

**SOUTH EAST SCOTLAND CANCER NETWORK
PROSPECTIVE CANCER AUDIT**

Head and Neck Cancer 2010 COMPARATIVE AUDIT REPORT

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HEAD AND NECK CANCERS
In South East Scotland Cancer Network

COMPARATIVE ANNUAL REPORT

PATIENTS DIAGNOSED 1 January – 31 December 2010

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Document History

Version	Circulation to	Date	Comment
1	SCAN Group	03/10/2011	Circulated to SCAN H&N group for sense checking. Comments to be received by 17/10/2011
2	Lead Clinicians and audit staff for sign-off meeting	04/11/2011	Amendments noted and action points agreed for 2012
3	SCAN Group	28/11/2011	Amendments and action points circulated to group for final comment by 19/12/2011
4	Final sign off	24/01/2012	Further amendments made following comments from Dr J. Ironside and Dr E. Junor. Assigned number and circulated to SCAN Group.
5	Circulated to Clinical governance groups and RCPG	07/02/2012	
Website version	Placed on SCAN website	June 2012	Following checks for any disclosive material.

**HEAD AND NECK CANCERS
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COMPARATIVE ANNUAL REPORT**

PATIENTS DIAGNOSED 1 January – 31 December 2010

1 Introduction and Methods

This report presents analysis of data collected on Head & Neck cancer patients diagnosed between 1 January and 31 December 2010 in the four health board regions comprising S E Scotland Cancer Network (SCAN) – Borders, Dumfries & Galloway, Fife, and Lothian. 5 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.

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 aims to address action points raised in the 2009 annual report.

Patients included in the Report

All patients diagnosed with Head & Neck Cancers 1 January – 31 December 2010

SCAN Region	Hospital	Lead Clinician	Audit Support
Lothian	St John's Hospital at Howden, Royal Infirmary Edinburgh, Western General Hospital, Edinburgh Dental Hospital	Mr G Vernham (Chair SCAN H&N Group)	Valerie Findlay (SCAN Audit Facilitator)
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 2010. Patients are initially reviewed locally by visiting consultant from Lothian*

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 (QA) 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 106% when compared with a 5 year average of Scottish Cancer Registry data from 2005-2009. Case ascertainment levels greater than 100% may be attributable to an increase in incidence. 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 03/10/2011 for comment. The draft was then reviewed at a meeting on 4/11/2011 by Dr J. Ironside, Mr G. Vernham, Fiona Haston (Head & Neck Clinical Nurse Specialist) and audit staff. Following a second circulation to the SCAN Group on 28/11/2011 further comments were received from Dr E. Junor. The draft was amended and comments added to the report.

Actions for Improvement

After final sign off, the process is for the report to be sent to the Clinical Governance groups within the four health boards and to the Regional Cancer Planning Group. Action plans and progress with plans will be highlighted to the groups. The report will be placed on the SCAN website once it has been fully signed-off and checked for any disclosive material.

Action points for 2010: as part of clinical sign-off areas for improvement are highlighted in the Action Plan 2010 on page 6.

Action points from 2009 results are noted under Table 9, Table 13 and Table 19.

2 Comment by Chair SCAN Head & Neck Group - Mr Guy Vernham

The 2010 report in most respects demonstrates similar raw statistics to those obtained in 2009 and I believe reflects a high quality of care and good compliance with national standards and guidelines. I would draw attention to the following:

- There has been a small reduction in the total number of patients referred to the MDM from 307 in 2009 to 290 in 2010. Following a period of year on year increases in patient numbers, it is to be hoped that this figure may stabilise at about 300 or even reduce.
- There has been no further increase in the incidence of oropharyngeal carcinoma (20.0% in 2010 compared with 24.4% in 2009) and while it is too early to be certain, this might indicate that Human Papilloma Virus related disease is peaking
- I noted an increased incidence of major salivary tumours in 2009 (4.9%) and while it is again important to be aware that these are rare tumours and numbers are small, the incidence in 2010 is similar (4.5%).
- The incidence of stage 4 carcinoma of hypopharynx was 88.9% in 2010. If such a high incidence of advanced disease is maintained, then the referral and diagnostic pathways should be examined.
- In 2010 the majority of cases of T1 carcinoma of the larynx were treated by radiotherapy rather than surgery (primarily laser resection). I do not believe this reflects a fundamental change in practice.
- It is pleasing to note a reduction from 11.7% (2009) to 6.9% of cases in whom stage at presentation was not recorded.

“Histological Diagnosis Recorded” and “Seen by Clinical Nurse Specialist” have been added to the quality standard dataset recorded. Results from both are encouraging.

The surgery to post-operative radiotherapy standard has been changed in line with the BAHNO standard which advocates that post operative radiotherapy should **start** within 42 days of surgery. This was achieved in 58.9% of cases. While this is a 73% improvement compared to 2009 (34%), the standard for 2009 was “XRT **completion** less than 11 weeks from surgery” so the figures are not directly comparable.

I am in communication with WOSCAN regarding standardisation of quality outcome measures between the 2 groups and hopefully right across Scotland. However, I think it very likely that most, if not all, of the outcomes which we currently employ will be included in this.

December 2011

3 Action Points 2010

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 4	Improve on the staging of salivary gland tumours by reducing the number of "not recorded"	Ensure tumour is staged at MDM or on MDM outcome sheet	There is no Scottish standard in place however it is regarded as good practice to stage every primary cancer where possible.
Table 7	All patients with new H&N primary including CiS should at least be recorded on the weekly MDM sheet.	Consider amending MDM sheet to include a "No discussion required-for audit only" section. This will include CiS and patients with unknown malignancy until surgery.	There is no Scottish standard in place. Sign Guideline 5 suggests that all H&N cancers be managed by an MDT
Table 10 and 11	Consider whether patients with T1 larynx or lip cancer should have CT head/neck/chest	Obtain agreement from clinicians on best clinical practice Amend reporting practice to measure clinical agreement, either by excluding T1 larynx and lip patients or by altering target.	Sign Guideline 3.2.3 recommends that all H&N cancer patients have a pre-treatment CT head/ neck/ chest.
Table 13	Improve numbers meeting the BAHNO standard of starting XRT within 42 days of surgery.	Implement an investigation into the cause of delay for patients missing target. Both surgery and radiotherapy planning notes will be scrutinised.	There is no Scottish standard in place. Using BAHNO standard allows for post surgical healing
Table19	Consider how useful 5 year follow up is	Ascertain cause of death for patients dead at 4 years to assess value of extended 5 year follow up. Obtain opinion of other H&N group clinicians and formulate proposals for change in light of this.	No clinical standard in place but current practice is to maintain follow up for 5 years.

Action points from 2009 results reported under Table 9, Table 13 and Table 19.

4 Attainment of Clinical Effectiveness Measures

Table	Measure	Target (%)	Lothian	Borders	Fife	D&G	SCAN 2010	SCAN 2009	SCAN 2008	SCAN 2007	SCAN 2006
1	Number of patients		193	13	62	22	290	307	247	267	243
4	TNM recorded (%) <i>excludes unknown primaries</i>	100	96.3	92.3	87.1	81.8	95.5	91.2	97.9	95.0	97.1
7	Discussed at MDM (%)	100	97.9	100	90.3	86.4	95.5	97.1	97.2	99.2	99.1
10	CT/ Chest (%)	100	97.3	100	92.5	86.4	95.6	94.1	96.0	88.4	77.4
11	CT/MRI Head & Neck (%)	100	100	100	94.2	88.2	98.1	98.0	100	96.5	86.4
13	Max 42 days from surgery to start of radiotherapy (%)	100	59.0	100	50.0	75.0	60.7	34.0	37.3	29.6	25.7
14	Histological Diagnosis	100	99.5	100	100	100	99.7	n/a	n/a	n/a	n/a
16	Seen by CNS	100	96.9	100.0	95.0	100	96.6	n/a	n/a	n/a	n/a
17	Died < 31 days from definitive surgery (%)	0	0	0	0	0	0	0	0.9	0	0
18	Died < 31 days from end radiotherapy (%)	0	2	0	1	0	1.9	n/a	n/a	n/a	n/a
	Died < 31days end of chemotherapy	0	1	0	0	0	1.5	n/a	n/a	n/a	n/a
21	<70 years old with stage 3 or 4 disease without primary surgery should be treated with Chemo radiotherapy (%)	100	100	100	100	100	100	96.5	89.7	97.8	83.0

Comment: The Clinical Effectiveness Measure in Table 13 has been altered in line with 2009 Action Point and is therefore not directly comparable with previous years results.

Key

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

n/a = not measured in previous years

5 Patient Numbers and Tumour Types

Case Ascertainment

Table 1

Health Board	n	Scottish Cancer Registry (annual average 2005-2010)	Estimate of case ascertainment	Male	Female
Lothian	193	154	125%	120	73
Borders	13	13	100%	7	6
Fife	62	59	105%	40	22
Dumfries & Galloway	22	31	71%	10	12
SCAN	290	274	106%	177	113

Source: Scottish Cancer Registration figures 2005-2009

As numbers for Head and Neck cancer patients are relatively small an average of Cancer Registration figures was taken from 2005 -2009 to provide a more accurate estimate of case ascertainment for 2010. 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

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	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
30-39	5	2.6%	1	7.7%	2	3.2%	0	0.0%	8	2.8%
40-49	15	7.8%	1	7.7%	6	9.7%	0	0.0%	22	7.6%
50-59	56	29.0%	3	23.1%	10	16.1%	4	18.2%	73	25.2%
60-69	52	26.9%	4	30.8%	19	30.6%	11	50.0%	86	29.7%
70-79	44	22.8%	3	23.1%	15	24.2%	4	18.2%	66	22.8%
80-89	19	9.8%	1	7.7%	6	9.7%	3	13.6%	29	10.0%
>89	2	1.0%	0	0.0%	4	6.5%	0	0.0%	6	2.1%
Total	193	100.0%	13	100.0%	62	100.0%	22	100.0%	290	100.0%

Incidence by H&N cancer site

Table 3

Cancer site	Lothian		Borders		Fife		D&G		SCAN	
Oral Cavity	64	33.2%	5	38.5%	20	32.3%	5	22.7%	94	32.4%
Oropharynx	35	18.1%	3	23.1%	16	25.8%	4	18.2%	58	20.0%
Nasopharynx	1	0.5%	0	0.0%	2	3.2%	0	0.0%	3	1.0%
Hypopharynx	13	6.7%	1	7.7%	3	4.8%	1	4.5%	18	6.2%
Larynx	56	29.0%	3	23.1%	13	21.0%	7	31.8%	79	27.2%
Nose and ear	2	1.0%	1	7.7%	0	0.0%	1	4.5%	4	1.4%
Paranasal sinuses	1	0.5%	0	0.0%	3	4.8%	1	4.5%	5	1.7%
Major salivary glands	12	6.2%	0	0.0%	1	1.6%	0	0.0%	13	4.5%
Lip	8	4.1%	0	0.0%	4	6.5%	3	13.6%	15	5.2%
Unknown Primary	1	0.5%	0	0.0%	0	0.0%	0	0.0%	1	0.3%
Total	193	100.0%	13	100.0%	62	100.0%	22	100.0%	290	100.0%

Note: Depending on the location of the lesion some patients with Squamous Cell Carcinoma (SCC) lip are collected by the skin audit team although often reviewed and treated by the Head and Neck oncology team. The incidence of lip SCC for 2010 is not currently available.

6 Staging

SCAN - Stage at Presentation

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	9	1	0	0	5	0	0	1	0	0	16	5.5
Stage 1	33	2	0	0	28	0	4	8	2	0	77	26.6
Stage 2	10	4	1	1	17	1	2	0	0	0	36	12.4
Stage 3	10	8	1	1	11	1	1	0	0	0	33	11.4
Stage 4 (total)	28	43	1	16	15	3	1	0	1	0	108	37.2
Not recorded	4	0	0	0	3	0	5	6	1	1	20	6.9
Total	94	58	3	18	79	5	13	15	4	7	290	100

Note: patients with an unknown primary were excluded from "TNM recorded" in the Summary table.

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

Table 5

	Oral Cavity %	Oropharynx %	Nasopharynx %	Hypopharynx %	Larynx %
Stage at presentation					
Stage 0	9.6	1.7	0.0	0.0	6.3
Stage 1	35.1	3.4	0.0	0.0	35.4
Stage 2	10.6	6.9	33.3	5.6	21.5
Stage 3	10.6	13.8	33.3	5.6	13.9
Stage 4	29.8	74.1	33.3	88.9	19.0
Not Recorded	4.3	0.0	0.0	0.0	3.8
Total	100	100	100	100	100

SCAN 2008-2010 - % Stage at presentation of the five most frequent Head and Neck

Table 6

	Oral Cavity %			Oropharynx %			Nasopharynx %			Hypopharynx %			Larynx %		
	2008	2009	2010	2008	2009	2010	2008	2009	2010	2008	2009	2010	2008	2009	20010
Stage at presentation															
Stage 0	0.0	2.3	9.6	0.0	1.3	1.7	0.0	0.0	0.0	0.0	0.0	0.0	2.8	5.7	6.3
Stage 1	20.3	27.9	35.1	8.9	5.3	3.4	0.0	0.0	0.0	5.6	4.2	0.0	31.0	31.8	35.4
Stage 2	24.6	16.3	10.6	7.1	5.3	6.9	0.0	0.0	33.3	0.0	8.3	5.6	21.1	17.0	21.5
Stage 3	11.6	12.8	10.6	17.9	12.0	13.8	12.5	16.7	33.3	27.8	20.8	5.6	15.5	15.9	13.9
Stage 4	34.8	32.6	29.8	62.5	68.0	74.1	75.0	33.3	33.3	61.1	58.3	88.9	28.2	27.3	19.0
Not Recorded	8.6	8.1	4.3	3.6	8.0	0.0	12.8	50.0	0	5.6	8.3	0	1.4	2.3	3.8
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source data: Appendix 1 and Appendix 2

Comment (Guy Vernham – H&N SCAN Chair) There is an increase of 52.5% in the number of stage 4 hypopharynx from 2009 to 2010. If such a high incidence is maintained, then the referral and diagnostic pathways should be examined.

7 Patients reviewed at MDM

Table 7

	Lothian	Borders	Fife	D&G	SCAN	% of Total
n=	193	13	62	22	290	100
Patients seen MDT	189	13	56	19	277	95.5
Patients not seen by MDT	4	0	6	3	13	4.5

Comment: Fife - patients not reviewed were carcinoma in situ (CIS). This has generated an action point (page 3) to decide on best clinical practice for managing CIS.

8 Treatment

First Treatment

Table 8

	Lothian		Borders		Fife		D&G		SCAN	% of Total
n=	193		13		62		22		290	
Surgery	109	56.5%	8	61.5%	29	46.8%	13	59.1%	159	54.8%
Radiotherapy	35	18.1%	2	15.4%	13	21.0%	1	4.5%	51	17.6%
Neoadjuvant Chemotherapy	18	9.3%	0	0.0%	3	4.8%	3	13.6%	24	8.3%
Palliative Chemotherapy	1	0.5%	0	0.0%	5	8.1%	0	0.0%	6	2.1%
Synchronous Chemoradiotherapy	13	6.7%	2	15.4%	5	8.1%	2	9.1%	22	7.6%
No Active Treatment	13	6.7%	0	0.0%	6	9.7%	1	4.5%	20	6.9%
Patient refused all therapies	0	0.0%	0	0.0%	1	1.6%	2	9.1%	3	1.0%
Other therapy (includes Cetuximab)	1	0.5%	1	7.7%	0	0.0%	0	0.0%	2	0.7%
Watchful waiting	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Died before treatment	2	1.0%	0	0.0%	0	0.0%	0	0.0%	2	0.7%
Not recorded	1	0.5%	0	0.0%	0	0.0%	0	0.0%	1	0.3%

Comment: The above table only includes first treatment and does not reflect the whole treatment plan for H&N patients. An action point from 2009 report was to include a summary of additional treatment in future reports (see table 9)

Summary of Treatment

Table 9 n=290 All patients diagnosed with a new primary H&N cancer

Radiotherapy	Lothian	BGH	Fife	D&G	SCAN	%
Primary Radical	37	3	14	1	55	19.0
Adjuvant post op	30	2	4	1	37	12.8
Chemoradiotherapy	42	2	13	4	61	21.0
Palliative	2	0	1	0	3	1.0
Chemotherapy						
Neoadjuvant	18	0	4	3	25	8.6
Chemoradiotherapy	42	2	13	4	61	21.0
Cetuximab	1	0	0	0	1	0.3
Palliative	1	0	4	0	5	1.7
Surgery (excluding incisional biopsy)						
Curative Surgery	100	8	28	13	149	51.4
Neck dissection	56	2	5	4	67	23.1

Action point 2009: The above data has been included as a result of an action point from the 2009 comparative report. It was considered important to recognise that patients with H&N cancer often have more than one treatment modality within their managed treatment plan.

CT Chest

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

Patients without Chest imaging were excluded if they were CiS and imaging regarded as not clinically necessary, refused treatment or unfit

Table 10

	Lothian	%	Borders	%	Fife	%	D&G	%	SCAN	%
n=	193	n/a	13	n/a	62	n/a	22	n/a	290	n/a
excluded	7	n/a	1	n/a	9	n/a	0	n/a	17	n/a
CT Chest/Thorax	181	97.3	12	100	49	92.5	19	86.4	261	95.6
No imaging recorded	5	2.7	0	0.0	4	7.5	3	13.6	12	4.4

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 any second primary tumours.

CT Head and Neck

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

Patients without H&N imaging were excluded if they were CiS and imaging regarded as not clinically necessary, refused treatment or unfit.

Table 11

	Lothian n=193	%	Borders n=13	%	Fife n=62	%	D&G n=22	%	SCAN n= 290	%
Eligible for imaging (n=)	186	n/a	12	n/a	52	n/a	17	n/a	267	n/a
CT or MRI Head/ Neck	186	100	12	100	49	94.2	15	88.2	262	98.1
No imaging recorded in eligible group	0	0.0	0	100	3	5.8	2	11.8	5	1.9

Exclusions: Fife 2 lip and 1 CiS.

Comparison of the incidence of CT/MRI of primary tumour and CT chest in SCAN 2006-2010

Table 12

	CT/MRI primary tumour %	CT chest %
2006	86.4	77.4
2007	96.5	88.4
2008	100.0	96.0
2009	98.0	94.1
2010	98.1	95.6

Surgery to start of Radiotherapy (XRT)

Overall treatment time from definitive surgery to start of Radiotherapy (XRT) within 42 days (BAHNO standard)

Exclusions = Patients having neck dissection or biopsy

Table 13

	Lothian	%	Borders	%	Fife	%	D&G	%	SCAN	%
Post op XRT or chemoXRT= n	44	n/a	2	n/a	6	n/a	4	n/a	56	100
Surgery to start XRT within 42 days	26	59.0	2	100	3	50.0	3	75.0	34	60.7

Comment: of the 18 Lothian patients who were not treated with XRT within 42 days from surgery 4 had post operative complications and 1 had adjuvant chemotherapy before chemoradiation.

Action Point 2009: the clinical effectiveness measure has been altered in line with the BAHNO standard which advocates that post operative radiotherapy should start within 42 days of surgery to maximise efficacy. Although there is improvement on the 2009 figure the percentage of patients reaching target in 2010 remains lower than anticipated. The cause of the delay will be investigated and progress reported in the 2011 comparative report.

9 Histological diagnosis recorded

Table 14

	Lothian	%	Borders	%	Fife	%	D&G	%	SCAN	%
n=	193		13		62		22		290	
Histological diagnosis	192	99.5	13	100	62	100	22	100	289	99.7

Note: One patient in Lothian was not fit for biopsy and had a clinical diagnosis only.

Comment: This measure was introduced in response to a draft set of H&N standards received from WOSCAN. It may be that this will form part of the H&N Quality Performance Indicators (QPI's) when they are developed in the future.

10 Surgical margins achieved

n = all patients having surgery

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

Table 15

Margin achieved	Lothian	%	Borders	%	Fife	%	D&G	%	SCAN	%
n=	93	n/a	8	n/a	22	n/a	7	n/a	130	n/a
>5mm	21	22.6	2	25.0	4	18.2	4	57.1	31	23.8
1-5mm	43	46.2	2	25.0	9	40.9	1	14.3	55	42.3
<1mm	11	11.8	0	0.0	4	18.2	0	0.0	15	11.5
Involved margin	8	8.6	1	12.5	3	13.6	0	0.0	12	9.2
Not applicable	7	7.5	2	25.0	0	0.0	1	14.3	10	9.2
Not recorded	3	3.2	1	12.5	2	9.1	1	25.0	7	5.4

Note: "not applicable" are patients with a re excision of primary tumour which show no malignancy or CiS

Comment: 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.

11 Review by Clinical Nurse Specialist (CNS)

Table 16

	Lothian	%	Borders	%	Fife	%	D&G	%	SCAN	%
n=	193	n/a	13	n/a	62	n/a	22	n/a	290	n/a
Seen by CNS	186	96.9	13	100	59	95.2	22	100	280	96.6

Note:

Of the 7 patients not seen by a H&N CNS in Lothian 2 were too ill to attend and were under the care of the palliative care team, 5 were lip patients who had surgery but did not attend the Edinburgh Cancer Centre (ECC).

There was no CNS cover at the Edinburgh Dental Institute (EDI) in 2010. On recording date of first point of contact with CNS, it was identified that these patients were seen at a later stage in the cancer pathway, than patients presenting through other pathways in the SCAN Region. To ensure patients receive equitable access to CNS support, it is planned to provide 0.2 wte nursing input, in order to support this client group and provide education for EDI staff.

12 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	100	8	28	8	144	n/a
Patients dying within 30 days of surgery	0	0	0	0	0	0.0

Death <31 days from last date of radiotherapy (XRT)

Table 18

	Lothian	Borders	Fife	D&G	SCAN	%
Number of patients having XRT	111	7	32	10	160	n/a
Patients dying within 30 days of completion	2	0	1	0	3	1.9%

Comment: None of the deaths were treatment related. The 3 patients dying within 30 days of radiotherapy died from progression of their H&N cancer.

Death <31 days from chemotherapy

	Lothian	Borders	Fife	D&G	SCAN	%
Number of patients treated with chemotherapy	46	2	16	4	68	n/a
Patients dying within 30 days of chemotherapy	1	0	0	0	1	1.5%

12 Survival from date of first treatment

Table 19 (data not provided for D&G)

Mortality - Patients diagnosed between 2007-2010 – Lothian & Borders

Overall stage	Total	Alive at 1 st Oct 2011	Dead at 6 months	Dead at 1yr	Dead at 2yr	Dead at 3yr	Dead at 4yr	No Tx
not measured	36	21	7	3	3	0	0	2
Stage 0	20	18	0	1	1	0	0	0
Stage 1	186	166	4	8	4	3	1	0
Stage 2	88	74	3	7	3	1	0	0
Stage 2B	1	1	0	0	0	0	0	0
Stage 3	100	73	9	6	9	1	2	0
Stage 4A	240	149	32	30	15	10	0	4
Stage 4B	10	6	1	3	0	0	0	0
Stage 4C	8	3	1	2	1	0	0	1

Mortality - Patients diagnosed between 2007-2010 – Fife

Overall stage	Total	Alive at 1 st Oct 2011	Dead at 6 months	Dead at 1yr	Dead at 2yr	Dead at 3yr	Dead at 4yr	No Tx
not measured	28	16	6	2	3	1	0	4
Stage 0	10	9	0	1	0	0	0	0
Stage 1	46	38	1	1	2	3	1	0
Stage 2	32	17	1	5	5	4	0	2
Stage 2B	0	0	0	0	0	0	0	0
Stage 3	32	17	1	5	5	4	0	2
Stage 4A	99	43	20	14	15	6	1	16
Stage 4B	11	4	2	1	3	1	0	2
Stage 4C	2	0	1	0	1	0	0	1

Action point 2009: Survival data for Lothian and Borders and Fife patients have been included.

Action point 2010: Review cause of death for patients dying at 4 years with a view to revising follow up protocol.

13 Oncology effectiveness measures

Neck dissection showing Extra Capsular Spread (ECS) who then proceed to chemoradiation

n = Patients having neck dissection

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

Table 20

	Lothian	%	Borders	%	Fife	%	D&G	%	SCAN	%
Patients excluded	4	12.5	0	0	1	25.0	0	0	5	n/a
Patients with Neck Dissection (after exclusions)=n	32	n/a	2	n/a	4	100	4	100	42	100
Patients with ECS	6	18.8	0	0	1	25.0	2	50	13	28.9
ECS proceeding to chemorad or XRT & cetuximab	6	100	0	n/a	1	100	2	100	9	100
ECS proceeding to XRT only	0	0	0	n/a	0	0	0	0	0	0

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

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

Exclusions = patients having palliative chemotherapy, unfit , refused or died before treatment

Table 21

	Lothian	%	Borders	%	Fife	%	D&G	%	SCAN	%
Patients <70 years with stage 3/4 disease	71	n/a	4	n/a	21	n/a	9	n/a	105	n/a
Patients with primary surgery	31	n/a	1	n/a	5	n/a	3	n/a	40	n/a
Exclusions	8	n/a	0	n/a	6	n/a	2	22.2 %	15	14.3 %
n=	32	n/a	3	n/a	10	n/a	4	n/a	50	n/a
Chemorad or XRT & cetuximab	32	100	3	100	10	100	4	100	50	100
No chemorad	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a

Note: Radiotherapy and cetuximab is considered an alternative treatment to chemoradiotherapy for patients unfit for chemotherapy. There were 8 patients treated with XRT and cetuximab.

13 T1 larynx first treatment

n= number of patients diagnosed with T1N0 laryngeal cancer

Table 22

	Lothian	%	Borders	%	Fife	%	D&G	%	SCAN	%
n=	22	n/a	1	n/a	4	n/a	1	n/a	28	100.0
Surgery/laser	7	31.8	0	0.0	3	75.0	1	100.0	11	39.3
Radiotherapy	14	63.6	1	100.0	1	25.0	0	0.0	16	57.1
Surgery and Post- op Radiotherapy	1	4.5	0	0.0	0	0.0	0	0.0	1	3.6

Comment: 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.

Appendix 1: Stage at Presentation

Lothian n=193

Table a

	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	2	1	0	0	2	0	0	1	0	0	6	3.1%
Stage 1	27	1	0	0	22	0	4	6	1	0	61	31.6%
Stage 2	6	1	1	0	13	1	2	0	0	0	24	12.4%
Stage 3	7	4	0	1	9	0	1	0	0	0	22	11.4%
Stage 4 (total)	21	28	0	12	10	0	1	0	1	0	73	37.8%
not recorded	1	0	0	0	0	0	4	1	0	1	7	3.6%
Total	64	35	1	13	56	1	12	8	2	1	193	100

Fife n=62

Table b

	Oral cavity	Oro pharynx	Naso pharynx	Hypo pharynx	Larynx (total)	Para nasal Sinus	Major Salivary Glands	Lip	Nose and Ear	Unknown Primary	Total	% of Total
Stage 0	6	0	0	0	2	0	0	0	0	0	8	12.9%
Stage 1	3	1	0	0	4	0	0	1	0	0	9	14.5%
Stage 2	2	1	0	1	3	0	0	0	0	0	7	11.3%
Stage 3	3	2	1	0	1	0	0	0	0	0	7	11.3%
Stage (4 total)	4	12	1	2	1	3	0	0	0	0	23	37.1%
not recorded	2	0	0	0	2	0	1	3	0	0	8	12.9%
Total	20	16	2	3	13	3	1	4	0	0	62	100

Borders n=13

Table c

	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	15.4%
Stage 1	2	0	0	0	1	0	0	0	0	0	3	23.1%
Stage 2	1	1	0	0	0	0	0	0	0	0	2	15.4%
Stage 3	0	1	0	0	1	0	0	0	0	0	2	15.4%
Stage 4 (total)	1	1	0	1	0	0	0	0	0	0	3	23.1%
not recorded	0	0	0	0	0	0	0	0	1	0	1	7.7%
Total	5	3	0	1	3	0	0	0	1	0	13	100

Dumfries and Galloway n=22

Table d

	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	1	0	0	0	1	0	0	1	1	0	4	18.2%
Stage 2	1	1	0	0	1	0	0	0	0	0	3	13.6%
Stage 3	0	1	0	0	0	1	0	0	0	0	2	9.1%
Stage 4 (total)	2	2	0	1	4	0	0	0	0	0	9	40.9%
not recorded	1	0	0	0	1	0	0	2	0	0	4	18.2
Total	5	4	0	1	7	1	0	3	1	0	22	100

Appendix 2

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

Table a

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	3.1%	30.0%	20.0%	0.0%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	n/a	n/a	0.0%	0.0%	0.0%	0.0%	3.6%	15.4%	33.3%	0.0%
Stage 1	42.2%	15.0%	40.0%	20.0%	2.9%	6.3%	0.0%	0.0%	0.0%	0.0%	n/a	n/a	0.0%	0.0%	0.0%	0.0%	39.3%	30.8%	33.3%	14.3%
Stage 2	9.4%	10.0%	20.0%	20.0%	2.9%	6.3%	33.3%	25.0%	100.0%	0.0%	n/a	n/a	0.0%	33.3%	0.0%	0.0%	23.2%	23.1%	0.0%	14.3%
Stage 3	10.9%	15.0%	0.0%	0.0%	11.4%	12.5%	33.3%	25.0%	0.0%	50.0%	n/a	n/a	7.7%	0.0%	0.0%	0.0%	16.1%	7.7%	33.3%	0.0%
Stage 4	32.8%	20.0%	20.0%	40.0%	80.0%	75.0%	33.3%	50.0%	0.0%	50.0%	n/a	n/a	92.3%	66.7%	100.0%	100.0%	17.9%	7.7%	0.0%	57.1%
Not Recorded	1.6%	10.0%	0.0%	20.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	n/a	n/a	0.0%	0.0%	0.0%	0.0%	0.0%	15.4%	0.0%	14.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	n/a	n/a	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

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 the 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 the cancer.

ECC – Edinburgh Cancer Centre, Western General Hospital, EH4 2XU

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

EDI – Edinburgh Dental Institute, Lauriston Place, EH3 9HA

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.

