms may be varied and poorly recalled by some.
- The median time from first symptom to referral in England recorded in 1900 patients is 58 days. The figures for oropharynx, oral cavity hypopharynx are similar to the sixth Annual Report, whilst slightly longer, a reduction in the interval in larynx and nasopharynx has occurred. The latter could represent greater awareness of symptoms but is more likely to represent partial data capture. In major salivary gland cancer the longest median is evident at 68 days.
- Information from the 2010 National Cancer Patients Experience Survey¹¹ showed that 25 per cent of patients saw a GP more than twice before being referred to a hospital doctor. Head and neck cancer lies in the mid range across all cancers for this aspect. The audit has previously reported on the need to increase awareness in General Dental Practitioners of the two week wait pathway and of increasing its use. This year, of 283 oral cavity cancers whose pathway started from a dental practitioner, 37.5 per cent came via the urgent two week wait pathway, whilst in 48 oropharynx cancers 45.8 per cent came as two week wait referrals.
- Early cancer diagnosis is a key aspect in Improving Outcomes: a strategy for cancer and is supported by the National Awareness and Early Diagnosis Initiative (NAEDI)²⁷. The overall goal of NAEDI is to promote earlier diagnosis of cancer, and through doing so, improve cancer survival rates and to reduce cancer mortality.

4.7.2 Interval referral to first appointment

- The interval from referral to diagnosis provides a key indicator of internal management of referrals in providers and may be indicative of processes around patient distribution to appropriately experienced teams.
- All patients have similar medians for access suggesting that provider internal processes are working.
- The previously noted lengthening of the medians by one day in the sixth Annual Report has not progressed with similar intervals to last year.

4.7.3 Interval from biopsy to reporting

- There are several methods of obtaining a biopsy in order to reach a diagnosis. The most appropriate method will be determined by the clinical presentation. This figure is a combination of data from cytological and histological specimens. These specimen types have different implications in terms of the complexity of interpretation and the types of diagnoses that can be made. Organisations should consider this complexity when reviewing pathways.

- An improvement in submission occurred this year with 2969 records submitted, against 2588 last year. This may have been helped by this being a Clinical Line of Enquiry in Peer Review.
- There was a further small improvement in percentage terms of the number of biopsies reported in under ten days, increasing from 83.8 per cent last year to 86.9 per cent this year. (England 87.2 per cent and Wales 84.7 per cent).
- 21 providers had more than five cases where the interval from biopsy to reporting was more than ten days.
- A further analysis looked at those cases with an interval from biopsy to reporting of over 21 days. 178 cases (6 per cent) were reported with an interval of 21 days or more. Some of these cases may reflect patients on a routine pathway where cancer was not clinically suspected and pathology reporting can take up to six weeks, though others may reflect significant resource constraints or poor data quality. Two organisations had significant case numbers with long intervals, North Cumbria University Hospitals NHS Trust and University Hospital Birmingham NHS Foundation Trust.
- For data quality the following nine cancer networks achieved more than 75 per cent of cases with the interval recorded:-
 - Dorset
 - East Midlands
 - Humber and Yorkshire Coast
 - North London
 - North of England
 - North Trent
 - South East Wales
 - South West London
 - South West Wales
- The following five cancer networks achieved only minimal returns:-
 - Anglia
 - Avon, Somerset and Wiltshire
 - Mount Vernon
 - South East London
 - Surrey, West Sussex and Hants
- **Figure 4.7.3** demonstrates providers who submitted more than five cases and is colour coded to show quartiles as follows: red displays those trusts with greater than or equal to 50 per cent of cases which have taken more than ten days, amber displays those trusts with less than 50 per cent but greater than or equal to 25 per cent which have taken more than ten days, finally green displays those trusts where less than 25 per cent of cases have taken more than ten days.

Key for Figure 4.7.3

- < 25 per cent taking > ten days
- < 50 per cent and > or = 25 per cent taking > ten days
- ▲ > or = 50 per cent taking > ten days

Figure 4.7.3
Interval from biopsy to reporting

Diagnosing Contact Organisation Name	<=10 days		>10 days		
	N	%	N	%	
Worcestershire Acute Hospitals NHS Trust	14	93.3	1	6.7	●
Wye Valley NHS Trust	14	87.5	2	12.5	●
3 Counties total	29	90.6	3	9.4	●
University Hospitals Coventry and Warwickshire NHS Trust	40	93	3	7	●
Arden total	40	93	3	7	●
Avon, Somerset and Wiltshire total	5	50	5	50	▲
University Hospital Southampton NHS Foundation Trust	9	90	1	10	●
Western Sussex Hospitals NHS Trust (St Richards)	10	83.3	2	16.7	●
Central South Coast total	23	88.5	3	11.5	●
Dorset County Hospital NHS Foundation Trust	9	81.8	2	18.2	●
Poole Hospital NHS Foundation Trust	88	86.3	14	13.7	●
Dorset total	99	83.9	19	16.1	●
Burton Hospitals NHS Foundation Trust	25	100	0	0	●
Derby Hospitals NHS Foundation Trust	70	94.6	4	5.4	●
Northampton General Hospital NHS Trust	21	100	0	0	●
Nottingham University Hospitals NHS Trust	86	86.9	13	13.1	●
United Lincolnshire Hospitals NHS Trust	10	71.4	4	28.6	■
University Hospitals of Leicester NHS Trust	47	95.9	2	4.1	●
East Midlands total	259	91.8	23	8.2	●
Colchester Hospital University NHS Foundation Trust	30	93.8	2	6.3	●
Southend University Hospital NHS Foundation Trust	17	89.5	2	10.5	●
Essex total	51	92.7	4	7.3	●
Bolton NHS Foundation Trust	19	82.6	4	17.4	●
Central Manchester University Hospitals NHS Foundation Trust	19	76	6	24	●
Pennine Acute Hospitals NHS Trust	27	100	0	0	●
Salford Royal NHS Foundation Trust	26	96.3	1	3.7	●
Tameside Hospital NHS Foundation Trust	28	90.3	3	9.7	●
Trafford Healthcare NHS Trust	6	85.7	1	14.3	●
Greater Manchester and Cheshire total	131	89.7	15	10.3	●
The Dudley Group of Hospitals NHS Foundation Trust	12	92.3	1	7.7	●
The Royal Wolverhampton Hospitals NHS Trust	74	81.3	17	18.7	●
University Hospital of North Staffordshire NHS Trust	6	100	0	0	●
Greater Midlands total	92	83.6	18	16.4	●
Hull and East Yorkshire Hospitals NHS Trust	66	80.5	16	19.5	●
Northern Lincolnshire and Goole Hospitals NHS Foundation Trust	30	93.8	2	6.3	●
Humber and Yorkshire Coast total	97	84.3	18	15.7	●
East Kent Hospitals University NHS Foundation Trust	3	42.9	4	57.1	▲
Queen Victoria Hospital NHS Foundation Trust	13	81.3	3	18.8	●
Kent and Medway total	19	67.9	9	32.1	■
Lancashire Teaching Hospitals NHS Foundation Trust	6	60	4	40	■
Lancashire and South Cumbria total	12	60	8	40	■
Aintree University Hospitals NHS Foundation Trust	25	89.3	3	10.7	●
Wirral University Teaching Hospital NHS Foundation Trust	14	87.5	2	12.5	●
Merseyside and Cheshire total	47	88.7	6	11.3	●
Whipps Cross University Hospital NHS Trust	24	100	0	0	●
North East London total	27	90	3	10	●
Barnet and Chase Farm Hospitals NHS Trust	78	90.7	8	9.3	●
University College London Hospitals NHS Foundation Trust	87	94.6	5	5.4	●
North London total	165	92.2	14	7.8	●
City Hospitals Sunderland NHS Foundation Trust	65	95.6	3	4.4	●

Figure 4.7.3 (continued)

Interval from biopsy to reporting

Diagnosing Contact Organisation Name	<=10 days		>10 days		
	N	%	N	%	
County Durham and Darlington NHS Foundation Trust	31	88.6	4	11.4	●
North Cumbria University Hospitals NHS Trust	1	3.8	25	96.2	▲
South Tees Hospital NHS Foundation Trust	104	90.4	11	9.6	●
The Newcastle Upon Tyne Hospitals NHS Foundation Trust	139	93.9	9	6.1	●
North of England total	340	86.7	52	13.3	●
Chesterfield Royal Hospital NHS Foundation Trust	15	83.3	3	16.7	●
Doncaster and Bassetlaw Hospitals NHS Foundation Trust	10	90.9	1	9.1	●
Sheffield Teaching Hospitals NHS Foundation Trust	123	93.9	8	6.1	●
The Rotherham NHS Foundation Trust	22	71	9	29	■
North Trent total	174	89.2	21	10.8	●
Imperial College Healthcare NHS Trust	24	85.7	4	14.3	●
North West London Hospitals NHS Trust	3	42.9	4	57.1	▲
North West London total	27	77.1	8	22.9	●
Heart of England NHS Foundation Trust	23	67.6	11	32.4	■
Sandwell and West Birmingham Hospitals NHS Trust	31	96.9	1	3.1	●
University Hospital Birmingham NHS Foundation Trust	18	51.4	17	48.6	■
Pan Birmingham total	73	71.6	29	28.4	■
Royal Cornwall Hospitals NHS Trust	35	89.7	4	10.3	●
Royal Devon and Exeter NHS Foundation Trust	33	86.8	5	13.2	●
South Devon Healthcare NHS Foundation Trust	36	85.7	6	14.3	●
Peninsula total	105	86.8	16	13.2	●
Guys and St Thomas NHS Foundation Trust	2	33.3	4	66.7	▲
South East London total	2	33.3	4	66.7	▲
St Georges Healthcare NHS Trust	125	92.6	10	7.4	●
The Royal Marsden NHS Foundation Trust	16	76.2	5	23.8	●
South West London total	143	89.9	16	10.1	●
Surrey West Sussex and Hants total	5	62.5	3	37.5	■
Brighton and Sussex University Hospitals NHS Trust	10	76.9	3	23.1	●
East Sussex Healthcare NHS Trust	14	93.3	1	6.7	●
Sussex total	27	87.1	4	12.9	●
Royal Berkshire NHS Foundation Trust	42	93.3	3	6.7	●
Thames Valley total	47	92.2	4	7.8	●
Bradford Teaching Hospitals NHS Foundation Trust	56	83.6	11	16.4	●
Calderdale and Huddersfield NHS Foundation Trust	21	87.5	3	12.5	●
Mid Yorkshire Hospitals NHS Trust	80	88.9	10	11.1	●
York Teaching Hospital NHS Foundation Trust	59	96.7	2	3.3	●
Yorkshire total	219	89.4	26	10.6	●
England total (including where n = /< 5)	2268	87.2	334	12.8	●
Betsi Cadwaladr University LHB	45	88.2	6	11.8	●
North Wales total	45	88.2	6	11.8	●
Aneurin Bevan LHB	64	95.5	3	4.5	●
Cardiff & Vale University LHB	53	74.6	18	25.4	■
Cwm Taf LHB	46	79.3	12	20.7	●
South East Wales total	163	83.2	33	16.8	●
Abertawe Bro Morgannwg University LHB	85	87.6	12	12.4	●
Hywel Dda LHB	18	78.3	5	21.7	●
South West Wales total	103	85.8	17	14.2	●
Wales total	311	84.7	56	15.3	●
England and Wales total	2579	86.9	390	13.1	●

Details by Provider on the interval from biopsy to reporting of over 21 days can be found [here](#).

Imaging of the chest in 95 per cent of cases prior to treatment planning (BAHNO Standard)

Timely submission and reporting of biopsy specimens are key contributors to the diagnostic patient pathway. Percentage of cases of head and neck cancer where the interval from biopsy to reporting is less than ten days should be measured (CLE National 3)

It is recognised that in many providers pathology services are under strain, however providers and cancer networks should be encouraged to look at innovative methods for improving the time to reporting, as it can be a key enabler to facilitate early treatment, and should seek to demonstrate improvements by increasing the volume of submission.

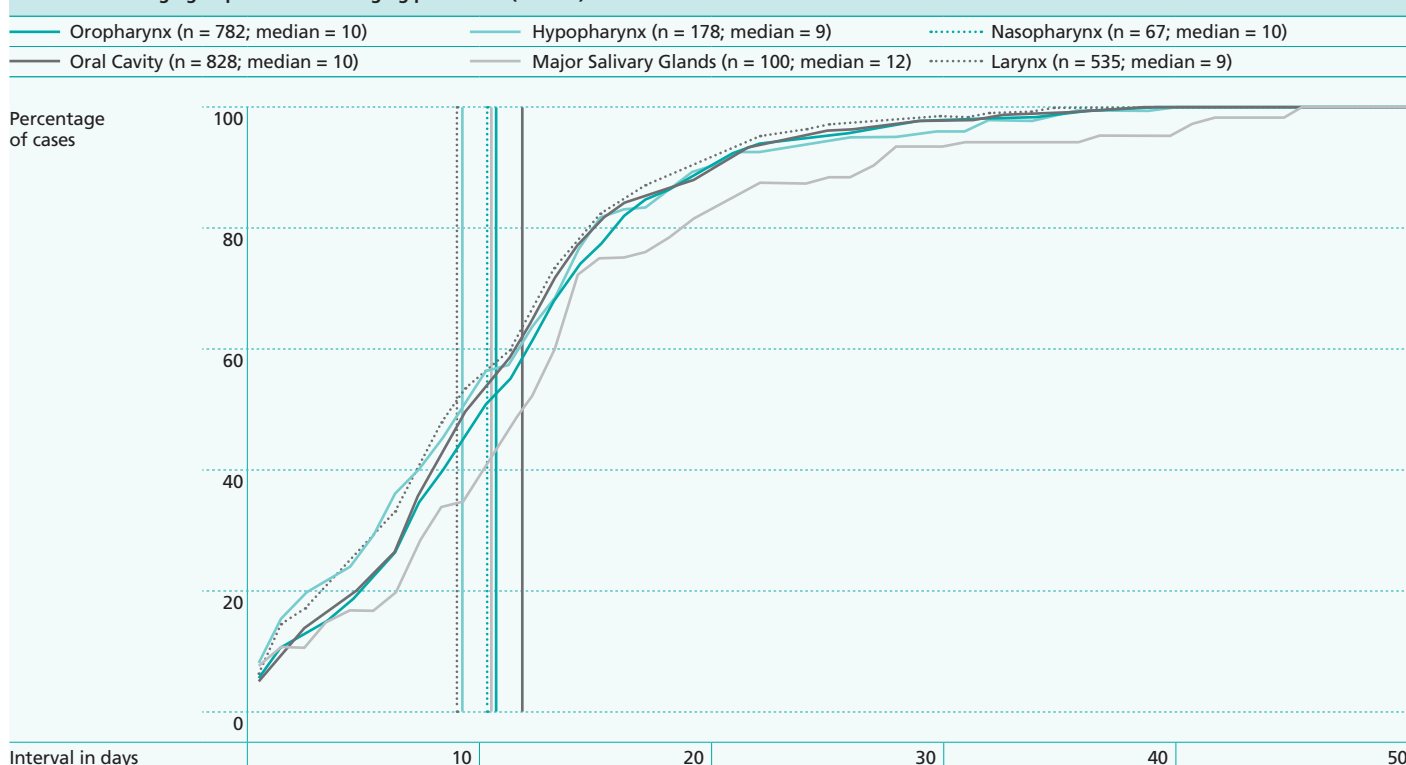
4.7.4 Imaging

4.7.4.1 Imaging of the chest

- Whilst the incidence of synchronous malignancies and metastatic chest disease may be low, their detection prior to the production of a care plan is an imperative and teams should be encouraged to identify that chest imaging has been carried out and reported prior to the agreement of a care plan.

- This year there has been a significant improvement in the data quality of records containing evidence of chest imaging.
- 4589 patients (66.7 per cent of all diagnoses) are evidenced as having had chest imaging by chest X-ray or CT at some point in the patient pathway. The highest performing cancer networks in England and Wales provided evidence in over 90 per cent of cases. Kent and Medway only provided evidence in 12.5 per cent of cases.
- 3760 cases representing 58.8 per cent of the 6391 cases with careplans had evidence of chest imaging being carried out prior to the MDT. Reporting of imaging by the time of the MDT discussion is a key requirement in the assurance pathway for quality care; a chart showing the percentage of providers achieving this standard can be found [here](#).
- The interval from imaging request to date imaging performed represents another key time-limiting step in the work up of a patient with head and neck cancer. For CT and MRI in 2494 cases the median interval is ten days, which is a significantly longer interval than found in the last two years (eight days respectively). This suggests increased pressures on imaging departments.

Figure 4.7.4.1
Interval from imaging request to date imaging performed (CT/MRI)



4.7.4.2 PET Scanning

- Positron Emission Scanning (PET)²⁸ in head and neck cancer is a relatively new technique in the United Kingdom. It uses a combination of CT scanning and injection of a radio-isotope (5 FDG), which is taken up by rapidly metabolising cells such as cancer cells. The technique may allow better delineation of disease and has particular relevance in the assessment of otherwise occult disease either ahead of major treatment or during follow up.
- This year a total of 82 organisations in England and Wales submitted records on PET scanning for their patients with a total of 431 scans being carried out, an increase of 27.9 per cent. The largest anatomical group by far receiving PET scans was in oropharynx (56.4 per cent of total PET scans).

This is most likely to be related to the type of disease, as many patients with oropharyngeal cancer present with neck disease and an occult primary, which a PET scan may reveal.

- It is reassuring that providers continue to be able to access PET CT when required, however it is noted that of the events reported, there is a significant variation by cancer network in the use of this imaging modality. This may reflect data quality but alternatively may reflect clinical variation of the value attributed to this modality by different MDTs.

Figure 4.7.4.2
Table showing PET scans by anatomical sub site

Larynx	Oral Cavity	Oropharynx	Hypopharynx	Nasopharynx	Major Salivary Glands	Total
53	53	243	38	23	21	430

4.7.5 The head and neck multidisciplinary team (MDT) – are all patients discussed?

- It is both a BAHNO standard and an Improving Outcomes Guidance standard that all patients are discussed in an MDT.
- In this report, it is very pleasing to report that overall 90.6 per cent of all patients, representing 97.5 per cent of those with a cancer care plan, were confirmed as having been discussed at an MDT meeting, with 2.3 per cent recording that they were not discussed (2.5 per cent of those with a cancer care plan).
- This represents an improvement on the 85.7 per cent of patients who were recorded as being discussed in a MDT in the sixth report with 5.6 per cent recorded that they were not.
- This year in 7.1 per cent of all cases (490 patients) there was no record of MDT discussion, and this would be compatible with the expected number who may not have reached the point of MDT discussion in their pathways. However, the distribution of cases recorded as unknown varies between cancer networks, with Greater Manchester and Cheshire, for example, having over 26 per cent of cases defined as unknown. A number of MDTs have provided feedback of where the transfer of patients across providers within a cancer network to a centralised MDT has led to variation in ownership of data entry for confirmation of MDT discussion. Cancer networks with disproportionately high levels of unknowns should examine the process with their constituent teams, and aim to improve submission in the on-going collection year to improve assurance of this important measure.
- These results show there remains however, a small but significant group of patients whose management has been planned outside of an MDT-160 patients this year recorded as not discussed at MDT (England 137 Wales 23) against 360 patients last year.
- The figures are proportionately higher in Wales but their data does not contain an unknown option, leading to a default recording of no discussion even where the patient has not reached that part in the pathway. In England a small number of cancer networks and trusts have significantly higher levels of cases recorded as not discussed. The following cancer networks in England reported over five per cent of cases as not discussed:-
 - o Avon, Somerset and Wiltshire
 - o Lancashire and South Cumbria
 - o Mount Vernon
 - o North East London
- This raises concerns not only about the assurance and governance of that treatment but also the access those patients had to the complete services of a head and neck MDT. Last year's report showed for the major salivary cancer pathway a higher rate of not discussed at MDT (last year 11.9 per cent), which has this year fallen to 5.0 per cent and this is similar to other anatomical sites.

Figure 4.7.5
Summary of multidisciplinary team discussion

Discussed	All Sites	
	N	%
Yes	6229	90.6
No	160	2.3
Not recorded	490	7.1
Total	6879	100.0

Percentage of new cases of head and neck cancer discussed at MDT. (CLE National 1)

All head and neck cancer patients should be managed by the MDT. (Welsh standard)

100 per cent of diagnoses should be discussed at a MDT, currently in England and Wales 90.6 per cent of all cases are recorded as having been discussed, representing 97.5 per cent of cases with a recorded care plan.

What percentage of cases are discussed by an MDT in each trust?

The chart below reports by diagnosing organisation the information supplied to the audit on MDT discussion. Care should be taken in assessing percentages where only small case numbers were submitted.

Figure 4.7.5
Analysis of multidisciplinary team discussion by diagnosing Organisation

Diagnosing Contact Organisation Name	Yes		No		Unknown		Total
	N	%	N	%	N	%	N
Gloucestershire Hospitals NHS Foundation Trust	104	99	1	1	0	0	105
Worcestershire Acute Hospitals NHS Trust	80	94.1	1	1.2	4	4.7	85
Wye Valley NHS Trust	20	87	2	8.7	1	4.3	23
3 Counties total	204	95.8	4	1.9	5	2.3	213
Cambridge University Hospitals NHS Foundation Trust	104	90.4	0	0	11	9.6	115
Hinchingbrooke Health Care NHS Trust	0	0	0	0	1	100	1
Ipswich Hospital NHS Trust	9	81.8	0	0	2	18.2	11
James Paget University Hospitals NHS Foundation Trust	11	100	0	0	0	0	11
Norfolk and Norwich University Hospitals NHS Foundation Trust	163	96.4	0	0	6	3.6	169
Peterborough and Stamford Hospitals NHS Foundation Trust	38	84.4	0	0	7	15.6	45
The Queen Elizabeth Hospital, Kings Lynn NHS Foundation Trust	2	50	0	0	2	50	4
West Suffolk Hospitals NHS Trust	2	100	0	0	0	0	2
Anglia total	329	91.9	0	0	29	8.1	358
University Hospitals Coventry and Warwickshire NHS Trust	102	99	1	1	0	0	103
Arden total	102	99	1	1	0	0	103
North Bristol NHS Trust	42	73.7	11	19.3	4	7	57
Royal United Hospital Bath NHS Trust	15	71.4	0	0	6	28.6	21
Taunton and Somerset NHS Foundation Trust	48	84.2	5	8.8	4	7	57
University Hospitals Bristol NHS Foundation Trust	74	82.2	6	6.7	10	11.1	90
Avon, Somerset and Wiltshire total	179	79.6	22	9.8	24	10.7	225
Portsmouth Hospitals NHS Trust	92	96.8	0	0	3	3.2	95
Salisbury NHS Foundation Trust	7	100	0	0	0	0	7
University Hospital Southampton NHS Foundation Trust	107	100	0	0	0	0	107
Western Sussex Hospitals NHS Trust (St Richards)	16	100	0	0	0	0	16
Central South Coast total	222	98.7	0	0	3	1.3	225
Dorset County Hospital NHS Foundation Trust	11	91.7	0	0	1	8.3	12
Poole Hospital NHS Foundation Trust	107	100	0	0	0	0	107
The Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust	5	100	0	0	0	0	5
Dorset total	123	99.2	0	0	1	0.8	124
Burton Hospitals NHS Foundation Trust	22	84.6	4	15.4	0	0	26
Derby Hospitals NHS Foundation Trust	70	90.9	7	9.1	0	0	77
Kettering General Hospital NHS Foundation Trust	2	100	0	0	0	0	2
Northampton General Hospital NHS Trust	36	100	0	0	0	0	36
Nottingham University Hospitals NHS Trust	138	93.2	1	0.7	9	6.1	148
United Lincolnshire Hospitals NHS Trust	18	94.7	1	5.3	0	0	19
University Hospitals of Leicester NHS Trust	62	100	0	0	0	0	62
East Midlands total	348	94.1	13	3.5	9	2.4	370
Basildon and Thurrock University Hospitals NHS Foundation Trust	26	92.9	0	0	2	7.1	28

Figure 4.7.5 (continued)

Analysis of multidisciplinary team discussion by diagnosing Organisation

Diagnosing Contact Organisation Name	Yes		No		Unknown		Total
	N	%	N	%	N	%	N
Colchester Hospital University NHS Foundation Trust	34	97.1	0	0	1	2.9	35
Mid Essex Hospital Services NHS Trust	25	100	0	0	0	0	25
Southend University Hospital NHS Foundation Trust	74	94.9	1	1.3	3	3.8	78
Essex total	159	95.8	1	0.6	6	3.6	166
Bolton NHS Foundation Trust	26	100	0	0	0	0	26
Central Manchester University Hospitals NHS Foundation Trust	26	100	0	0	0	0	26
East Cheshire NHS Trust	0	0	2	22.2	7	77.8	9
Mid Cheshire Hospitals NHS Foundation Trust	27	84.4	0	0	5	15.6	32
Pennine Acute Hospitals NHS Trust	120	87.6	0	0	17	12.4	137
Salford Royal NHS Foundation Trust	6	18.2	0	0	27	81.8	33
Stockport NHS Foundation Trust	24	75	3	9.4	5	15.6	32
Tameside Hospital NHS Foundation Trust	4	10.8	0	0	33	89.2	37
The Christie NHS Foundation Trust	1	50	0	0	1	50	2
Trafford Healthcare NHS Trust	12	80	0	0	3	20	15
University Hospital of South Manchester NHS Foundation Trust	7	87.5	0	0	1	12.5	8
Wrightington Wigan and Leigh NHS Foundation Trust	25	71.4	7	20	3	8.6	35
Greater Manchester and Cheshire total	278	70.9	12	3.1	102	26	392
Mid Staffordshire NHS Foundation Trust	9	81.8	0	0	2	18.2	11
Shrewsbury and Telford Hospital NHS Trust	73	98.6	1	1.4	0	0	74
The Dudley Group of Hospitals NHS Foundation Trust	13	92.9	0	0	1	7.1	14
The Royal Wolverhampton Hospitals NHS Trust	106	98.1	0	0	2	1.9	108
University Hospital of North Staffordshire NHS Trust	69	82.1	6	7.1	9	10.7	84
Greater Midlands total	270	92.8	7	2.4	14	4.8	291
Hull and East Yorkshire Hospitals NHS Trust	90	97.8	0	0	2	2.2	92
Northern Lincolnshire and Goole Hospitals NHS Foundation Trust	20	60.6	2	6.1	11	33.3	33
Scarborough and North East Yorkshire Health Care NHS Trust	2	100	0	0	0	0	2
Humber and Yorkshire Coast total	112	88.2	2	1.6	13	10.2	127
East Kent Hospitals University NHS Foundation Trust	46	82.1	0	0	10	17.9	56
Maidstone and Tunbridge Wells NHS Trust	66	98.5	0	0	1	1.5	67
Medway NHS Foundation Trust	11	57.9	0	0	8	42.1	19
Queen Victoria Hospital NHS Foundation Trust	25	96.2	0	0	1	3.8	26
Kent and Medway total	148	88.1	0	0	20	11.9	168
Blackpool Teaching Hospitals NHS Foundation Trust	42	73.7	2	3.5	13	22.8	57
East Lancashire Hospitals NHS Trust	54	76.1	10	14.1	7	9.9	71
Lancashire Teaching Hospitals NHS Foundation Trust	56	77.8	1	1.4	15	20.8	72
University Hospitals of Morecambe Bay NHS Foundation Trust	23	74.2	1	3.2	7	22.6	31
Lancashire and South Cumbria total	175	75.8	14	6.1	42	18.2	231
Aintree University Hospitals NHS Foundation Trust	265	84.1	2	0.6	48	15.2	315
Clatterbridge Centre For Oncology NHS Foundation Trust	0	0	1	100	0	0	1
Countess of Chester Hospital NHS Foundation Trust	8	72.7	0	0	3	27.3	11
Royal Liverpool and Broadgreen University Hospitals NHS Trust	29	70.7	0	0	12	29.3	41
Southport and Ormskirk Hospital NHS Trust	5	50	0	0	5	50	10
St Helens and Knowsley Hospitals NHS Trust	8	66.7	1	8.3	3	25	12
Warrington and Halton Hospitals NHS Foundation Trust	6	100	0	0	0	0	6
Wirral University Teaching Hospital NHS Foundation Trust	15	44.1	0	0	19	55.9	34
Merseyside and Cheshire total	336	78.1	4	0.9	90	20.9	430
Bedford Hospital NHS Trust	19	86.4	0	0	3	13.6	22
East and North Hertfordshire NHS Trust	44	88	6	12	0	0	50
Luton and Dunstable Hospital NHS Foundation Trust	27	93.1	0	0	2	6.9	29
Mount Vernon total	90	89.1	6	5.9	5	5	101
Barking Havering and Redbridge University Hospitals NHS Trust	2	50	2	50	0	0	4
Barts and The London NHS Trust	54	58.1	17	18.3	22	23.7	93
Homerton University Hospital NHS Foundation Trust	5	62.5	0	0	3	37.5	8
Whipps Cross University Hospital NHS Trust	49	98	1	2	0	0	50
North East London total	110	71	20	12.9	25	16.1	155
Barnet and Chase Farm Hospitals NHS Trust	104	100	0	0	0	0	104

Figure 4.7.5 (continued)

Analysis of multidisciplinary team discussion by diagnosing Organisation

Diagnosing Contact Organisation Name	Yes		No		Unknown		Total
	N	%	N	%	N	%	N
North Middlesex University Hospital NHS Trust	0	0	0	0	0	0	0
The Princess Alexandra Hospital NHS Trust	8	100	0	0	0	0	8
University College London Hospitals NHS Foundation Trust	114	97.4	0	0	3	2.6	117
North London total	226	98.7	0	0	3	1.3	229
City Hospitals Sunderland NHS Foundation Trust	104	96.3	4	3.7	0	0	108
County Durham and Darlington NHS Foundation Trust	34	97.1	0	0	1	2.9	35
North Cumbria University Hospitals NHS Trust	56	96.6	0	0	2	3.4	58
Northumbria Healthcare NHS Foundation Trust	1	100	0	0	0	0	1
South Tees Hospital NHS Foundation Trust	113	95	2	1.7	4	3.4	119
The Newcastle Upon Tyne Hospitals NHS Foundation Trust	151	99.3	0	0	1	0.7	152
North of England total	459	97	6	1.3	8	1.7	473
Barnsley Hospital NHS Foundation Trust	4	100	0	0	0	0	4
Chesterfield Royal Hospital NHS Foundation Trust	20	100	0	0	0	0	20
Doncaster and Bassetlaw Hospitals NHS Foundation Trust	48	100	0	0	0	0	48
Sheffield Teaching Hospitals NHS Foundation Trust	133	96.4	0	0	5	3.6	138
The Rotherham NHS Foundation Trust	34	97.1	0	0	1	2.9	35
North Trent total	239	97.6	0	0	6	2.4	245
Ealing Hospital NHS Trust	1	100	0	0	0	0	1
Imperial College Healthcare NHS Trust	63	98.4	1	1.6	0	0	64
North West London Hospitals NHS Trust	54	98.2	0	0	1	1.8	55
North West London total	118	98.3	1	0.8	1	0.8	120
Heart of England NHS Foundation Trust	40	69	1	1.7	17	29.3	58
Sandwell and West Birmingham Hospitals NHS Trust	45	93.8	0	0	3	6.3	48
University Hospital Birmingham NHS Foundation Trust	105	91.3	0	0	10	8.7	115
Walsall Hospitals NHS Trust	1	6.3	2	12.5	13	81.3	16
Pan Birmingham total	191	80.6	3	1.3	43	18.1	237
Northern Devon Healthcare NHS Trust	3	100	0	0	0	0	3
Plymouth Hospitals NHS Trust	65	91.5	3	4.2	3	4.2	71
Royal Cornwall Hospitals NHS Trust	54	96.4	1	1.8	1	1.8	56
Royal Devon and Exeter NHS Foundation Trust	69	97.2	2	2.8	0	0	71
South Devon Healthcare NHS Foundation Trust	45	100	0	0	0	0	45
Peninsula total	236	95.9	6	2.4	4	1.6	246
Guys and St Thomas NHS Foundation Trust	143	97.9	3	2.1	0	0	146
South East London total	143	97.9	3	2.1	0	0	146
Epsom and St Helier University Hospitals NHS Trust	4	100	0	0	0	0	4
Kingston Hospital NHS Trust	1	100	0	0	0	0	1
St Georges Healthcare NHS Trust	137	100	0	0	0	0	137
The Royal Marsden NHS Foundation Trust	21	95.5	1	4.5	0	0	22
South West London total	163	99.4	1	0.6	0	0	164
Ashford and St Peters Hospitals NHS Foundation Trust	8	100	0	0	0	0	8
Basingstoke and North Hampshire NHS Foundation Trust	7	100	0	0	0	0	7
Frimley Park Hospital NHS Foundation Trust	5	100	0	0	0	0	5
Royal Surrey County Hospital NHS Trust	146	100	0	0	0	0	146
Surrey and Sussex Healthcare NHS Trust	13	100	0	0	0	0	13
Surrey West Sussex and Hants total	179	100	0	0	0	0	179
Brighton and Sussex University Hospitals NHS Trust	86	98.9	0	0	1	1.1	87
East Sussex Healthcare NHS Trust	54	98.2	0	0	1	1.8	55
Western Sussex Hospitals NHS Trust (Worthing and Southlands)	25	89.3	0	0	3	10.7	28
Sussex total	165	97.1	0	0	5	2.9	170
Great Western Hospitals NHS Foundation Trust	12	63.2	3	15.8	4	21.1	19
Heatherwood and Wexham Park Hospitals NHS Foundation Trust	21	100	0	0	0	0	21
Milton Keynes Hospital NHS Foundation Trust	7	38.9	0	0	11	61.1	18
Oxford University Hospitals NHS Trust	71	82.6	2	2.3	13	15.1	86
Royal Berkshire NHS Foundation Trust	46	95.8	0	0	2	4.2	48
Thames Valley total	157	81.8	5	2.6	30	15.6	192
Bradford Teaching Hospitals NHS Foundation Trust	73	98.6	1	1.4	0	0	74

Figure 4.7.5 (continued)
Analysis of multidisciplinary team discussion by diagnosing Organisation

Diagnosing Contact Organisation Name	Yes		No		Unknown		Total
	N	%	N	%	N	%	N
Calderdale and Huddersfield NHS Foundation Trust	27	100	0	0	0	0	27
Harrogate and District NHS Foundation Trust	5	100	0	0	0	0	5
Leeds Teaching Hospitals NHS Trust	81	95.3	2	2.4	2	2.4	85
Mid Yorkshire Hospitals NHS Trust	92	97.9	2	2.1	0	0	94
York Teaching Hospital NHS Foundation Trust	77	98.7	1	1.3	0	0	78
Yorkshire total	355	97.8	6	1.7	2	0.6	363
England total	5816	90.3	137	2.1	490	7.6	6443
Betsi Cadwaladr University LHB	80	87	12	13	0	0	92
North Wales total	80	87	12	13	0	0	92
Aneurin Bevan LHB	70	100	0	0	0	0	70
Cardiff and Vale University LHB	76	97.4	2	2.6	0	0	78
Cwm Taf LHB	58	96.7	2	3.3	0	0	60
South East Wales total	204	98.1	4	1.9	0	0	208
Abertawe Bro Morgannwg University LHB	103	95.4	5	4.6	0	0	108
Hywel Dda LHB	26	92.9	2	7.1	0	0	28
South West Wales total	129	94.9	7	5.1	0	0	136
Wales total	413	94.7	23	5.3	0	0	436
England and Wales total	6229	90.6	160	2.3	490	7.1	6879

4.7.6 The head and neck multi-disciplinary team - (MDT) are all patients with resective pathology discussed?

For the first time information is presented on the analysis of multidisciplinary team discussion of those patients who have undergone resective surgery as their first treatment.

Improving Outcomes Guidance (IOG) measures in England identify that a multidisciplinary team should undertake post-operative review of operation findings on all patients who have undergone surgery. This was also a local measure within in Clinical Lines of Enquiry for the 2011 Peer Review round.

In Wales it is considered good practice to discuss resective pathology at an MDT, but it is not a formal measure. Insufficient data was received from Wales this year for Wales only analysis to be reported.

This allows both interaction between pathologist and surgeon, agreed interpretation of adequacy of margins and consideration of the need for adjunctive treatment. From these discussions an overall agreed integrated stage should be documented and available for future comparisons.

- Of 2337 cases in England and Wales submitted as undergoing surgery as first treatment, 1714 cases (82.5 per cent) were recorded as having their resective pathology discussed in England. All English cancer networks achieved at least 50 per cent of cases discussed.

- Analysis of the interval from surgical resection to reporting on the resected specimen, demonstrated a median interval of seven days. A smaller number of specimens took up to 50 days for analysis, with 95 per cent being complete by this time. Those specimens taking longer than 50 days were largely oral cavity specimens most likely reflecting the time taken for decalcification of bony specimens.
- This provides good assurance that MDT practice is meeting this IOG requirement and providing a high standard of care to patients.
- A chart showing the percentage of trusts in England achieving this standard can be found in [figure 4.7.6](#).
- Note, that this chart shows surgical activity by where the patient was diagnosed. It is not implying that the surgical activity took place at this organisation.
- Care should be taken in assessing percentages where only small case numbers were submitted.

Percentage of cases of head and neck that have undergone surgery where respective pathology is discussed in the MDT (CLE Local 3)

Figure 4.7.6

Analysis of multidisciplinary discussion of resective pathology in those patients undergoing surgery as their first definitive treatment for index year by contact trust

Code	Diagnosing Contact Trust Name	Yes		No		Total
		N	%	N	%	N
RTE	Gloucestershire Hospitals NHS Foundation Trust	41	87.2	6	12.8	47
RWP	Worcestershire Acute Hospitals NHS Trust	35	94.6	2	5.4	37
RLQ	Wye Valley NHS Trust	4	80	1	20	5
N29	3 Counties total	80	89.9	9	10.1	89
RGT	Cambridge University Hospitals NHS Foundation Trust	21	72.4	8	27.6	29
RQQ	Hinchingbrooke Health Care NHS Trust	0	0	0	0	0
RGQ	Ipswich Hospital NHS Trust	0	0	0	0	0
RGP	James Paget University Hospitals NHS Foundation Trust	4	100	0	0	4
RM1	Norfolk and Norwich University Hospitals NHS Foundation Trust	10	100	0	0	10
RGN	Peterborough and Stamford Hospitals NHS Foundation Trust	13	100	0	0	13
RCX	The Queen Elizabeth Hospital, Kings Lynn NHS Foundation Trust	1	100	0	0	1
RGR	West Suffolk Hospitals NHS Trust	0	0	0	0	0
N37	Anglia total	49	86	8	14	57
RKB	University Hospitals Coventry and Warwickshire NHS Trust	37	82.2	8	17.8	45
N12	Arden total	37	82.2	8	17.8	45
RVJ	North Bristol NHS Trust	9	56.3	7	43.8	16
RD1	Royal United Hospital Bath NHS Trust	3	100	0	0	3
RBA	Taunton and Somerset NHS Foundation Trust	10	58.8	7	41.2	17
RA7	University Hospitals Bristol NHS Foundation Trust	34	94.4	2	5.6	36
N28	Avon, Somerset and Wiltshire total	56	77.8	16	22.2	72
RHU	Portsmouth Hospitals NHS Trust	1	2.6	37	97.4	38
RNZ	Salisbury NHS Foundation Trust	4	100	0	0	4
RHM	University Hospital Southampton NHS Foundation Trust	39	97.5	1	2.5	40
RYR16	Western Sussex Hospitals NHS Trust (St Richards)	4	100	0	0	4
N31	Central South Coast total	48	55.8	38	44.2	86
RBD	Dorset County Hospital NHS Foundation Trust	2	100	0	0	2
RD3	Poole Hospital NHS Foundation Trust	36	100	0	0	36
RDZ	The Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust	4	100	0	0	4
N27	Dorset total	42	100	0	0	42
RJF	Burton Hospitals NHS Foundation Trust	9	75	3	25	12
RTG	Derby Hospitals NHS Foundation Trust	25	65.8	13	34.2	38
RNQ	Kettering General Hospital NHS Foundation Trust	1	100	0	0	1
RNS	Northampton General Hospital NHS Trust	18	100	0	0	18
RX1	Nottingham University Hospitals NHS Trust	23	46	27	54	50
RWD	United Lincolnshire Hospitals NHS Trust	6	85.7	1	14.3	7
RWE	University Hospitals of Leicester NHS Trust	22	91.7	2	8.3	24
N39	East Midlands total	104	69.3	46	30.7	150
RDD	Basildon and Thurrock University Hospitals NHS Foundation Trust	3	75	1	25	4
RDE	Colchester Hospital University NHS Foundation Trust	7	100	0	0	7
RQ8	Mid Essex Hospital Services NHS Trust	6	75	2	25	8
RAJ	Southend University Hospital NHS Foundation Trust	10	100	0	0	10
N38	Essex total	26	89.7	3	10.3	29
RMC	Bolton NHS Foundation Trust	2	100	0	0	2
RW3	Central Manchester University Hospitals NHS Foundation Trust	1	6.7	14	93.3	15
RJN	East Cheshire NHS Trust	0	0	0	0	0
RBT	Mid Cheshire Hospitals NHS Foundation Trust	7	100	0	0	7
RW6	Pennine Acute Hospitals NHS Trust	21	95.5	1	4.5	22
RM3	Salford Royal NHS Foundation Trust	0	0	0	0	0
RWJ	Stockport NHS Foundation Trust	2	66.7	1	33.3	3
RMP	Tameside Hospital NHS Foundation Trust	2	66.7	1	33.3	3
RBV	The Christie NHS Foundation Trust	0	0	0	0	0
RM4	Trafford Healthcare NHS Trust	0	0	0	0	0
RM2	University Hospital of South Manchester NHS Foundation Trust	3	75	1	25	4
RRF	Wrightington Wigan and Leigh NHS Foundation Trust	4	57.1	3	42.9	7
N02	Greater Manchester and Cheshire total	42	66.7	21	33.3	63
RJD	Mid Staffordshire NHS Foundation Trust	1	100	0	0	1
RXW	Shrewsbury and Telford Hospital NHS Trust	24	100	0	0	24
RNA	The Dudley Group of Hospitals NHS Foundation Trust	4	100	0	0	4

Figure 4.7.6 (continued)

Analysis of multidisciplinary discussion of resective pathology in those patients undergoing surgery as their first definitive treatment for index year by contact trust

Code	Diagnosing Contact Trust Name	Yes		No		Total
		N	%	N	%	N
RL4	The Royal Wolverhampton Hospitals NHS Trust	32	100	0	0	32
RJE	University Hospital of North Staffordshire NHS Trust	23	92	2	8	25
N35	Greater Midlands total	84	97.7	2	2.3	86
RWA	Hull and East Yorkshire Hospitals NHS Trust	48	98	1	2	49
RJL	Northern Lincolnshire and Goole Hospitals NHS Foundation Trust	9	75	3	25	12
RCC	Scarborough and North East Yorkshire Health Care NHS Trust	2	100	0	0	2
N07	Humber and Yorkshire Coast total	59	93.7	4	6.3	63
RVV	East Kent Hospitals University NHS Foundation Trust	3	25	9	75	12
RWF	Maidstone and Tunbridge Wells NHS Trust	5	55.6	4	44.4	9
RPA	Medway NHS Foundation Trust	4	100	0	0	4
RPC	Queen Victoria Hospital NHS Foundation Trust	17	89.5	2	10.5	19
N34	Kent and Medway total	29	65.9	15	34.1	44
RXL	Blackpool Teaching Hospitals NHS Foundation Trust	4	80	1	20	5
RXR	East Lancashire Hospitals NHS Trust	20	95.2	1	4.8	21
RXN	Lancashire Teaching Hospitals NHS Foundation Trust	2	100	0	0	2
RTX	University Hospitals of Morecambe Bay NHS Foundation Trust	0	0	0	0	0
N01	Lancashire and South Cumbria total	26	92.9	2	7.1	28
REM	Aintree University Hospitals NHS Foundation Trust	100	96.2	4	3.8	104
REN	Clatterbridge Centre For Oncology NHS Foundation Trust	0	0	0	0	0
RJR	Countess of Chester Hospital NHS Foundation Trust	4	100	0	0	4
RQ6	Royal Liverpool and Broadgreen University Hospitals NHS Trust	11	91.7	1	8.3	12
RVY	Southport and Ormskirk Hospital NHS Trust	2	66.7	1	33.3	3
RBN	St Helens and Knowsley Hospitals NHS Trust	5	100	0	0	5
RWW	Warrington and Halton Hospitals NHS Foundation Trust	2	100	0	0	2
RBL	Wirral University Teaching Hospital NHS Foundation Trust	6	100	0	0	6
N03	Merseyside and Cheshire total	130	95.6	6	4.4	136
RC1	Bedford Hospital NHS Trust	4	100	0	0	4
RWH	East and North Hertfordshire NHS Trust	13	48.1	14	51.9	27
RC9	Luton and Dunstable Hospital NHS Foundation Trust	4	80	1	20	5
N20	Mount Vernon total	21	58.3	15	41.7	36
RF4	Barking Havering and Redbridge University Hospitals NHS Trust	2	100	0	0	2
RNJ	Barts and The London NHS Trust	24	85.7	4	14.3	28
RQX	Homerton University Hospital NHS Foundation Trust	3	100	0	0	3
RGC	Whipps Cross University Hospital NHS Trust	17	100	0	0	17
N23	North East London total	46	92	4	8	50
RVL	Barnet and Chase Farm Hospitals NHS Trust	24	82.8	5	17.2	29
RAP	North Middlesex University Hospital NHS Trust	0	0	0	0	0
RQW	The Princess Alexandra Hospital NHS Trust	1	100	0	0	1
RRV	University College London Hospitals NHS Foundation Trust	44	89.8	5	10.2	49
N22	North London total	69	87.3	10	12.7	79
RLN	City Hospitals Sunderland NHS Foundation Trust	24	92.3	2	7.7	26
RXP	County Durham and Darlington NHS Foundation Trust	5	83.3	1	16.7	6
RNL	North Cumbria University Hospitals NHS Trust	24	70.6	10	29.4	34
RTF	Northumbria Healthcare NHS Foundation Trust	1	100	0	0	1
RTR	South Tees Hospital NHS Foundation Trust	27	93.1	2	6.9	29
RTD	The Newcastle Upon Tyne Hospitals NHS Foundation Trust	59	86.8	9	13.2	68
N36	North of England total	140	85.4	24	14.6	164
RFF	Barnsley Hospital NHS Foundation Trust	3	100	0	0	3
RFS	Chesterfield Royal Hospital NHS Foundation Trust	10	100	0	0	10
RP5	Doncaster and Bassetlaw Hospitals NHS Foundation Trust	13	72.2	5	27.8	18
RHQ	Sheffield Teaching Hospitals NHS Foundation Trust	59	92.2	5	7.8	64
RFR	The Rotherham NHS Foundation Trust	11	91.7	1	8.3	12
N08	North Trent total	96	89.7	11	10.3	107
RC3	Ealing Hospital NHS Trust	1	100	0	0	1
RYJ	Imperial College Healthcare NHS Trust	20	95.2	1	4.8	21
RV8	North West London Hospitals NHS Trust	22	73.3	8	26.7	30

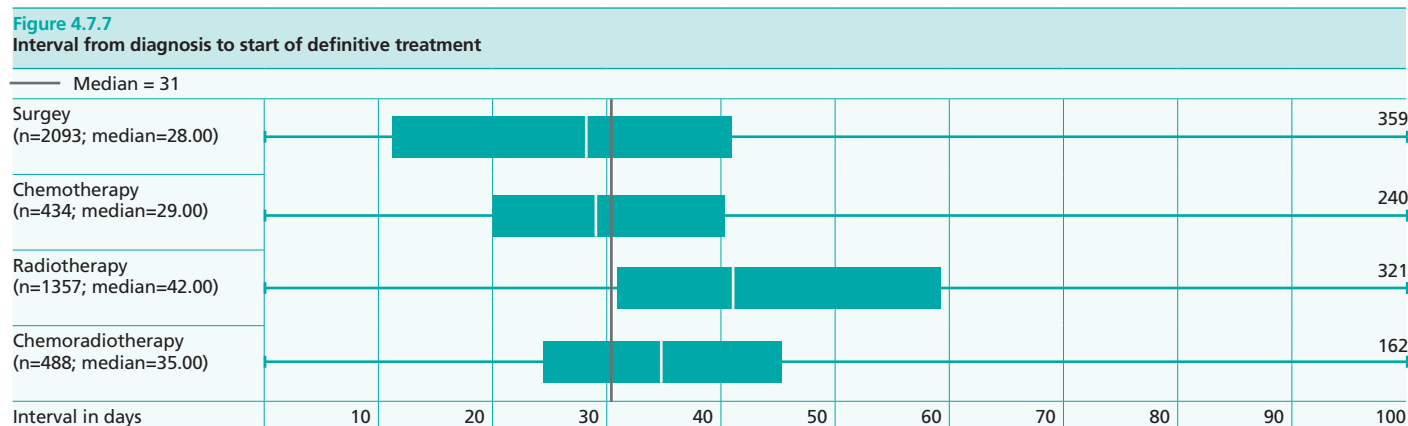
Figure 4.7.6 (continued)

Analysis of multidisciplinary discussion of resective pathology in those patients undergoing surgery as their first definitive treatment for index year by contact trust

Code	Diagnosing Contact Trust Name	Yes		No		Total
		N	%	N	%	N
N21	North West London total	43	82.7	9	17.3	52
RR1	Heart of England NHS Foundation Trust	13	92.9	1	7.1	14
RXK	Sandwell and West Birmingham Hospitals NHS Trust	9	100	0	0	9
RRK	University Hospital Birmingham NHS Foundation Trust	38	97.4	1	2.6	39
RBK	Walsall Hospitals NHS Trust	0	0	0	0	0
N11	Pan Birmingham total	60	96.8	2	3.2	62
RBZ	Northern Devon Healthcare NHS Trust	0	0	0	0	0
RK9	Plymouth Hospitals NHS Trust	5	55.6	4	44.4	9
REF	Royal Cornwall Hospitals NHS Trust	20	100	0	0	20
RH8	Royal Devon and Exeter NHS Foundation Trust	29	90.6	3	9.4	32
RA9	South Devon Healthcare NHS Foundation Trust	12	42.9	16	57.1	28
N26	Peninsula total	66	74.2	23	25.8	89
RJ1	Guys and St Thomas NHS Foundation Trust	63	100	0	0	63
N24	South East London total	63	100	0	0	63
RVR	Epsom and St Helier University Hospitals NHS Trust	1	100	0	0	1
RAX	Kingston Hospital NHS Trust	0	0	0	0	0
RJ7	St Georges Healthcare NHS Trust	42	91.3	4	8.7	46
RPY	The Royal Marsden NHS Foundation Trust	5	100	0	0	5
N25	South West London total	48	92.3	4	7.7	52
RTK	Ashford and St Peters Hospitals NHS Foundation Trust	3	60	2	40	5
RN5	Basingstoke and North Hampshire NHS Foundation Trust	2	100	0	0	2
RDU	Frimley Park Hospital NHS Foundation Trust	0	0	0	0	0
RA2	Royal Surrey County Hospital NHS Trust	39	92.9	3	7.1	42
RTP	Surrey and Sussex Healthcare NHS Trust	6	100	0	0	6
N32	Surrey West Sussex and Hants total	50	90.9	5	9.1	55
RXH	Brighton and Sussex University Hospitals NHS Trust	18	94.7	1	5.3	19
RXC	East Sussex Healthcare NHS Trust	12	100	0	0	12
RYR18	Western Sussex Hospitals NHS Trust (Worthing and Southlands)	8	100	0	0	8
N33	Sussex total	38	97.4	1	2.6	39
RN3	Great Western Hospitals NHS Foundation Trust	7	87.5	1	12.5	8
RD7	Heatherwood and Wexham Park Hospitals NHS Foundation Trust	1	100	0	0	1
RD8	Milton Keynes Hospital NHS Foundation Trust	0	0	0	0	0
RTH	Oxford University Hospitals NHS Trust	43	76.8	13	23.2	56
RHW	Royal Berkshire NHS Foundation Trust	5	71.4	2	28.6	7
N30	Thames Valley total	56	77.8	16	22.2	72
RAE	Bradford Teaching Hospitals NHS Foundation Trust	37	94.9	2	5.1	39
RWY	Calderdale and Huddersfield NHS Foundation Trust	12	92.3	1	7.7	13
RCD	Harrogate and District NHS Foundation Trust	2	100	0	0	2
RR8	Leeds Teaching Hospitals NHS Trust	0	0	31	100	31
RXF	Mid Yorkshire Hospitals NHS Trust	28	63.6	16	36.4	44
RCB	York Teaching Hospital NHS Foundation Trust	27	71.1	11	28.9	38
N06	Yorkshire total	106	63.5	61	36.5	167
	England total	1714	82.5	363	17.5	2077

4.7.7 Interval from diagnosis to first treatment

- The interval from diagnosis to treatment: surgery, radiotherapy, chemotherapy or chemoradiotherapy remains variable but with delays still apparent in the delivery of radiotherapy treatments.



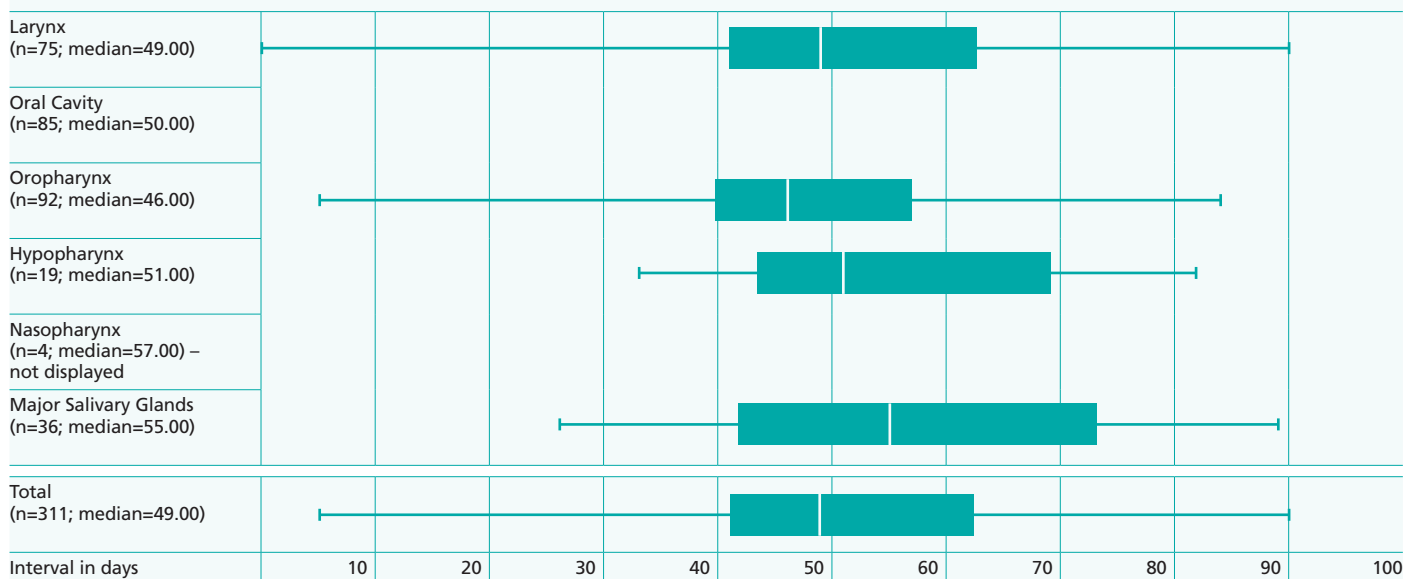
- The medians for surgery (28 days) and chemotherapy (29 days) remain within 31 days (an arbitrary 50 per cent of the 62 day target), but chemoradiotherapy (35 days) and radiotherapy (42 days) exceed this by some margin. The median for radiotherapy access has improved by two days when compared to the sixth Annual Report. This improvement is welcome however, the median interval to the start of radiotherapy remains high.
- Within and between cancer networks and providers variation still exists, for example in Anglia median access times for Cambridge was 20 days and Norfolk and Norwich 44 days.
- Considering treatment of any type, the longest median access times from date of diagnosis to the start of treatment were found in Pan Birmingham (49 days) and Essex (47 days), with the shortest median access times in North West London (21 days) and Thames Valley (22 days). In Wales, the shortest access time was in South East Wales (22 days) and longest in North Wales (37 days). More information by cancer network for each modality of treatment can be found [here](#).
- For surgery the longest median access times were in Sussex (42 days) and Arden (41 days), and radiotherapy in North Wales (69 days) and South West Wales (73 days) and Pan Birmingham (60.5 days).
- In entering treatment information, the organisation where treatment is physically delivered should be recorded. However, in radiotherapy a number of organisations have erroneously attributed themselves as providing this treatment when it is known that they do not have radiotherapy facilities.
- Cancer networks should review the provision of radiotherapy services to ensure patients are not disadvantaged by difficulties in accessing radiotherapy services in particular.
- By provider, considerable variation is seen in the time to surgery, radiotherapy, chemotherapy and chemoradiotherapy. More information by provider for each modality of treatment can be found [here](#).

4.7.8 Interval to adjuvant radiotherapy

- Adjuvant radiotherapy is a key part of many head and neck treatment plans and ideally should be started within six weeks of surgery. As has been repeatedly identified in previous annual reports, there are identifiable delays in accessing radiotherapy services. Where adjuvant radiotherapy is required it can commonly be determined prior to surgery and therefore to minimise delays the forward planning of adjuvant radiotherapy can be helpful

- The median of 49 days for all sites has decreased by five days from the last annual report. Of the 2337 patients undergoing primary surgery only 311 patients were reported as having postoperative radiotherapy. This is considerably less than would be expected in clinical practice and needs to be interpreted with care. The future incorporation of the Radiotherapy Episode Statistics (RES) into the audit, should improve reporting in this area.

Figure 4.7.8
Interval from date of surgery to start date of post-operative radiotherapy



4.8 Clinical Outcomes sixth and seventh Annual Report Cohorts

4.8.1 Death

4.8.1.1 Seventh Annual Report cohort - Deaths recorded within provider submissions for index year after supplementation with MRIS data.

A case file was obtained from the Medical Research Information Service (MRIS) of patients registered in the audit for which MRIS had evidence, from death certification, of the registrant having died.

The audit is working to provide data for survival analyses.

Figure 4.8.1.1
Number of deaths in the index period within one year of diagnosis supplemented by MRIS data to January 6 2012 (date of MRIS extraction)

	Larynx	Oral cavity	Oropharynx	Hypopharynx	Nasopharynx	Salivary Glands	Total
Number of deaths	199	290	286	144	28	45	992
Total number of cases	1776	2028	2035	467	169	404	6879
Proportion died	11.2	14.3	14.1	30.8	16.6	11.1	14.4

Overall, of the 6879 cases submitted 992 cases were identified as deceased, (14.4 per cent) within the index year supplemented by MRIS data to 6 January 2012 representing the point of analysis. This includes deaths from all causes i.e. crude death rate. This is in line with outcomes data in the sixth Annual Report but shows some slight improvement over earlier reports.

Improvements in crude death rates were seen in all subsites with the exception of hypopharynx. Comparison with the equivalent figures in the sixth Annual Report is shown below.

Figure 4.8.1.2a
Proportion of deaths in the index period within one year of diagnosis supplemented by MRIS data comparing sixth & seventh reports

	Larynx	Oral cavity	Oropharynx	Hypopharynx	Nasopharynx	Salivary Glands	Total
Proportion of deaths sixth report	12.1	16.7	14.7	30.6	13.1	15.3	15.6
Proportion of deaths seventh report	11.2	14.3	14.1	30.8	16.6	11.1	14.4

4.8.1.2 Sixth Annual Report Cohort - Deaths recorded within one year of date of diagnosis by supplementation with MRIS data

Figure 4.8.1.2.b
Updated number of deaths (crude death rate) within one year of diagnosis using data from the sixth Annual Report, cohort with a date of diagnosis November 2009 - October 2010

	Larynx	Oral cavity	Oropharynx	Hypopharynx	Nasopharynx	Salivary Glands	Total
Number of deaths	262	416	377	147	43	96	1341
Total number of cases	1658	1914	1913	392	196	461	6534
Proportion died	15.8	21.7	19.7	37.5	21.9	20.8	20.5
Previously reported proportion deceased in 6th report at close extraction	12.1	16.7	14.7	30.6	13.1	15.3	15.6

- The crude death rate of the 6534 patients submitted in the sixth Annual Report at one year is 20.5 per cent overall. This confirms both the significant mortality of head and neck cancer and the impact of co-morbidities in this patient population.
- Comparative one year crude death rates for breast cancer (7.5 per cent) , lung cancer (73.9 per cent) and colorectal cancer (31.6 per cent) set the figure above in context.
- This means that one in five head and neck cancer patients on average will be deceased from all causes by one year and is a sober reminder of the impact of this disease.
- Across the audit cohorts no significant change in survival is seen, this is despite as noted in pathways of care, some changes in the use of surgical and non-surgical modalities. In the United States²⁹ a decline in survival rates had been noted which has opened a debate on the causative factors. The audit will continue to monitor changes in crude mortality.
- The audit is working to provide data for casemix adjusted survival analyses, but is handicapped by the data quality of key contributory factors of stage, co-morbidity and performance status, and this has been referred to earlier in Section 4.5.4. Cancer networks are encouraged to improve submission levels in these key areas. We would hope that an improvement in submission of these items in the current years data would allow risk adjustment to be applied to these figures in next year's report.

4.8.1.3 Cumulative survival analysis by cohort

- From the accumulated DAHNO submissions, supplemented by MRIS death data, survival at two years from the date of diagnosis is presented for the first time. This demonstrates that in larynx cancer nearly three quarters of patients are alive at two years. In oral cavity cancer survival decreases to just over two-thirds at the same point.

Figure 4.8.1.3
Cumulative survival analysis by submission cohort and anatomic subsite

DAHNO Group	Nov 04-Oct 05	Nov 05-Oct 06	Nov 06-Oct 07	Nov 07-Oct 08
Larynx	76.8	76.2	74.4	75.9
Oral cavity	68.7	62.7	67.4	69.6
Oropharynx				69.6
Hypopharynx				45.3
Nasopharynx				73.7
Major Salivary Glands				74.4
Total	72.8	69.6	71	70.4

Survival per cent at 2 years (730 days)

4.8.1.4 Sixth Annual Report Cohort – deaths recorded within one year of date of diagnosis by supplementation with MRIS data - crude death rate by cancer network

A case file was obtained from the MRIS of patients registered in the audit for which there was MRIS evidence, from death certification, of the registrant having died. This was then compared with the cancer network at registration to the National Head and Neck Cancer Audit and a crude death rate calculated by cancer network. These are deaths occurring in less than 14 months from diagnosis.

The figures below should be considered extremely cautiously. Crude death rate reflects death from any cause (not just cancer) and cannot be considered in isolation as a marker of the impact of any treatment received, nor of the efficacy of services. No adjustments to the figures have been made and each cancer network will vary in its casemix and the background health of individuals presenting with cancer. In addition, the cancer subsites vary in their mortality rates and thus variation in case distribution by cancer network will impact on this.

Figure 4.8.1.4a
Sixth Annual Report Cohort - deaths recorded within one year of date of diagnosis by supplementation with MRIS data - crude death rate by cancer network

Contact Network	Larynx	Oral Cavity	Oropharynx	Hypopharynx	Nasopharynx	Major Salivary Glands	Total %
Crude death rate							
3 Counties	15.4	19.7	17.6	83.3	28.6	23.5	20.7
Anglia	20.0	17.3	21.0	54.5	50.0	25.0	22.7
Arden	21.1	34.1	13.3	30.0	20.0	16.7	24.6
Avon, Somerset and Wiltshire	18.6	14.3	10.8	10.0	33.3	18.8	15.0
Central South Coast	5.7	19.8	11.5	33.3	28.6	25.0	16.6
Dorset	12.5	19.4	29.4	66.7	50.0	20.0	23.3
East Midlands	12.3	21.2	21.7	43.8	18.2	7.9	18.3
Essex	15.4	22.0	17.4	33.3	11.1	25.0	19.8
Greater Manchester and Cheshire	15.5	27.2	18.2	33.3	12.5	16.2	20.8
Greater Midlands	19.8	21.0	15.9	27.3	33.3	28.6	20.3
Humber and Yorkshire Coast	15.6	24.4	17.1	0.0	20.0	27.3	18.7
Kent and Medway	6.9	25.0	20.3	33.3	0.0	40.0	21.2
Lancashire and South Cumbria	16.2	21.3	32.1	45.0	0.0	21.4	24.4
Merseyside and Cheshire	19.1	19.6	19.5	44.8	11.1	18.8	21.2
Mount Vernon	22.6	20.6	7.7	50.0	0.0	0.0	18.4
North East London	24.1	16.7	22.6	54.5	14.3	12.5	22.1
North London	20.0	34.2	29.3	60.0	66.7	16.7	30.5
North of England	17.4	22.7	25.0	30.0	30.0	11.5	21.7
North Trent	15.3	22.2	15.9	9.1	33.3	10.0	17.6
North West London	13.8	7.5	7.9	8.3	0.0	22.2	9.8
Pan Birmingham	15.2	23.5	28.6	14.3	33.3	20.0	22.2
Peninsula	4.8	18.9	19.5	50.0	16.7	18.5	17.7
South East London	13.3	23.9	22.6	20.0	16.7	31.3	21.6
South West London	20.8	24.6	12.5	36.4	0.0	30.0	20.8
Surrey West Sussex and Hants	14.3	16.0	16.4	25.0	66.7	14.3	17.8
Sussex	7.1	22.0	22.4	71.4	0.0	40.0	22.6
Thames Valley	17.2	21.3	20.5	50.0	40.0	15.8	22.1
Yorkshire	14.5	22.3	21.0	37.5	10.0	14.8	20.7
England	15.7	21.8	19.7	37.3	21.5	20.0	20.4
North Wales	16.7	13.3	25.0	20.0	NA	33.3	18.3
South East Wales	21.1	21.4	18.2	50.0	100.0	28.6	24.4
South West Wales	11.8	27.8	16.7	50.0	NA	36.4	21.7
Wales	16.7	21.3	19.3	42.1	100.0	31.4	22.0
England and Wales	15.8	21.7	19.7	37.5	21.9	20.8	20.5

The purpose of this inclusion is to provide an overview of both the impact of head and neck cancer as well as stimulating organisations to submit high levels of factors that impact on casemix adjustment, so that more meaningful comparisons can be made in future reports.

Of 6534 cases of head and neck cancer submitted, 1341 (20.5 per cent) had died from all causes 14 months from diagnosis. The figure for England was 20.4 per cent and for Wales was 22.0 per cent.

Cancer networks vary in crude death rate from 9.8 per cent (North West London – submitted 59.2 per cent of estimated cases) to 30.5 per cent (North London who submitted 67.4 per cent of estimated cases). Incomplete data submissions may have influenced these figures emphasising the difficulty in providing risk-adjusted outcomes.

Examining the three commonest anatomic sites larynx, oral cavity and oropharynx there was again, considerable variation between cancer networks. In larynx, cancer crude mortality ranged from 4.8 per cent to 24.1 per cent, in oral cavity from 7.5 per cent to 34.2 per cent and in oropharynx from 7.7 per cent to 32.1 per cent.

The chart below demonstrates the one year crude mortality by cancer network in the last two audit reports.

Figure 4.8.1.4b
Crude one year mortality by cancer network for consecutive Annual Reports

Contact Network	5th Annual Report updated	6th Annual Report updated
3 Counties	17.9	20.7
Anglia	21.6	22.7
Arden	27.5	24.6
Avon, Somerset and Wiltshire	21.8	15.0
Central South Coast	18.6	16.6
Dorset	21.1	23.3
East Midlands	17.3	18.3
Essex	22.5	19.8
Greater Manchester and Cheshire	21.9	20.8
Greater Midlands	21.3	20.3
Humber and Yorkshire Coast	12.1	18.7
Kent and Medway	25.4	21.2
Lancashire and South Cumbria	24.1	24.4
Merseyside and Cheshire	19.0	21.2
Mount Vernon	13.6	18.4
North East London	26.4	22.1
North London	28.9	30.5
North of England	25.5	21.7
North Trent	21.6	17.6
North West London	20.9	9.8
Pan Birmingham	23.7	22.2
Peninsula	21.8	17.7
South East London	n/a	21.6
South West London	18.2	20.8
Surrey West Sussex and Hants	13.5	17.8
Sussex	18.8	22.6
Thames Valley	17.9	22.1
Yorkshire	22.6	20.7
England	21.2	20.4
North Wales	23.9	18.3
South East Wales	24.3	24.4
South West Wales	22.6	21.7
Wales	23.8	22.0
England and Wales	21.4	20.5
Submissions	5597	6458
n/a - numbers submitted too small for analysis		

At the inception of the audit, one of the key rationales was a belief that if the worst performing trusts could match the delivery of the best performing, then without a major technological advance survival could be improved. The figures presented are a further small step to meeting this aim.

4.8.2 Locoregional recurrence within one year and two years of diagnosis

The audit is working to provide data for analysis of recurrence. A key requirement is capturing details on current status for patients at regular intervals following completion of treatment. This allows assessment of disease specific survival and interval to recurrence.

Only around 12.7 per cent of records contain current status information and it is strongly encouraged for trusts to collect and submit this information for the eighth Annual Report.

4.8.3 Number of treatment related deaths (to include death within 30 days of surgery and / or within the same admission and within 30 or 90 days of chemotherapy / radiotherapy / chemo-radiotherapy)

Figure 4.8.3

Number of treatment related deaths (to include death within 30 days of surgery and / or within the same admission and within 30 or 90 days of chemotherapy/radiotherapy/chemo-radiotherapy)

Description	7th Annual Report	6th Annual Report
Deaths within 30 days of diagnosis		
Number of reported deaths within 30 days of diagnosis or with discharge destination 'death' after any admission	112	108
Deaths following surgical treatment		
Number of reported deaths within 30 days of surgery or with discharge destination 'death' after surgery	33	25
Of these patients, the number whose death followed diagnostic surgery	5	5
Of these patients, the number whose death followed recorded surgery with curative intent	21	13
Of these patients, the number whose death followed recorded surgery with palliative intent	1	3
Of the others, the number whose death followed recorded surgery with no treatment intent recorded	6	4
Deaths following non surgical treatment		
Number of reported deaths within 30 days of radiotherapy or with discharge destination 'death' after radiotherapy	38	31
Number of reported deaths within 90 days of radiotherapy or with discharge destination 'death' after radiotherapy	111	87
Number of reported deaths within 30 days of chemotherapy or with discharge destination 'death' after chemotherapy	21	9
Number of reported deaths within 90 days of chemotherapy or with discharge destination 'death' after chemotherapy	42	25
Number of reported deaths within 30 days of chemoradiotherapy or with discharge destination 'death' after chemoradiotherapy	2	2
Number of reported deaths within 90 days of chemoradiotherapy or with discharge destination 'death' after chemoradiotherapy	10	19

- Overall, head and neck surgery appears a safe procedure, with 33 peri-operative deaths in some 1881 surgical procedures (1.75 per cent). This has been consistently identified throughout each of the seven annual reports.
- Performing complex procedures in a predominantly elderly population with significant co-existent co-morbidities will, however, inevitably lead to some deaths in the peri-operative period.
- For non-surgical treatment similar caveats apply in relation to the complexity of treatment and its impact on a co-morbid population. A rising trend in the use of chemoradiotherapy in comparison to radiotherapy alone, inevitably involves a trade-off of the potential to improve survival against a greater risk of complications and in some cases a toxicity induced death.
- Death after 30 and 90 days has been calculated to reflect both the initial impact of non-surgical treatment and with prolonged treatment courses, the impact of the whole treatment course. Within 90 days, some patients treated with palliative intent may have succumbed to their disease.
- For meaningful interpretation it is important that treatment intent, as to whether applied with a curative intent or palliative intent is recorded. In surgery, chemotherapy and radiotherapy, a clear statement of curative treatment intent, was found in 76.1, 73.5, and 77.7 per cent respectively of cases with treatment recorded.
- For non-surgical treatment, in 2710 patients (radiotherapy, chemotherapy and chemoradiotherapy) 61 deaths occurred within 30 days of first treatment. Of these 24 were recorded with curative intent and 14 with palliative intent, 163 deaths occurred within 90 days of non- surgical treatment commencing (6.0 per cent). In 117 records treatment intent is declared, and of the deaths at 90 days, 56 were for curative intent, 61 were palliative. Thus mortality from non-surgical treatment with curative intent ranges from two to four per cent.
- Further cycles of the audit will assist in providing nationally derived estimates of risk to patients and MDTs.
- At the outset of the audit it was proposed "by matching the outcomes from the cancer networks with the lowest rates to those of the highest, we would probably be able to improve long-term survival rates without providing any therapeutic development". Recent publications have identified the concept of "unnecessary deaths" referring to the impact of complications of treatment or sub standard care. It has been suggested that this could amount to 170 deaths per year in head and neck cancer.

Appendices

Appendix 1: Analysis of submitted cases against estimate by anatomic group site

Figure A1
Analysed Data

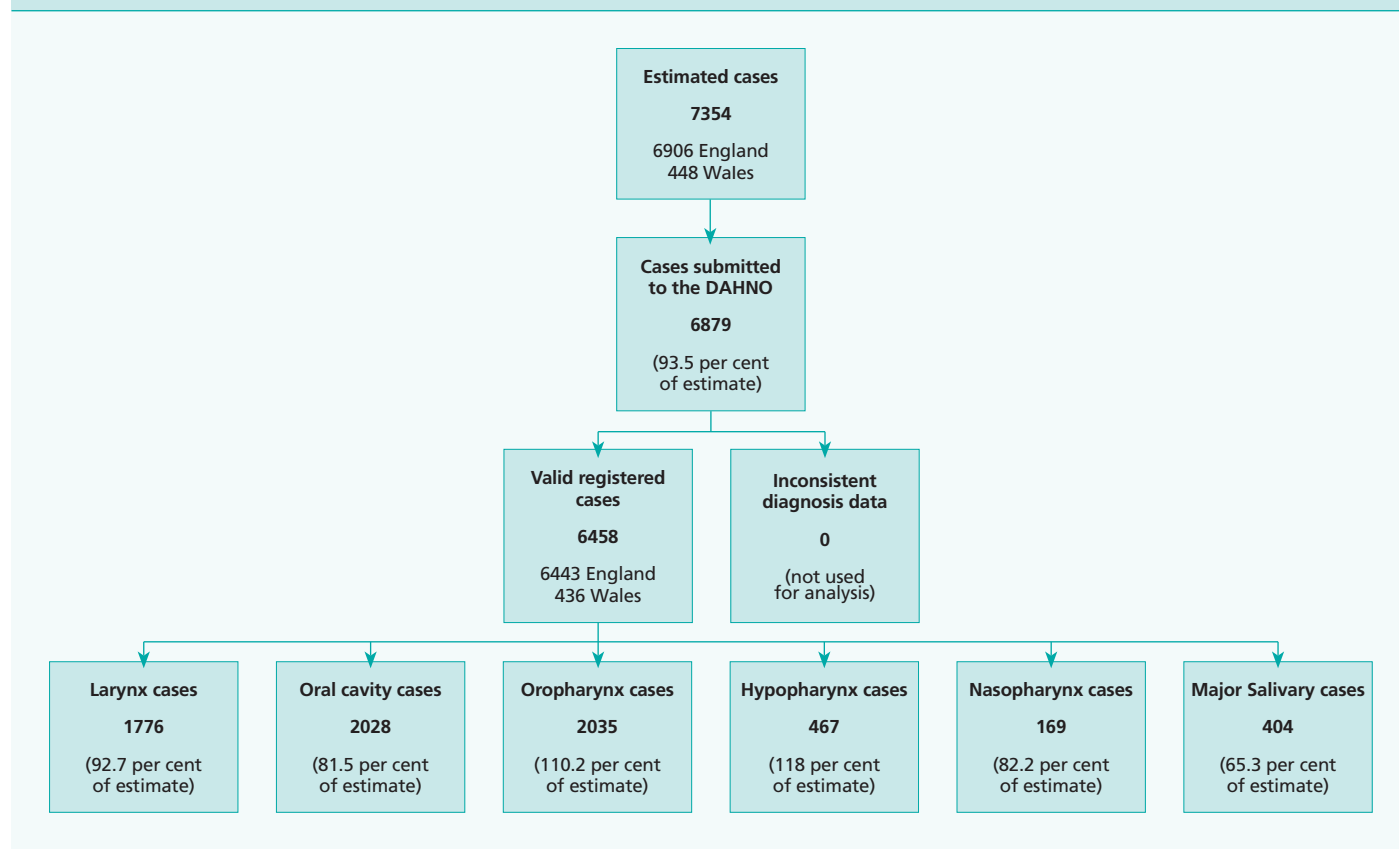


Figure A2
Details of 87 patients with multiple tumours in index period

Site combinations	Patients
Oral cavity, Oropharynx	25
Oropharynx, Hypopharynx	3
Oral Cavity, Oral Cavity	14
Oropharynx, Larynx	5
Hypopharynx, Larynx	5
Larynx, Larynx	5
Oropharynx, Oropharynx	18
Larynx, Oral Cavity	2
Oropharynx, Salivary Glands	2
Nasopharynx, Hypopharynx	1
Nasopharynx, Larynx	1
Nasopharynx, Oral cavity	2
Nasopharynx, Oropharynx	1
Oral cavity, Hypopharynx	2
Hypopharynx, Salivary Gland	1

Appendix 2: Number of registered new head and neck primaries by subsite

Site	Subsite	Total	Cumulative cases from audit inception
Larynx	Glottis	972	4694
	Supraglottis	427	2068
	Larynx, unspecified	310	1529
	Subglottis	36	191
	Laryngeal cartilage	31	164
	Total	1776	8646
Oral Cavity	Tongue	880	3912
	Cheek mucosa	212	856
	Floor of mouth	326	1632
	Hard palate	131	564
	Lip, inner aspect	98	484
	Mouth unspecified	46	176
	Retromolar area	148	648
	Upper & lower gingivae	160	771
	Vestibule of mouth	27	222
	Total	2028	9265
Oropharynx	Base of tongue	615	2051
	Lateral wall	32	94
	Oropharynx unspecified	202	548
	Posterior wall	34	116
	Soft palate	172	546
	Tonsil	931	3043
	Uvula	27	87
	Vallecula	22	70
Total	2035	6555	
Hypopharynx	Aryepiglottic fold	17	53
	Overlapping lesion hypopharynx	121	396
	Piriform sinus	220	706
	Postcricoid region	68	223
	Posterior wall	41	121
Total	467	1499	
Nasopharynx	Total	169	673
Major Salivary Glands	Total	404	1580
Total		6879	28218

Appendix 3: Head and neck cancer histological diagnoses reported

Histological diagnosis by site group summation								
	Undifferentiated carcinoma	Small cell carcinoma	Squamous carcinoma (NOS)	Keratinising squamous carcinoma	Verrucous carcinoma	Non-keratinising squamous carcinoma	Squamous cell Carcinoma variants*	Adeno-carcinoma (NOS)
	M8020/3	M8041/3	M8070/3	M8071/3	M8051/3	M8072/3	SCC VAR	M8140/3
Larynx total	7	8	1357	54	4	0	10	4
Oral Cavity total	3	12	1532	107	15	2	10	24
Oropharynx total	9	9	1541	78	3	17	2	5
Hypopharynx total	2	3	365	17	0	1	4	2
Nasopharynx total	19	1	70	5	0	7	2	2
Major Salivary Glands total	10	3	78	3	0	0	0	39
Total	50	36	4943	264	22	27	28	76

Histological diagnosis by site group summation (continued)								
	Adenoid cystic carcinoma	Muco-epidermoid carcinoma	Acinic cell carcinoma	Carcinoma ex pleomorphic adenoma	Other salivary variants**	Other	Blank	Total
	M8200/3	M8430/3	M8550/3	M8941/3	SAL VAR			
Larynx total	2	0	0	0	0	21	309	1776
Oral Cavity total	16	22	3	2	13	21	246	2028
Oropharynx total	6	11	2	0	11	29	312	2035
Hypopharynx total	0	0	0	0	0	6	67	467
Nasopharynx total	6	0	0	0	3	7	47	169
Major Salivary Glands total	47	50	33	11	20	8	102	404
Total	77	83	38	13	47	92	1083	6879

*Squamous cell Carcinoma variants

Adenoid squamous carcinoma M8075/3
Spindle cell squamous carcinoma NOS M8074/3

**Other salivary variants

Salivary duct carcinoma M8500/3
Polymorphous low grade adenocarcinoma M8525/3
Adeno-squamous carcinoma M8560/3
Epithelial-myoepithelial carcinoma M8562/3
Basal cell adeno-carcinoma M8147/3

Appendix 4: Clinical Lines of Enquiry (2012)

The Clinical Lines of Enquiry below are those recently introduced to support the 2012 / 13 Peer Review Programme. For those in place during the collection period please refer to the sixth Annual Report

CLE national indicators

1. Percentage of new cases of head and neck cancer discussed at MDT*
2. Percentage of new cases of head and neck cancer discussed at MDT* where recorded T, N, M staging category is evident
3. Percentage of cases of head and neck cancer* where the interval from biopsy to reporting is less than 10 days
4. Percentage of new cases of head and neck cancer* where confirmed seen by a clinical nurse specialist (CNS) prior to commencement of treatment
5. Percentage of new cases of head and neck cancer* confirmed as having any pre-operative/ pre-treatment (includes radio and chemotherapy) dietetic assessment

New cases* as denominator are calculated from the Trust submissions with a date of diagnosis in the index period, and where an included anatomic site and valid histological diagnosis are entered.

(*relates to cancers of the larynx, oral cavity, oropharynx, nasopharynx, hypopharynx and major salivary glands matching to DAHNO inclusion criteria)

Appendix 5: Submission by networks - cancers where pre-treatment T and N staging recorded (cumulative)

Diagnosing Contact Network Name	Audit year*						
	2005	2006	2007	2008	2009	2010	2011
	%	%	%	%	%	%	%
3 Counties	0	0	97.2	77.6	86.4	86.1	77
Anglia	80	84.5	88.8	93.2	80.6	89.3	91.3
Arden	26.3	0	24.4	34.4	30.3	43	71.8
Avon, Somerset and Wiltshire	100	84.6	88.9	100	32.4	56.1	53.8
Central South Coast	0	0	100	30.3	41.8	64.5	90.7
Dorset	100	100	68.6	100	100	90.5	99.2
East Midlands	35.4	29.1	50	82.7	80.7	87.6	89.7
Essex	0	33.3	100	91.7	94.3	92.2	95.8
Greater Manchester and Cheshire	60	77.8	28	17.9	19	53.9	64.3
Greater Midlands	0	0	100	85.5	54.5	69.4	83.8
Humber and Yorkshire Coast	0	60	0	62.7	64.6	81.3	83.5
Kent and Medway	33.3	46.2	44.4	7.1	44.4	46.1	67.3
Lancashire and South Cumbria	66.7	87.5	95.2	90.3	70.4	84	69.7
Merseyside and Cheshire	95.8	93.3	94.6	72.8	72.4	92.8	69.8
Mount Vernon	0	0	0	71.6	84.5	88.8	83.2
North East London	0	0	100	95.5	81.4	89.4	69.7
North London	0	0	100	17.6	95.8	90.7	90.4
North of England	12.5	33	76.2	82.7	90.5	93.8	98.1
North Trent	100	78.9	63.6	94.7	97.4	98.3	99.2
North West London	0	0	0	72.2	76	60.6	57.5
Pan Birmingham	49.3	67.1	65.3	80.5	79.2	96.5	65.4
Peninsula	83.3	87.9	69.9	98.2	83.3	73.4	78.9
South East London	0	0	0	77.1	100	99.3	57.5
South West London	0	0	0	96.4	95	95.1	96.3
Surrey West Sussex and Hants	0	0	73.3	100	20.5	26	68.2
Sussex	0	0	50	98.8	49.6	85.6	90
Thames Valley	5.9	35.3	36.8	38.6	32.8	43.4	71.9
Yorkshire	66.1	74.7	84.1	78.5	65.8	83.7	94.8
North Wales	25	6.9	4	72.4	80.3	86.6	68.5
South East Wales	100	52.6	51.2	73	81.5	86.9	95.7
South West Wales	28.6	28.6	30	44.6	72	72.2	86.8
Private Hospitals	0	0	0	80	100	100	0
Not Known	0	0	100	100	0	0	0
Not recorded	54.4	42.7	49.9	51.6	66.7	0	0
Total	55.5	52	58.6	75	69.4	78.3	81.2

Cases included: all diagnoses

* Audit years run Nov to Oct. The year covering Jan to Oct is used in the headers e.g. 2005 = Nov 2004 to Oct 2005.

** Oropharynx, Hypopharynx, Nasopharynx and Major Salivary Glands collected from audit year 2008 onwards.

Non-Larynx/Oral Cavity cases prior to 2008 have been excluded.

Appendix 6: 2012 Membership of the audit / NCIN Head and Neck SSCRG Showing Professional and Charitable Bodies

Chair SSCRG	Richard Wight	DAHNO Audit Chair, BAHNO Audit Chair
National Team	Tim Cooper	NCAT-National Cancer Action Team
Cancer Network	Julie Taylor-Clarke	Humber and Yorkshire Coast Cancer Network
Cancer Registry	Monica Roche	Oxford Cancer Intelligence Unit
NCIN	Di Riley	
NCIN	Linda Dutton	Secretariat
NCIN	Nicky Coombes	Secretariat
NCIN - COSD	Trish Stokes	Cancer Outcomes Datasets
Peer Review	Lucy Evans	National Cancer Peer Review Team
HQIP	Helen Laing	HQIP –Healthcare Quality Improvement Partnership
IC - DAHNO	Julie Michalowski	HSCIC, CASU
IC - DAHNO	Tracie Lowe	HSCIC, CASU
Consumer	Christine Allmark	Patient liaison RCSEng
Voluntary Sector 1	Jean Fraser, (Malcolm Babb –Deputy)	NALC-National Association of Laryngectomy Clubs
Clinical Psychology	Gerry Humphris	Clinical Psychology
Surgery- ENT	Mark Watson	ENT UK Head and Neck
Nursing	Kathleen Mais	British Association of Head and Neck Oncology Nurses
Nursing - deputy	Lynda Farmer	British Association of Head and Neck Oncology Nurses
Oncology		Head and Neck Oncology
Palliative Care	Ged Corcoran	Palliative Care Association
Pathology - Oral	Edward Odell	British Oral and Maxillo Facial Pathology Association
Radiology	Julie Olliff	Royal College of Radiologists
Restorative Dentistry	Lorna McCaul	President BSSPD
BAHNO	Cyrus Kerawala	BAHNO Council Member
DAHNO	Graham Putnam	Vice Chair of DAHNO
Surgery - Oral and Maxillofacial Surgery	Austen Smith	British Association of Oral and Maxillofacial Surgeons
Therapies - Dietetics	Sarah Cameron	British Dietetic Association
Therapies - Speech and Language	Jo Patterson	Speech and Language Therapists
Thyroid	John Watkinson	BAETS President
Thyroid Sub group chair	David Chadwick	BAETS Secretary

Appendix 7: Data Quality Indicators by Cancer Network

Cancer Network	Case ascertainment % of estimate	% Pre-treatment T and N staging	% Cases with recorded performance status 0-4	% Cases with co-morbidity status	% All 3 of PS, co-morbidity and staging	% Cases with interval to biopsy recorded	% Cases with treatment record
3 Counties	119.1 ●	77.0 ■	19.7 ▲	49.3 ▲	8.8 ▲	15.2 ▲	72.8 ■
Anglia	105.7 ●	91.0 ●	68.7 ■	26.8 ▲	67.4 ■	1.4 ▲	57.5 ■
Arden	94.2 ●	72.0 ■	15.5 ▲	0.0 ▲	3.2 ▲	41.8 ▲	73.8 ■
Avon, Somerset and Wiltshire	100.4 ●	54.0 ▲	4.4 ▲	0.4 ▲	1.9 ▲	4.4 ▲	64.0 ■
Central South Coast	89.5 ●	91.0 ●	90.6 ●	88.4 ●	88.4 ●	11.6 ▲	88.9 ●
Dorset	109.2 ●	99.0 ●	84.7 ●	83.1 ●	92.8 ●	95.9 ●	89.5 ●
East Midlands	67.6 ▲	90.0 ●	85.1 ●	60.3 ■	76.9 ●	75.6 ●	78.6 ●
Essex	92.4 ●	96.0 ●	81.9 ●	72.3 ■	85.1 ●	33.1 ▲	47.6 ▲
Greater Manchester and Cheshire	92.9 ●	64.0 ■	34.2 ▲	18.6 ▲	28.2 ▲	36.8 ▲	32.7 ▲
Greater Midlands	128.2 ●	84.0 ■	66.3 ■	57.7 ■	67.2 ■	37.8 ▲	71.8 ■
Humber and Yorkshire Coast	89.7 ●	83.0 ■	49.6 ▲	46.5 ▲	38.3 ▲	92.0 ●	78.7 ●
Kent and Medway	76.3 ▲	67.0 ■	54.2 ■	18.5 ▲	56.0 ■	17.2 ▲	61.9 ■
Lancashire and South Cumbria	103.6 ●	70.0 ■	16.9 ▲	0.0 ▲	15.9 ▲	8.6 ▲	54.1 ■
Merseyside and Cheshire	114.5 ●	70.0 ■	34.2 ▲	4.7 ▲	25.1 ▲	12.5 ▲	59.3 ■
Mount Vernon	89.9 ●	83.0 ■	25.7 ▲	29.7 ▲	34.7 ▲	4.1 ▲	71.3 ■
North East London	78.7 ▲	70.0 ■	35.5 ▲	52.3 ■	28.1 ▲	19.4 ▲	63.9 ■
North London	120.1 ●	90.0 ●	87.3 ●	93.9 ●	83.5 ●	78.1 ●	59.8 ■
North of England	97.8 ●	98.0 ●	76.7 ●	82.0 ●	80.7 ●	82.9 ●	82.5 ●
North Trent	88.9 ●	99.0 ●	89.4 ●	30.2 ▲	92.7 ●	80.0 ●	76.3 ●
North West London	51.4 ▲	58.0 ▲	25.0 ▲	20.0 ▲	16.0 ▲	32.1 ▲	85.8 ●
Pan Birmingham	78.4 ▲	65.0 ■	61.2 ■	43.9 ▲	38.5 ▲	42.5 ▲	57.0 ■
Peninsula	95.2 ●	79.0 ■	55.7 ■	36.6 ▲	48.4 ▲	49.0 ▲	76.8 ●
South East London	69.4 ▲	58.0 ▲	0.7 ▲	4.8 ▲	0.7 ▲	4.1 ▲	98.6 ●
South West London	92.7 ●	96.0 ●	98.8 ●	98.8 ●	96.6 ●	98.1 ●	83.5 ●
Surrey West Sussex and Hants	138.3 ●	68.0 ■	1.1 ▲	2.2 ▲	1.8 ▲	4.3 ▲	75.0 ■
Sussex	104.2 ●	90.0 ●	75.3 ●	55.3 ■	63.8 ■	18.0 ▲	64.1 ■
Thames Valley	67.2 ▲	72.0 ■	30.7 ▲	25.5 ▲	26.1 ▲	28.5 ▲	64.6 ■
Yorkshire	103.8 ●	95.0 ●	61.4 ■	52.9 ■	59.9 ■	67.0 ■	83.5 ●
England	93.3	81.0	54.2	42.1	50.4	40.4	69.0
North Wales	87.6 ●	68.0 ■	30.4 ▲		27.2 ▲		83.7 ●
South East Wales	95.3 ●	96.0 ●	74.0 ■		71.1 ■		91.8 ●
South West Wales	109.1 ●	87.0 ●	51.5 ■		32.8 ▲		80.9 ●
Wales	97.3	87.0	57.8	0.0	49.9		86.7
England and Wales	93.5	81.2	54.4	39.4	50.4		70.1
	Key						
	< 80% ▲	<60% ▲	<50% ▲	<50% ▲	<50% ▲	<50% ▲	<50% ▲
		60 to 85% ■	50 to 75% ■	50 to 75% ■	50 to 75% ■	50 to 75% ■	50 to 75% ■
	>80% ●	>85% ●	>75% ●	>75% ●	>75% ●	>75% ●	>75% ●

Appendix 8: Findings Summary by Cancer Network

Cancer Network	Interval biopsy to reporting > 10 days	% Yes MDT discussion	% Cases with chest imaging	% Of cases where CNS at breaking bad news	% Seen by CNS prior to treatment	% Dietetic input prior to treatment	% Pre-treatment salt speech and swallowing assessment	Diagnosis to first treatment (days)	Diagnosis to first treatment surgery (days)	Diagnosis to first treatment radiotherapy (days)	% 1 year crude mortality
3 Counties	90.6 ●	95.8 ●	48.8 ▲	36.6 ■	75.3 ●	32 ■	34 ■	45	39	46.5	20.7
Anglia	100 ●	91.9 ●	55.6 ■	8.7 ▲	31.4 ■	5.5 ▲	21.5 ■	29	19	38	22.7
Arden	93 ●	99 ●	55.3 ■	25.2 ■	76.4 ●	50.8 ■	61.5 ●	40.5	41	53.5	24.6
Avon, Somerset and Wiltshire	50 ■	79.6 ■	44 ▲	17.8 ▲	57.1 ■	2.5 ▲	41.8 ■	33.5	29.5	39	15.0
Central South Coast	88.5 ●	98.7 ●	25.8 ▲	51.1 ■	59.5 ■	20.4 ■	7 ▲	28	28	42	16.6
Dorset	83.9 ●	99.2 ●	54.8 ■	90.3 ●	92.7 ●	48 ■	8.8 ▲	30	31	34.5	23.3
East Midlands	91.8 ●	94.1 ●	60.3 ■	46.2 ■	50.9 ■	10.9 ▲	0.4 ▲	34	26	43.5	18.3
Essex	92.7 ●	95.8 ●	39.2 ▲	84.9 ●	86.8 ●	72.2 ●	65.3 ●	47	26	55	19.8
Greater Manchester and Cheshire	89.7 ●	70.9 ▲	51 ■	23.7 ■	73.8 ●	17.6 ▲	15.1 ▲	32	28	45	20.8
Greater Midlands	83.6 ●	92.8 ●	56.7 ■	58.1 ■	88.4 ●	32.8 ■	21 ■	35	28	41	20.3
Humber and Yorkshire Coast	84.3 ●	88.2 ●	29.9 ▲	32.3 ■	2 ▲	19.4 ▲	11.8 ▲	27.5	22	53	18.7
Kent and Medway	67.9 ■	88.1 ●	11.9 ▲	6.5 ▲	19.4 ▲	12.9 ▲	8.6 ▲	36	34	42	21.2
Lancashire and South Cumbria	60 ■	75.8 ■	55.4 ■	8.2 ▲	65.3 ■	11.3 ▲	6.1 ▲	45	31.5	55	24.4
Merseyside and Cheshire	88.7 ●	78.1 ■	59.8 ■	19.5 ▲	36 ■	19.8 ▲	9.9 ▲	34	26	38	21.2
Mount Vernon	100 ●	89.1 ●	30.7 ▲	48.5 ■	83.8 ●	16.7 ▲	33.3 ■	33	27	39.5	18.4
North East London	90 ●	71 ▲	40 ▲	43.2 ■	55.1 ■	35.1 ■	37.2 ■	30.5	19	45.5	22.1
North London	92.2 ●	98.7 ●	47.2 ▲	84.3 ●	44.4 ■	16 ▲	36 ■	35	32	41.5	30.5
North of England	86.7 ●	97 ●	86.7 ●	40.8 ■	38.2 ■	45.1 ■	49.7 ■	38	35	41	21.7
North Trent	89.2 ●	97.6 ●	73.9 ■	50.2 ■	38 ■	14.9 ▲	25.1 ■	31	28	41	17.6
North West London	77.1 ●	98.3 ●	17.5 ▲	20.8 ■	20.4 ■	17.8 ▲	24.8 ■	21	14	27	9.8
Pan Birmingham	71.6 ■	80.6 ■	59.1 ■	44.7 ■	84.9 ●	31.6 ■	39.3 ■	49	40	60.5	22.2
Peninsula	86.8 ●	95.9 ●	57.7 ■	44.7 ■	72.3 ●	43.9 ■	39.8 ■	31	19	42	17.7
South East London	33.3 ▲	97.9 ●	0 ▲	0.7 ▲	4.2 ▲	0 ▲	0 ▲	27	24	38	21.6
South West London	89.9 ●	99.4 ●	60.4 ■	85.4 ●	58.4 ■	25.6 ■	27.1 ■	28	27	33	20.8
Surrey West Sussex and Hants	62.5 ■	100 ●	83.8 ●	1.1 ▲	95 ●	1.8 ▲	0.9 ▲	40	34	41	17.8
Sussex	87.1 ●	97.1 ●	69.4 ■	24.1 ■	89.4 ●	65.3 ●	40 ■	42	42	46	22.6
Thames Valley	92.2 ●	81.8 ■	14.6 ▲	68.2 ■	76.6 ●	1.7 ▲	0 ▲	22	0	47	22.1
Yorkshire	89.4 ●	97.8 ●	76 ●	17.1 ▲	52.4 ■	14.2 ▲	13.2 ▲	40	34	45.5	20.7
England	87.2	90.3	53.5	36.8	55.3	23.1	22.6				20.4
North Wales	88.2 ●	87 ●	52.2 ■					37	0	69	18.3
South East Wales	83.2 ●	98.1 ●	88.9 ●					22	0	56	24.4
South West Wales	85.8 ●	94.9 ●	58.8 ■					30	0	73	21.7
Wales	84.7	94.7	71.8								22.0
England and Wales	86.9	90.6	54.7					34	28	42	20.5

		Key											
<50%	▲	<75%	▲	<50%	▲	<20%	▲	<20%	▲	<20%	▲	<20%	▲
50 to 75%	■	75 to 85%	■	50 to 75%	■	20 to 70%	■	20 to 70%	■	20 to 60%	■	20 to 60%	■
>75%	●	>85%	●	>75%	●	>70%	●	>70%	●	>60%	●	>60%	●

Appendix 9

The following documents are available via hyperlinks in the main body of the report.

- Description of Performance Status (PS) at point of treatment decision for larynx, oral cavity, hypopharynx and oropharynx
- Co-morbidity by level of decompensation for total separate site groups
- Routes of submission
- Larynx – first treatment microlaryngeal resection on or radiotherapy
- Number of patients registered with new head and neck primaries by provider organisation
- Head and neck cancer services – provision by provider organisation
- Submission by cancer network and provider of patients who underwent surgery for all anatomical sites where recording of pre-treatment and post resective pathological staging is identified
- Distribution of performance status at the point of treatment decision (cumulative)
- Distribution of co-morbidity index at point of treatment decision (cumulative)
- Completion of Performance Status (PS) , co-morbidity and final pre-treatment stage
- Percentage of patients where clinical nurse specialist (or designate) is present at the breaking of bad news
- Percentage of patients seen by a clinical nurse specialist prior to commencement of first treatment
- Percentage of patients having a pre-treatment dental assessment
- Percentage of patients having a pre-treatment speech and swallowing assessment
- Percentage of patients having a pre-treatment diatetic assessment
- Time from biopsy to reporting by provider (> 21 days)
- Percentage of patients having chest imaging by chest x-ray (CXR) or chest computerised tomography (CT) prior to MDT
- Interval from date of diagnosis to start of first definitive treatment by cancer network:
 - A) Surgery
 - B) Chemoradiotherapy
 - C) Radiotherapy
 - D) Any treatment
- Interval from date of diagnosis to start of first definitive treatment by provider organisation
 - A) Surgery
 - B) Radiotherapy
 - C) Chemotherapy
 - D) Chemoradiotherapy
- Larynx, oral cavity, oropharynx, hypopharynx, nasopharynx and major salivary gland - N+ stage at diagnosis

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