



HEAD AND NECK CANCERS
SCAN COMPARATIVE ANNUAL AUDIT REPORT
PATIENTS DIAGNOSED
1 January – 31 December 2009

REPORT NUMBER: SA HN01/11 W

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South East Scotland Cancer Network
Working regionally to improve cancer services

HEAD AND NECK CANCERS
In South East Scotland Cancer Network

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1 Document History

Version	Circulation to	Date	Comment
1.1	SCAN Group	24/11/2010	Circulated to SCAN H&N group for sense checking. Comments to be received by 8/12/2010. Amendments made.
1.2	Lead Clinicians and audit staff for sign-off meeting	28/1/2011	For discussion and preparation of action points. Amendments made to report following meeting.
2.1	SCAN Group	21/02/2011	For final comment following sign off meeting. Comments to be received by 07/03/2011.
2.2	No further comments: SCAN Group sign off confirmed	07/03/2011	Final preparation of report and SCAN Report Index number assigned.
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2 FOREWORD

This report presents analysis of data collected on Head & Neck cancer patients diagnosed between 1 January and 31 December 2009 in the four health board regions comprising S E Scotland Cancer Network (SCAN) – Borders, Dumfries & Galloway, Fife, and Lothian.

Basis of Analysis

There are currently no nationally agreed standards for Head & Neck cancer care. Measures presented are those incorporated into a draft set of Clinical Effectiveness Measures for the SCAN Head & Neck Group. They incorporate some items within the SIGN Guideline on Management of Head & Neck Cancers (No: 90 Date published: Oct 2006) and items from the Core Standards for Cancer published by NHS Quality Improvement Scotland (NHSQIS) in March 2008. This report is intended to provide baseline data against which improvement can be measured in subsequent years.

Patients included in the Report

Patients included: all patients diagnosed with Head & Neck Cancers 1 January – 31 December 2009

SCAN Region	Hospital	Lead Clinician	Audit Support
Lothian	St Johns Hospital at Howden, Royal Infirmary Edinburgh, Western General Hospital, EDI	Dr E Junor	Valerie Findlay
Dumfries & Galloway	D&G Royal Infirmary	Mr B Joshi Mr S Mahmood	Kirsten Moffat
Borders	Borders General Hospital	Mr S Moralee Mr M Armstrong	Valerie Findlay
Fife	Queen Margaret Hospital Victoria Hospital	**	Laura Huey

** H&N cancer is diagnosed locally but patients are treated in Lothian. There was no lead H&N consultant in Fife for 2009.

Data Collection

Patients were almost all identified through registration at the weekly regional multidisciplinary meeting, and through checks made against pathology listings. Data capture was dependent on casenote audit or review of various hospitals electronic records systems. Data was recorded on Access databases and eCase (in Dumfries & Galloway).

Datasets and definitions

The dataset collected is the Scottish National Core Minimum Dataset as published by ISD on 1st July 2005. This may be viewed on the ISD website (www.isdscotland.org/cancer) Further information on the dataset and definitions can be obtained from Valerie Findlay, SCAN Cancer Audit Facilitator, SCAN Audit Office, c/o Dept of Clinical Oncology, Western General Hospital, Edinburgh. valerie.findlay@luht.scot.nhs.uk

Data Quality

All hospitals in the region participate in the Quality Assurance programme provided by the National Services Scotland Information Services Division (ISD). QA of the full Head & Neck dataset has not yet been undertaken.

Estimate of Case Ascertainment

Overall case ascertainment is estimated at 123% when compared with a 5 year average of Scottish Cancer Registry data from 2004-2008. Case ascertainment levels greater than 100% may be attributable to an increase in incidence, however, allowance has to be made in reviewing results where numbers are small and variation may be due to chance.

Process for reviewing and reporting the results

The report was circulated to members of the SCAN Head & Neck Group on 24/11/2010. The report was also reviewed by the Mr Guy Vernham (Chair of the SCAN H&N group), with the assistance of the audit staff. Arising from these discussions a number of items of data were checked and amendments made so that there was agreement on the results shown. Issues raised by the results were considered by the Lead Clinician, and comments have been added to the report. The Lead Clinician agreed to circulate the report for final sign off by the SCAN group on 28/01/2011.

After final sign off the report will be sent to Clinical Governance groups within the four health boards and to the Regional Cancer Planning Group, before being placed on the SCAN website.

3 Comment by Mr Guy Vernham- Chair SCAN Head and Neck Group

A key purpose of S E Scotland Cancer Network is to promote equity of treatment across its constituent health boards and I am pleased to present the SCAN Head & Neck Group Comparative Audit Report on data relating to patients newly-diagnosed in the year 2009 who were treated in one of the four constituent health board areas (Borders, Dumfries & Galloway, Fife, and Lothian, and the tertiary centre in Edinburgh).

Comparing results offers the opportunity to consider any specific points of difference, and comments within the report will draw attention to these. Allowance has to be made in reviewing results where numbers are small and variation may be due to chance.

The report also compares summary results between 2006 - 2008. It is important to demonstrate consistency and (where necessary) improvement in results over time.

We have been collecting the nationally-agreed dataset in SCAN health boards from 2004 and the process of collection and reporting is well-established. This report presents results based on very comprehensive coverage of the Head & Neck cancer population in the four health board areas. Results have been reviewed and checked locally by Head & Neck Cancer Lead Clinicians. This means that we can be confident in the accuracy of the results shown.

An important aim of the network is to monitor the quality of care received by Head & Neck cancer patients against nationally-agreed standards. At present there are no Scottish nationally-agreed clinical quality standards specific to Head & Neck cancers. In the absence of nationally-agreed standards we have developed some draft Clinical Effectiveness Measures based on SIGN Guideline on Management of Head & Neck Cancers (No: 90) and on items from the *Core Cancer Standards* which were published in March 2008 by NHS Quality Improvement Scotland (NHSQIS) (www.healthquality.org).

Overall the data in this report re-affirms our belief that the quality of the head and neck service across SCAN is of a high standard.

- Notably the figures demonstrate a significant increase in the total number of patients to in excess of 300 (an increase of 24.3% on the 2008 figures). Continuation of this trend will have resource implications.
- It is pleasing to note that the previously reported improvement in CT scanning of the chest (in line with SIGN Guideline 3.2) has been maintained.
- The incidence of oropharyngeal carcinoma continues to rise in line with other national and international figures. This increase is largely due to human papilloma virus related disease.
- An increased incidence of major salivary gland tumours is noted, but numbers are small. However, my impression is that 2010 figures may show this being maintained.

As noted in the 2008 report, we have measured our practice against SIGN Guidance (7.3) referring to time from surgery to commencement of post-operative radiotherapy. Whilst this is a very challenging guideline, it is concerning that the figures demonstrate that the previously noted steady improvement has stalled. Post-operative clinical problems are a common unavoidable cause for delay, but further improvements to minimise unnecessary delays will be sought.

Dr Junor commented in the 2008 report that meaningful outcome data needs to be recorded and reported. We will continue to work towards this, the aim being to compare our results with those from the other Scottish networks and also more widely through the DAHNO project supported by the NHS Information Centre for Health & Social Care (www.ic.nhs.uk).

Guy Vernham
 Consultant ENT Surgeon
 January 2011

4 Action Points

Listed below are some possible areas for improvement identified through the report with proposed action outlined against each:

Report Section	Possible area for improvement	Proposed action	Which clinical standard will this meet?
Table 16	Use a more realistic target in line with BAHNO standards (max 42 days from surgery to start of XRT)	Change to "surgery to start of post op radiotherapy within 42 days"	No Scottish standard in place. SIGN Guideline implies 100% patients to have completed XRT within 11 weeks of surgery but BAHNO standard more realistic to allow for post-surgical healing
Table 11	Include adjuvant treatment as well as first treatment.	Include adjuvant treatment in next SCAN Comparative Report	No specific standard in place at present but would give fuller picture of modalities used in H&N cancer treatment
Additional section	Extend outcome reporting	Report on overall survival	No specific standard in place at present

5 SUMMARY OF RESULTS

Achievement against SCAN Head & Neck Group Draft Clinical Effectiveness Measures (April 2009)

Table	Measure	Target (%)	Lothian	Borders	Fife	D&G	SCAN 2009	SCAN 2008	SCAN 2007	SCAN 2006
1	Number of patients	n/a	193	15	70	29	307	247	267	243
4	TNM recorded (%)	100	90.7	86.7	84.3	72.4	91.2	97.9	95.0	97.1
10	Discussed at MDM (%)	100	96.9	100	97.1	96.6	97.1	97.2	99.2	99.1
12	CT/ Chest (%)	100	94.8	100	90.0	96.6	94.1	96.0	88.4	77.4
13	CT/MRI Head & Neck (%)	100	96.9	100	100	100	98.0	100	96.5	86.4
16	Max 11 weeks from surgery to completion of radiotherapy (%)	100	44.1	0	25.0	0	34.0	37.3	29.6	25.7
17	Treatment related mortality (< 31 days from definitive surgery) (%)	0	0	0	0	0	0	0.9	0	0
19	Patients <70years old with stage 3 or 4 disease without primary surgery should be treated with chemo radiotherapy (%)	100	91.9	100	94.1	100	96.5	89.7	97.8	83.0

Key

95-100% of target	75-94% of target	<75% of target

Note: 6 patients from Dumfries and Galloway were treated in Glasgow although they were diagnosed in the SCAN region. Their treatment is included in this report but is not a true reflection of the service given in SCAN.

6 RESULTS

Patient numbers and estimate of case ascertainment

Table 1

Health Board	n	Scottish Cancer Registry (annual average 2004-2008)	Estimate of case ascertainment	Male	Female
Lothian	193	157	123%	128	65
Borders	15	13.3	113%	11	4
Fife	70	62.3	112%	45	25
Dumfries & Galloway	29	28.3	103%	22	7
SCAN	307	260.9	118%	206	101

Source: Scottish Cancer Registration figures 2004-2008

As numbers for Head and Neck cancer patients are relatively small an average of Cancer Registration figures was taken from 2004 -2008 to provide a more accurate estimate of case ascertainment for 2009. Variations in estimates may be accounted for by the following differences between audited cohorts: cancer registration figures use "Incidence Date" rather than "Date of Diagnosis" and also include patients diagnosed at post mortem; Dumfries and Galloway may have patients who although resident in Scotland will be diagnosed in England and are therefore not included in the audit. Further information on Cancer Registration figures can be found on the ISD website <http://www.isdscotland.org/isd/183.html>

Frequencies of age at date of diagnosis of Head and Neck cancer

Table 2

Age Group	Lothian		Borders		Fife		D&G		SCAN	
<20	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
20-29	1	0.5%	0	0.0%	0	0.0%	0	0.0%	1	0.3%
30-39	4	2.1%	0	0.0%	0	0.0%	0	0.0%	4	1.3%
40-49	24	12.4%	1	6.7%	5	7.1%	2	6.9%	32	10.4%
50-59	48	24.9%	2	13.3%	14	20.0%	4	13.8%	68	22.1%
60-69	52	26.9%	7	46.7%	30	42.9%	11	37.9%	100	32.6%
70-79	45	23.3%	5	33.3%	10	14.3%	8	27.6%	68	22.1%
80-89	16	8.3%	0	0.0%	8	11.4%	3	10.3%	27	8.8%
>89	3	1.6%	0	0.0%	3	4.3%	1	3.4%	7	2.3%
Total	193	100.0%	15	100.0%	70	100.0%	29	100.0%	307	100.0%

Breakdown by cancer site

Table 3

Cancer site	Lothian		Borders		Fife		D&G		SCAN	
Oral Cavity	54	28.0%	5	33.3%	17	24.3%	10	34.5%	86	28.0%
Oropharynx	46	23.8%	3	20.0%	19	27.1%	7	24.1%	75	24.4%
Nasopharynx	4	2.1%	0	0.0%	1	1.4%	1	3.4%	6	2.0%
Hypopharynx	18	9.3%	0	0.0%	4	5.7%	2	6.9%	24	7.8%
Larynx	58	30.1%	4	26.7%	17	24.3%	9	31.0%	88	28.7%
Nose and ear	2	1.0%	2	13.3%	0	0.0%	0	0.0%	4	1.3%
Paranasal sinuses	0	0.0%	0	0.0%	1	1.4%	0	0.0%	1	0.3%
Major salivary glands	7	3.6%	0	0.0%	8	11.4%	0	0.0%	15	4.9%
Lip	1	0.5%	0	0.0%	0	0.0%	0	0.0%	1	0.3%
Not yet Known	3	1.6%	1	6.7%	3	4.3%	0	0.0%	7	2.3%
Total	193	100.0%	15	100.0%	70	100.0%	29	100.0%	307	100.0%

Note: Depending on the location of the lesion some patients with lip cancer are reported by the skin audit team although often reviewed and treated by the Head and Neck oncology team.

Clinical stage at presentation

SCAN (n=307)

Table 4

	Oral cavity	Oro pharynx	Naso pharynx	Hypo pharynx	Larynx (total)	Para nasal Sinus	Major Salivary Glands	Lip	Nose and Ear	Not Yet Known	Total	% of Total
Stage 0	2	1	0	0	5	0	0	0	1	0	9	2.9
Stage 1	24	4	0	1	28	0	0	1	2	0	60	19.5
Stage 2	14	4	0	2	15	0	1	0	0	0	36	11.7
Stage 3	11	9	2	5	14	0	2	0	0	0	43	14.0
Stage 4 (total)	28	51	2	14	24	1	3	0	0	0	123	40.1
Not recorded	7	6	2	2	2	0	9	0	1	7	36	11.7
Total	86	75	6	24	88	1	15	1	4	7	307	100

Note: Of the 36 patients without staging 8 have an unknown primary tumour and are not included in the percentage calculated in "% TNM recorded" in Section 5 Summary of Results.

SCAN- % Stage at presentation of the five most frequent Head and Neck cancers

Table 5

Stage at presentation	Oral Cavity %	Oropharynx %	Nasopharynx %	Hypopharynx %	Larynx %
Stage 0	2.3	1.3	0.0	0.0	5.7
Stage 1	27.9	5.3	0.0	4.2	31.8
Stage 2	16.3	5.3	0.0	8.3	17.0
Stage 3	12.8	12.0	16.7	20.8	15.9
Stage 4	32.6	68.0	33.3	58.3	27.3
Not Recorded	8.1	8.0	50.0	8.3	2.3
Total	100.0	100.0	100.0	100.0	100.0

SCAN 2007-2009 - % Stage at presentation of the five most frequent Head and Neck

Table 6

Stage at presentation	Oral Cavity %			Oropharynx %			Nasopharynx %			Hypopharynx %			Larynx %		
	2007	2008	2009	2007	2008	2009	2007	2008	2009	2007	2008	2009	2007	2008	2009
Stage 0	0.0	0.0	2.3	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	2.4	2.8	5.7
Stage 1	45.6	20.3	27.9	4.4	8.9	5.3	28.6	0.0	0.0	0.0	5.6	4.2	38.6	31.0	31.8
Stage 2	13.2	24.6	16.3	11.8	7.1	5.3	0.0	0.0	0.0	11.5	0.0	8.3	16.9	21.1	17.0
Stage 3	11.8	11.6	12.8	10.3	17.9	12.0	0.0	12.5	16.7	15.5	27.8	20.8	18.0	15.5	15.9
Stage 4	26.5	34.8	32.6	70.6	62.5	68.0	57.1	75.0	33.3	73.0	61.1	58.3	20.5	28.2	27.3
Not Recorded	3.0	8.6	8.1	2.9	3.6	8.0	14.3	12.75	50.0	0.0	5.6	8.3	3.6	1.4	2.3
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Clinical stage at presentation- by health board

Lothian n=193

Table 7a

	Oral cavity	Oro pharynx	Naso pharynx	Hypo pharynx	Larynx (total)	Paranasal Sinus	Major Salivary Glands	Lip	Nose and Ear	Unknown primary	Total	% of Total
Stage 0	1	1	0	0	4	0	0	0	1	0	7	3.6
Stage 1	18	3	0	1	15	0	0	1	1	0	39	20.2
Stage 2	9	3	0	1	9	0	1	0	0	0	23	11.9
Stage 3	6	7	1	4	11	0	2	0	0	0	31	16.1
Stage 4 (total)	16	31	1	10	18	0	0	0	0	0	76	39.4
not recorded	4	1	2	2	1	0	4	0	0	3	17	8.8
Total	54	46	4	18	58	0	7	1	2	3	193	100.0%

Fife n=70

Table 7b

	Oral cavity	Oro pharynx	Naso pharynx	Hypo pharynx	Larynx (total)	Paranasal Sinus	Major Salivary Glands	Lip	Nose and Ear	Unknown Primary	Total	% of Total
Stage 0	1	0	0	0	1	0	0	0	0	0	2	2.9
Stage 1	4	1	0	0	6	0	0	0	0	0	11	15.7
Stage 2	1	1	0	0	4	0	0	0	0	0	6	8.6
Stage 3	2	2	0	1	2	0	0	0	0	0	7	10.0
Stage 4 (total)	8	13	1	3	4	1	3	0	0	0	33	47.1
not recorded	1	2	0	0	0	0	5	0	0	3	11	15.7
Total	17	19	1	4	17	1	8	0	0	3	70	100

Borders n=15

Table 7c

	Oral cavity	Oro pharynx	Naso pharynx	Hypo pharynx	Larynx (total)	Paranasal Sinus	Major Salivary Glands	Lip	Nose and Ear	Unknown Primary	Total	% of Total
Stage 0	0	0	0	0	0	0	0	0	0	0	0	0.0
Stage 1	0	0	0	0	2	0	0	0	1	0	3	20.0
Stage 2	1	0	0	0	1	0	0	0	0	0	2	13.3
Stage 3	2	0	0	0	1	0	0	0	0	0	3	20.0
Stage 4 (total)	2	3	0	0	0	0	0	0	0	0	5	33.3
not recorded	0	0	0	0	0	0	0	0	1	1	2	13.3
Total	5	3	0	0	4	0	0	0	2	1	15	100

Dumfries and Galloway n=29

Table 7d

	Oral cavity	Oro pharynx	Naso pharynx	Hypo pharynx	Larynx (total)	Paranasal Sinus	Major Salivary Glands	Lip	Nose and Ear	Unknown Primary	Total	% of Total
Stage 0	0	0	0	0	0	0	0	0	0	0	0	0.0
Stage 1	2	0	0	0	5	0	0	0	0	0	7	24.1
Stage 2	3	0	0	1	1	0	0	0	0	0	5	17.2
Stage 3	1	0	1	0	0	0	0	0	0	0	2	6.9
Stage 4 (total)	2	4	0	1	2	0	0	0	0	0	9	31.0
not recorded	2	3	0	0	1	0	0	0	0	0	6	20.7
Total	10	7	1	2	9	0	0	0	0	0	29	100

SCAN Health boards- comparison of % stage at presentation of the five most frequent Head and Neck cancers

Table 9

Stage at presentation	Oral cavity				Oropharynx				Nasopharynx				Hypopharynx				Larynx			
	Lothian	Fife	BGH	D&G	Lothian	Fife	BGH	D&G	Lothian	Fife	BGH	D&G	Lothian	Fife	BGH	D&G	Lothian	Fife	BGH	D&G
Stage 0	1.9%	5.9%	0.0%	0.0%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	n/a	0.0%	0.0%	0.0%	n/a	0.0%	6.9%	5.9%	0.0%	0.0%
Stage 1	33.3%	23.5%	0.0%	20.0%	6.5%	5.3%	0.0%	0.0%	0.0%	0.0%	n/a	0.0%	5.6%	0.0%	n/a	0.0%	25.9%	35.3%	50.0%	55.6%
Stage 2	16.7%	5.9%	20.0%	30.0%	6.5%	5.3%	0.0%	0.0%	0.0%	0.0%	n/a	0.0%	5.6%	0.0%	n/a	50.0%	15.5%	23.5%	25.0%	11.1%
Stage 3	11.1%	11.8%	40.0%	10.0%	15.2%	10.5%	0.0%	0.0%	25.0%	0.0%	n/a	0.0%	22.2%	25.0%	n/a	0.0%	19.0%	11.8%	25.0%	0.0%
Stage 4	29.6%	47.1%	40.0%	20.0%	67.4%	68.4%	100.0%	57.1%	25.0%	100.0%	n/a	0.0%	55.6%	75.0%	n/a	50.0%	31.0%	23.5%	0.0%	22.2%
Not Recorded	7.4%	5.9%	0.0%	20.0%	2.2%	10.5%	0.0%	42.9%	50.0%	0.0%	n/a	100.0%	11.1%	0.0%	n/a	0.0%	1.7%	0.0%	0.0%	11.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	n/a	100.0%	100.0%	100.0%	n/a	100.0%	100.0%	100.0%	100.0%	100.0%

Patients reviewed at MDM

Table 10

	Lothian	Borders	Fife	D&G	SCAN	% of Total
n=	193	15	70	29	307	100.0
Patients seen MDT	187	15	68	28	298	97.1
Patients not seen by MDT	6	0	2	1	9	2.9

First Treatment

Table 11

	Lothian		Borders		Fife		D&G		SCAN	% of Total
n=	193		15		70		29		307	
Surgery	88	45.6%	9	60.0%	33	47.1%	16	55.2%	146	47.6%
Radiotherapy	35	18.1%	3	20.0%	11	15.7%	2	6.9%	51	16.6%
Chemotherapy	24	12.4%	0	0.0%	11	15.7%	1	3.4%	36	11.7%
Synchronous ChemoXRT	19	9.8%	2	13.3%	7	10.0%	7	24.1%	35	11.4%
No Active Treatment	20	10.4%	0	0.0%	6	8.6%	2	6.9%	28	9.1%
Patient refused all therapies	3	1.6%	1	6.7%	2	2.9%	1	3.4%	7	2.3%
Other therapy	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Watchful waiting	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Died before treatment	4	2.1%	0	0.0%	0	0.0%	0	0.0%	4	1.3%
Not recorded	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

Note: The above table only includes first treatment and does not reflect the whole treatment plan for H&N patients. Many go on to have adjuvant treatment which is currently not reported. A complete treatment summary would give a more accurate account of the extent of treatment modalities employed in the treatment of Head & Neck cancer. This is an action point for 2010.

All patients with head and neck cancer should undergo chest CT
(SIGN guideline 3.2.5)

Table 12

	Lothian	%	Borders	%	Fife	%	D&G	%	SCAN	%
n=	193	n/a	15	n/a	70	n/a	29	n/a	307	n/a
CT Chest/Thorax	183	94.8	15	100	63	90.0	28	96.6	289	94.1
No imaging recorded	10	5.2	0	0	7	10.0	1	3.4	18	5.9

There is no evidence that CT or MRI improves the accuracy of primary staging of T1 laryngeal tumours which are localised and confined to one vocal cord with no extension into the anterior commissure. The purpose of CT chest is to detect synchronous lung tumours in a population of smokers. CT of the chest in stage T2-T4 tumours is for staging purposes in addition to detection of a second primary tumour.

All patients with head and neck cancer should undergo CT/MRI of primary tumour site (SIGN guideline 3.2.3)

Exclusions= Tis or T1 not requiring imaging

Table 13

	Lothian n=193	%	Borders n=15	%	Fife n=70	%	D&G n=29	%	SCAN n= 307	%
Eligible for imaging (n=)	192	99.5	15	100	69	98.6	29	100	305	99.3
CT or MRI Head/Neck	186	96.9	15	100	69	100	29	100	299	98.0
No imaging recorded in eligible group	6	3.1	0	0	0	0	0	0	6	2.0

% Comparison of the incidence of CT/MRI of primary tumour and Chest CT in SCAN from 2006-2009

Table 14

	CT/MRI primary tumour %	CT chest %
2006	86.4	77.4
2007	96.5	88.4
2008	100	96.0
2009	98.0	94.1

T1 larynx first treatment summary

n= number of patients diagnosed with T1N0 larynx

Table 15

	Lothian	%	Borders	%	Fife	%	D&G	%	SCAN	%
n=	15	n/a	2	n/a	6	n/a	5	n/a	28	100
Surgery	7	46.6	2	100	3	50.0	3	60.0	15	53.6
Radiotherapy	8	53.3	0	0.0	3	50.0	2	40.0	13	46.4
Surgery and Post- op Radiotherapy	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

Patients with early glottic cancer (T1N0) may be treated by endoscopic laser excision, partial laryngectomy or radiotherapy (SIGN 11.1). Radiotherapy offers voice preservation with surgery available as salvage. All 15 patients with surgery as first treatment had laser resection.

Overall treatment time from definitive surgery to completion of XRT should be <11 weeks

(Sign guideline 7.3)

Exclusions= Patients having neck dissection or biopsy

Table 16

	Lothian	%	Borders	%	Fife	%	D&G	%	SCAN	%
Number patients having post op XRT/ chemoXRT=n	34	n/a	4	n/a	12	n/a	3	n/a	53	n/a
Surgery to completion of XRT<11 weeks	15	44.1	0	0.0	3	25.0	0	0.0	18	34.0

Note: Although the SIGN guideline implies that 100% of patients should have completed radiotherapy within 11 weeks of surgery, delayed healing post surgery can make it impossible to hit this target. In line with BAHNO standards we consider a target of 42 days from surgery to post operative radiotherapy to be more realistic and will look at this in future reports.

Treatment related mortality: death <31 days from definitive surgery

Exclusions= Patients having neck dissection

Table 17

	Lothian	Borders	Fife	D&G	SCAN
Number of patients with definitive surgery	70	7	31	9	117
Patients dying within 30 days of surgery	0	0	0	0	0

Neck dissection showing Extra Capsular Spread who then proceed to chemoradiation

N = Patients having neck dissection

Exclusions= patients who have chemotherapy prior to neck dissection, >70 years, unfit for treatment.

Table 18

	Lothian	%	Borders	%	Fife	%	D&G	%	SCAN	%
Patients excluded	19	n/a	2	n/a	0	n/a	0	n/a	21	n/a
Patients with Neck Dissection (after exclusions)=n	27	100	3	100	10	100	6	100	46	100
Patients with ECS	3	11.1	2	67.0	6	60.0	2	33.3	13	28.3
ECS proceeding to chemorad or XRT & cetuximab	3	100	2	100	5	83.3	2	100	12	92.3
ECS proceeding to XRT only	0	0	0	0	1	16.7	0	0	1	7.7

Patients <70years with stage 3 or 4 disease without primary surgery should be treated with chemoradiotherapy

N = Number of patients <70 years old with stage 3 or 4 disease who have not had primary surgery

Exclusions = Patients having palliative chemotherapy, unfit patients, patients who died before treatment, patients who refused treatment.

Table 19

	Lothian	%	Borders	%	Fife	%	D&G	%	SCAN	%
Patients <70 years with stage 3/4 disease	75	n/a	5	n/a	29	n/a	8	n/a	117	n/a
Patients with primary surgery	25	n/a	3	n/a	8	n/a	4	n/a	40	n/a
Exclusions	15	n/a	1	n/a	4	n/a	0	0.0	20	17.1
n=	35	100	1	100	17	100	4	100	57	100
ChemoradXRT & cetuximab	34	97.1	1	100	16	94.1	4	100	55	96.5
No chemorad	3	8.6	0	0.0	1	5.9	0	0	4	7.0

Note: Radiotherapy and cetuximab is considered an alternative treatment to chemoradiotherapy for patients unfit for chemotherapy

Surgical Margins Achieved

N= all patients having surgery

Exclusions= patients having laser resection, patients having neck dissection, and/or biopsy.

Table 20

Margin achieved	Lothian	%	Borders	%	Fife	%	D&G	%	SCAN	%
n=	62	n/a	5	n/a	25	n/a	4	n/a	96	n/a
>5mm	18	29.0	2	40.0	4	29.4	1	25.0	25	26.0
1-5mm	27	43.5	1	20.0	9	52.9	2	50.0	39	40.6
<1mm	5	8.1	1	20.0	7	5.9	0	0.0	13	13.5
Involved margin	7	11.3	1	20.0	2	0.0	0	0.0	10	10.4
uncertain	0	1.6	0	0.0	0	12.0	1	25.0	1	1.0
Not recorded	5	8.1	0	0.0	3	11.8	0	0.0	8	8.3

Ideally surgeons try to have 5mm of tissue around the tumour which is free of disease. This is often technically impossible because of the situation of the tumour. Where the margin is "not recorded" it may be that the margin is clear but is not given a measurement in the pathology report.

GLOSSARY OF TERMS

Anterior commissure – point at which the vocal cords meet in front of the larynx.

BAHNO – British Association of Head and Neck oncologists.

CT Scan - Computerised Tomography. This scan uses X-rays and a computer to create detailed images of the inside of your body.

Chemotherapy- The treatment of cancer with cell killing (cytotoxic drugs). Different types of drugs, dosage and delivery systems are used depending on the size and type of cancer.

Chemoradiotherapy – The treatment of cancer with a combination of chemotherapy and radiotherapy.

Diagnosis – When the doctor identifies the nature of your cancer

ECS – Extra capsular spread. When cancer has spread beyond the lymph node capsule.

Endoscope - The endoscope is a thin, flexible tube with a bright light at the end. Looking through it the Doctor gets a clear view of the different areas of the nose and throat and can check whether or not any disease or abnormality is present.

Laryngectomy- removal of the voice box

MDM- Multidisciplinary meeting. This is made up of professionals who are expert in diagnosing, treating and caring for people with cancer.

MRI- Magnetic Resonance Imaging. This scan uses a powerful magnetic field to see detailed internal structures.

Neck Dissection – A surgical procedure to remove lymph nodes from the neck which may contain cancer cells. A neck dissection helps to control the spread of Head and Neck cancer to the rest of the body.

Postoperative – After an operation e.g. postoperative radiotherapy is radiotherapy after surgery has been performed.

Radiotherapy (XRT) - Uses high energy xrays to destroy cancer cells. Radiotherapy is usually given in a series of short treatment sessions over days or weeks.

Staging - A series of tests to establish the size and spread of the cancer.

Surgical Margins – Free edge of normal tissue seen by the pathologist. A “narrow margin” implies the tumour exists very close to the surgical margin.