S E Scotland Cancer Network
SCAN AUDIT

S E Scotland Cancer Network: Prospective Cancer Audit

(excluding Dumfries & Galloway)

MELANOMA CANCER

Report on Patients Diagnosed
1 January 2008 to 31 December 2008
Version 2

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NHS Fife:	Queen Margaret Hospital, Dunfermline; Victoria Hospital, Kirkcaldy; Fife GPs
NHS Lothian:	New Royal Infirmary, Edinburgh
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	Roodlands Hospital, Haddington
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FOREWORD

This report presents analysis of data collected on patients newly-diagnosed with primary invasive melanoma ICD-10 C43 (>Clark Level 1) or secondary melanoma with no known primary, except those with melanoma of the eye, between 1 January and 31 December 2008 in three of the four health board regions comprising S E Scotland Cancer Network (SCAN) – Borders, Fife and Lothian. Dermatological services for Dumfries & Galloway are managed and audited through West of Scotland Cancer Network.

Basis of Analysis

There are currently no nationally-agreed standards for melanoma cancer care.

Measures presented are draft clinical items within the SIGN Guideline on Management of Cutaneous Melanoma (No 72; Date published: July 2003) and items from the Core Standards for Cancer published by NHS Quality Improvement Scotland (NHSQIS) in March 2008.

In addition data is presented on recurrence in the format required by the Scottish Melanoma Group.

Patients included in the Report

Patients included: all patients diagnosed with Primary Invasive Melanoma or secondary melanoma (no known primary) 1 January – 31 December 2008

SCAN Network	Lead Clinician	Audit Coordination	NHS Board/Hospitals	Lead Clinician	Audit Support
SCAN Skin Group	Dr V Doherty	Gillian Smith, SCAN Audit Facilitator	**NHS Borders**	Dr D Kemmett	Gillian Smith
		Alison Allen, SCAN Audit Manager	**NHS Fife**	Dr S A Holme Dr M Mowbray	Laura McLean
			NHS Lothian		
		Dept of Dermatology St John's Hospital - Plastic Surgery Service		Dr V Doherty Mr M Butterworth	Gillian Smith

Data Collection

Patients were identified through checks made against pathology listings and through registration at the fortnightly regional multidisciplinary meeting. Data capture was mainly dependent on casenote audit or review of hospital electronic records systems. Data was recorded on Access databases in Edinburgh and Dunfermline.

Datasets and definitions

The dataset collected is the Scottish National Core Minimum dataset as published by ISD Scotland in April 2005 . This may be viewed on the ISD website (www.isdscotland.org). Further information on the dataset and definitions can be obtained from Gillian Smith SCAN Cancer Audit Facilitator, Dept of Dermatology, Lauriston Buildings, Edinburgh. Gillian.w.smith@luht.scot.nhs.uk

Data Quality

- **Case Ascertainment**

  Overall case ascertainment is estimated at 119% when compared with Scottish Cancer Registry data for 2006 (145% compared to 2002 - 2006).

- **Quality assurance of data**

  All hospitals in the region participate in the Quality Assurance programme provided by the National Services Scotland Information & Statistics Division (ISD). QA of the full Primary Invasive Melanoma dataset has not yet been undertaken. QA of data submitted for Scottish Executive waiting times returns showed overall accuracy of data (including melanoma) at 95.8% (Borders), 93.2% (Lothian) and 87.1% (Fife).

Process for reviewing and reporting the results

The report was reviewed at 2 meetings of the SCAN Skin Group in 2009 and 2010

Subsequently the agreed process is for the report to be presented to the Regional Cancer Planning Group, and disseminated to Clinical Governance groups within the three health board areas, before being placed on the SCAN website.

In preparation for lodging the report on the SCAN website the contents were reviewed for Disclosive Material to assess for any risk of communication of personally-identifiable information about a data subject. No amendments were required.

Document History

Version	Events	Actions
Version 1.1	1st Draft circulated to SCAN Group on 1.12.2009	Discussed at SCAN Group meeting and accepted subject to addition of information on trials and any further comments. Comments received and amended and Chair's Overall Commentary added.
Version 1.2	2nd Draft circulated to SCAN Group on 21.1.2010	
Version 2	Signed off 29.1.2010	
Version 2	Final version circulated to Clinical Governance Groups on 12.4.210	
Version 2	Final version circulated to Regional Cancer Planning Group on 11.8.2010	
Version 2W	Final version reviewed for any Disclosive Material. Placed on SCAN website December 2010.	

MELANOMA CANCER AUDIT REPORT 2008 OVERALL COMMENT

Two key purposes of S E Scotland Cancer Network are to monitor the quality of care received by melanoma patients among patients in its constituent health boards, and to promote equity of treatment. I am therefore pleased to present the SCAN Skin Group Comparative Audit Report on data relating to patients newly-diagnosed with cutaneous melanoma in 2008 who were treated in SE Scotland Cancer Network Health Board areas of Lothian, Fife and Borders. The Skin Cancer service in Dumfries and Galloway is managed and audited through West of Scotland Cancer Network.

The results have been reviewed and checked locally by Skin Cancer lead clinicians. The subsequent collation of the results has involved discussion between representatives from each area which, with the excellent case ascertainment and completeness of data, means that there can be great confidence in their accuracy. Allowance has to be made in reviewing results where numbers are small and variation may be due to chance. We are very fortunate in our long-established and high-quality data records and are very grateful for the commitment and hard work of the two audit facilitators involved.

Comparing results offers the opportunity to consider any specific points of difference, and comments within the report will draw attention to these. The report also shows results from 2007 to compare with those from 2008. It is important to demonstrate consistency and (where necessary) improvement in results over time.

In the absence of agreed national standards of clinical care for melanoma we have used draft measures based on the clinical evidence from the SIGN Guideline on Management of Patients with Cutaneous Melanoma (SIGN Guideline No: 72) published in July 2003 (www.sign.ac.uk) and also the Scottish national generic Core Cancer quality standards published by NHS Quality Improvement Scotland (NQIS) in 2008 (www.nhshealthquality.org).

Our 2008 results show no evidence of any fall off in the trend (now lasting some three decades) towards increasing numbers of cases of melanoma. There is however an encouraging increase in the percentage of patients, especially females, presenting with thin, good prognosis melanomas (<1mm Breslow). It is of note that more than half of melanoma cases occur in “working age” individuals in contrast to other malignancies which are more frequent in the elderly. This emphasises the impact of this disease on national economies as well as individuals and their families.

Surgery remains the main treatment for melanoma with three quarters of patients having full excision as their first treatment. The majority of cases now are diagnosed by dermatologists who, working with colleagues in plastic and general surgery, are taking on an increasing role in first and (to a lesser extent) second stage surgical treatment. Plastic and general surgeons continue to perform the more complex surgery and an increasing number of sentinel node biopsies.

Comparison of results between 2007 and 2008 shows that we need to monitor the time taken from diagnosis to wide local excision (i.e. the second treatment procedure). The percentage achieving this within eight weeks remains around the 50% mark and although there is no evidence-based standard on the optimal timescale we would like to increase this figure. In some cases, however, the longer timing reflects patient choice.

The service to patients has been greatly improved since 2007 by the introduction of the regular regional multidisciplinary team meeting (MDM). This brings together the specialists in all fields, and enables us to undertake more extensive individual review of patient care. The audit shows that in 2008 almost all (99%) of newly-diagnosed patients were managed through this route. The MDM also contributes to improved links with oncology services leading to an increase of patients being offered entry into both adjuvant and other trials. We also benefit greatly from the work of the Clinical Nurse Specialist who (as shown by the audit) has contact with the great majority of patients.

The final and most important piece of information we can report relates to outcome of treatment. Using Scottish Melanoma Group data we have looked at mortality rates at 5 years for 502 patients with invasive melanoma presenting in 2000-2002. Overall 59 individuals died of melanoma (a rate of 11.8%) which is comparable with that for other Scottish regions. 70% of patients were alive and disease free and a further 6% were alive having had or with ongoing recurrent disease. Survival rates were highest for those with thin lesions and this emphasises the need for early recognition and treatment.

Reporting and comparison of audit results enables us to identify ways in which we can improve the service we provide. We would very much like to compare results more widely across Scotland. We contribute incidence and survival data to the national meeting of the Scottish Melanoma Group and would be keen to undertake further comparative audits with the other Scottish regions. We look forward to taking part in the development of nationally-agreed standards for Scottish melanoma patients in the near future.

Dr V Doherty
Consultant Dermatologist and SCAN Lead Cancer Clinician
SCAN Skin Group
January 2010

Table 1: Case ascertainment n281

(Number of patients is 279 - includes 2 patients with two primary lesions)

Health Board	2008 SCAN invasive	2008 SCAN in situ	2008 SCAN total	2006 Number of Cancer Registrations	Estimated Case Ascertainment
Borders	23	2	25	29	86.2%
Fife	69	13	82	70	117.1%
Lothian	189	31	220	176	125.0%
Total:	**281**	**46**	**327**	**275**	**118.9%**

2007 SCAN	*2004 Number of Cancer Registrations*	*Estimated Case Ascertainment*
28	*24*	*117%*
53	*29*	*183%*
188	*142*	*132%*
269	*195*	*138%*

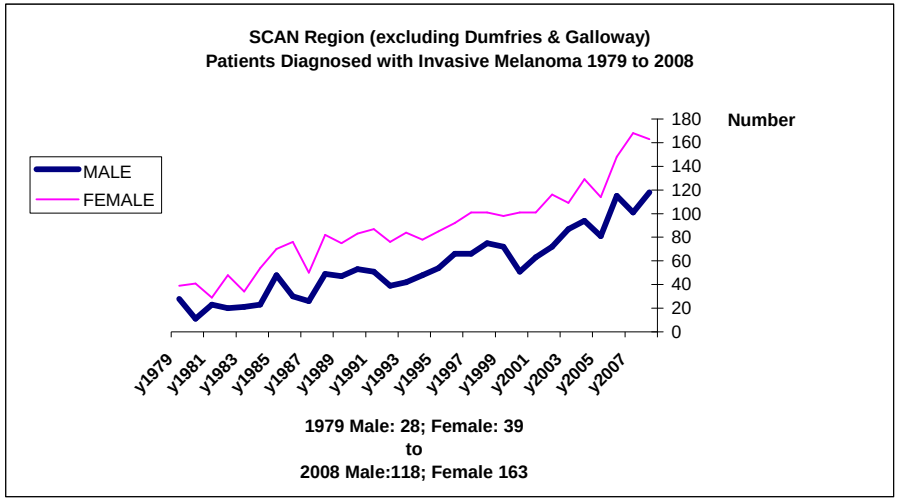
* Malignant melanoma of the skin (ICD-10 C43)

Source: Scottish Cancer Registry, ISD

Period 2006 Data extracted: March 2009

This table shows the number of patients diagnosed during 2008 compared with the number of cancer registrations recorded by the Scottish Cancer Registry (SCR) for 2006. Note: the selection published by SCR is not based on behaviour codes and includes in situ lesions; the additional number of in situ lesions diagnosed in SCAN has therefore been included for direct comparison of case ascertainment.

Note: Case ascertainment levels in excess of 100% may be attributable to an increase in incidence, however, allowance has to be made in reviewing the results where numbers are small and variation may be due to chance.



This chart, using data taken from The Scottish Melanoma Group (SMG) records, demonstrates the increase in invasive melanoma in Lothian & SE Scotland since SMG records began in 1979.

Table 2: Breslow Depth n281

Male:

Male:	**n9**	*%*	**n39**	*%*	**n70**	*%*	**n118**	*%*	*2007*	
mm	**Borders**	*Borders*	**Fife**	*Fife*	**Lothian**	*Lothian*	**SCAN**	***SCAN***	*n101*	*%*
									SCAN	*SCAN*
0 - 0.99	5	*55.6*	21	*53.8*	44	*62.8*	70	*59.3*	*45*	*44.6*
1 - 1.99	1	*11.1*	8	*20.5*	10	*14.3*	19	*16.1*	*23*	*22.8*
2 - 2.99	2	*22.2*	1	*2.6*	4	*5.7*	7	*5.9*	*9*	*8.9*
3 - 3.99	0	*0.0*	2	*5.1*	3	*4.3*	5	*4.2*	*4*	*4.0*
>= 4	1	*11.1*	6	*15.4*	5	*7.1*	12	*10.2*	*17*	*16.8*
n/a	0	*0.0*	1	*2.6*	0	*0.0*	1	*0.8*	*1*	*1.0*
Mets.	0	*0.0*	0	*0*	4	*5.7*	4	*3.4*	*2*	*2.0*
Total:	**9**		**39**		**70**		**118**		*101*	

Female: n

Female	**n14**	*%*	**n30**	*%*	**n119**	*%*	**n163**	*%*	*2007*	
mm	**Borders**	*Borders*	**Fife**	*Fife*	**Lothian**	*Lothian*	**SCAN**	***SCAN***	*n168*	*%*
									SCAN	*SCAN*
0 - 0.99	9	*64.3*	18	*60.0*	74	*62.2*	101	*62.0*	*101*	*60.1*
1 - 1.99	4	*28.6*	7	*23.3*	24	*20.2*	35	*21.5*	*34*	*20.2*
2 - 2.99	0	*0.0*	2	*6.7*	6	*5.0*	8	*4.9*	*12*	*7.1*
3 - 3.99	1	*7.1*	0	*0.0*	5	*4.2*	6	*3.7*	*5*	*3.0*
>= 4	0	*0.0*	3	*10.0*	6	*5.0*	9	*5.5*	*12*	*7.1*
n/a	0	*0.0*	0	*0.0*	3	*2.5*	3	*1.8*	*0*	*0.0*
Mets.	0	*0.0*	0	*0.0*	1	*0.8*	1	*0.6*	*4*	*2.4*
Total:	**14**		**30**		**119**		**163**		*168*	

Overall SCAN ratio of male to female is 1:1.4; in Fife the ratio is 1.3:1. In comparison to 2007 both actual numbers and proportions of men presenting with thin lesions (<1.0m) rose. This largely explains the overall increase in thin melanoma to 60.9%, an increase of 6.6% in comparison with 2007. It will be interesting to see if this trend continues.

Table 3: Age at presentation n281

Male:

Male:	**n9**	*%*	**n39**	*%*	**n70**	*%*	**n118**	***%***	*2007*	
	Borders	*Borders*	**Fife**	*Fife*	**Lothian**	*Lothian*	**SCAN**	***SCAN***	*n101*	*%*
									SCAN	*SCAN*
0-19	0	*0.0*	0	*0*	1	*1.4*	1	*0.8*	*2*	*2.0*
20-34	0	*0.0*	1	*2.6*	3	*4.3*	4	*3.4*	*9*	*8.9*
35-44	0	*0.0*	4	*10.3*	9	*12.9*	13	*11.0*	*10*	*9.9*
45-54	1	*11.1*	3	*7.7*	13	*18.6*	17	*14.4*	*7*	*6.9*
55-64	2	*22.2*	8	*20.5*	13	*18.6*	23	*19.5*	*24*	*23.8*
65-74	2	*22.2*	16	*41*	18	*25.7*	36	*30.5*	*26*	*25.7*
>=75	4	*44.4*	7	*17.9*	13	*18.6*	24	*20.3*	*23*	*22.8*
Total:	**9**		**39**		**70**		**118**		*101*	

Female:

Female	**n14**	*%*	**n30**	*%*	**n119**	*%*	**n163**	*%*	*2007*	
	Borders	*Borders*	**Fife**	*Fife*	**Lothian**	*Lothian*	**SCAN**	***SCAN***	*n168*	*%*
									SCAN	*SCAN*
0-19	0	*0.0*	0	*0.0*	4	*3.4*	4	*2.5*	*3*	*1.8*
20-34	2	*14.3*	3	*10.0*	14	*11.8*	19	*11.7*	*20*	*11.9*
35-44	2	*14.3*	4	*13.3*	14	*11.8*	20	*12.3*	*28*	*16.7*
45-54	4	*28.6*	10	*33.3*	25	*21.0*	39	*23.9*	*31*	*18.5*
55-64	1	*7.1*	3	*10.0*	30	*25.2*	34	*20.9*	*23*	*13.7*
65-74	1	*7.1*	4	*13.3*	12	*10.1*	17	*10.4*	*28*	*16.7*
>=75	4	*28.6*	6	*20.0*	20	*16.8*	30	*18.4*	*34*	*20.2*
Total:	**14**		**30**		**119**		**163**		*n/a 1*	*0.6*
									168	

Comment: As with most cancers the incidence of melanoma rises with age, but melanoma is among cancers which not infrequently occurs in younger people. In this cohort there were five patients under 20 years of age: one male aged 18 and four females aged 15, 17 and two aged 19. 10% were under 35 years at diagnosis compared with 12.6% in 2007 and females account for a greater percentage of this age group than in 2007.

Working Age Population ie Males aged 20 to 65 and Females aged 20 to 60**:** incidence in this category 50% of males and 58.9% of females diagnosed

There has been a drop in both actual numbers and proportions of melanomas in women over 65.

Table 4: Histogenetic Type of Melanoma n281

Male: Histological Pattern	**n118 SCAN**	*% **SCAN***	*2007 n101 SCAN*	*% SCAN*
Lentigo maligna melanoma	20	*16.9*	*17*	*16.8*
superficial spreading	58	*49.2*	*48*	*47.5*
nodular	14	*11.9*	*17*	*16.8*
polypoid	1	*0.8*	*1*	*1.0*
acral/mucosal	2	*1.7*	*6*	*5.9*
other	3	*2.5*	*2*	*2.0*
unclassifiable*	15	*12.7*	*3*	*3.0*
not recorded	1	*0.8*	*5*	*5.0*
secondary	4	*3.4*	*2*	*2.0*

Female: Histological Pattern	**n163 SCAN**	***% SCAN***	*2007 n168 SCAN*	*% SCAN*
Lentigo maligna melanoma	28	*17.2*	*18*	*10.7*
superficial spreading	89	*54.6*	*111*	*66.1*
nodular	11	*6.7*	*11*	*6.5*
polypoid	2	*1.2*	*2*	*1.2*
acral/mucosal	3	*1.8*	*3*	*1.8*
other	8	*4.9*	*5*	*3.0*
unclassifiable*	21	*12.9*	*4*	*2.4*
not recorded	0	*0.0*	*10*	*6.0*
secondary	1	*0.6*	*4*	*2.4*

Note: There were also 46 diagnoses of melanoma in situ (n16 Male and n30 Female) see *Table 1: Case Ascertainment*

Superficial spreading melanoma remains the most common type especially in women, while both genders have seen increase in numbers and proportion of LMM.

Table 5a: Anatomical Site n281

Site	**SCAN n118 MALE**	*%*	**SCAN n163 FEMALE**	*%*
Head and Neck:				
Face	16	*13.6*	30	*18.4*
Scalp	9	*7.6*	1	*0.6*
Neck	4	*3.4*	6	*3.7*
Ears	5	*4.2*	1	*0.6*
Trunk anterior above waist	16	*13.6*	4	*2.5*
Trunk anterior below waist	1	*0.8*	2	*1.2*
Trunk posterior above waist	30	*25.4*	24	*14.7*
Trunk posterior below waist	2	*1.7*	3	*1.8*
Arm above elbow	4	*3.4*	21	*12.9*
Arm below elbow	7	*5.9*	10	*6.1*
Leg above knee	8	*6.8*	19	*11.7*
Leg below knee	8	*6.8*	35	*21.5*
Dorsum of foot			3	*1.8*
Sole	1	*0.8*	2	*1.2*
Mucosal	2	*1.7*		
Subungual hand			1	*0.6*
Subungual toe	1	*0.8*		
Mets at presentation	4	*3.4*	1	*0.6*
Total:	**118**		**163**	

Top three sites:

Male: Head and Neck: 28.8%; Posterior Trunk above waist: 25.4% and Anterior Trunk above waist: 13.6%

Female: Head and neck: 23.3%; Lower leg: 21.5% and Posterior Trunk above waist: 14.7%

Melanoma remains rare on always covered skin. Scalp and ear melanomas are almost exclusively found in men. Upper arms and lower legs more common in females

In 2007 the top sites were: Male: Posterior Trunk 30.7%, Head and Neck 27.7% and Anterior Trunk above waist 11.9%; Female Lower Leg 17.3%, Upper Arm 16.7% and Head and Neck 15.5%

Both genders show an increase in Head and Neck lesions which may mirror increase in LMM sub type (see ***Table 4***)

Table 5b: Histogenetic Type and Anatomical Site n281

Male n118

Histo type	Face	Scalp	Neck	Ears	Trunk anterior above waist	Trunk anterior below waist	Trunk posterior above waist	Trunk posterior below waist	Arm above elbow	Arm below elbow	Leg above knee	Leg below knee	Sole	Mucosal	Subungual toe	Mets	Total:
lmm	8	6	1	3	1							1					**20**
ssmm	3	1	2	1	12		24	1	1	4	5	4					**58**
nodular	2	2	1	1	1	1	4			1	1						**14**
polypoid											1						**1**
unclass	2				2		1	1	1	2		3	1	2			**15**
other									1		1						**2**
acral							1		1						1		**3**
nr/na	1															4	**5**
Totals:	**16**	**9**	**4**	**5**	**16**	**1**	**30**	**2**	**4**	**7**	**8**	**8**	**1**	**2**	**1**	**4**	**118**

Female n163

Histo type	Face	Scalp	Neck	Ears	Trunk anterior above waist	Trunk anterior below waist	Trunk posterior above waist	Trunk posterior below waist	Arm above elbow	Arm below elbow	Leg above knee	Leg below knee	Dorsum of foot	Sole	Subungual hand	Mets	Total:
lmm	22		1				1			2		7					**33**
ssmm	1	1	5		4	1	15	2	13	5	17	19	2				**85**
nodular	1						3		2	1		2			1		**10**
polypoid									1				1				**2**
unclass	6			1			3	1	3	1	2	4					**21**
other						1	2		2			3					**8**
acral										1				2			**3**
na																1	**1**
Totals:	**30**	**1**	**6**	**1**	**4**	**2**	**24**	**3**	**21**	**10**	**19**	**35**	**3**	**2**	**1**	**1**	**163**

Table 6: Method of Diagnosis n281

Method of Diagnosis	**SCAN**	*%*
Shave/Curettage	9	*3.2*
Incision/Partial Biopsy	51	*18.1*
Excision Biopsy	212	*75.4*
Wide excision	6	*2.1*
FNA	2	*0.7*
Not recorded	1	*0.4*

2007

Method of Diagnosis	*SCAN*	*%*
Shave/Curettage	*9*	*3.3*
Incision/Partial Biopsy	*55*	*20.4*
Excision Biopsy	*201*	*74.7*
Amputation	*3*	*1.1*
Core Biopsy (Mets)	*1*	*0.4*

Comment: in 77.6% of cases the suspected melanoma is completely excised at first presentation. Sampling of suspect lesions (incision/partial biopsy) is used when there is diagnostic doubt or for planning/staging purposes in larger lesions or those on cosmetically challenging areas.

Table 7: Mode and Urgency of Referral n281

Mode/urgency of referral	n23		n69		n189		n281		2007 n269	
	Borders	%	Fife	%	Lothian	%	SCAN	%	SCAN	%
Urgent Referral	5	21.7	34	49.3	98	51.9	137	48.8	108	40.1
Self Referral to A&E	0	0.0	1	1.4	1	0.5	2	0.7	1	0.4
GP referral to A&E	0	0.0	0	0.0	0	0.0	0	0.0	1	0.4
Routine Referral	5	21.7	5	7.2	44	23.3	54	19.2	56	20.8
Urgency not recorded	0	0.0	13	18.8	3	1.6	16	5.7	24	8.9
Diagnosed by GP	12	52.2	4	5.8	17	9.0	33	11.7	34	12.6
Incidental finding	0	0.0	4	5.8	7	3.7	11	3.9	17	6.3
Review patient	0	0.0	4	5.8	14	7.4	18	6.4	23	8.5
'Other'	0	0.0	4	5.8	2	1.1	6	2.1	0	0.0
Mode of referral not known	1	4.3	0	0.0	0	0.0	1	0.4	3	1.1
Wholly treated in private sector	0	0.0	0	0.0	3	1.6	3	1.1	2	0.7

Comment: although almost 50% of invasive melanomas had been referred urgently,a further 25% had been routinely referred or urgency not recorded, reflecting the cases lacking red flag signs and over 10% were found as incidental or at review. However, each year increasing numbers of lesions (not actual melanomas) are being referred urgently and this may reflect a degree of uncertainty in primary care. Overall in SCAN 11.7% had lesions excised in primary care despite national guidelines advising against this. A disproportionate number of GP excision of melanomas occurs in Borders compared to other areas. This is likely to reflect the differing geography and accessibility to services.

Table 8: Time from Biopsy/Excision to Issue of Pathology Report n281

Time Interval (Days)	Borders and Lothian	%	Fife	%	SCAN	%
	n212		**n69**		**n281**	
0 - 7	21	*9.9*	39	*56.5*	60	*21.4*
8 - 14	80	*37.7*	19	*27.5*	99	*35.2*
15 - 21	63	*29.7*	5	*7.2*	68	*24.2*
22 - 28	32	*15.1*	2	*2.9*	34	*12.1*
> 28	13	*6.1*	3	*4.3*	16	*5.7*
n/a	3	*1.4*	1	*1.4*	4	*1.4*
Median	**15**		**7**			
Range	**5 - 37**		**0 - 38**			

2007

SCAN	%
n269	
55	*20.4*
107	*39.8*
65	*24.2*
24	*8.9*
14	*5.2*
2	*0.7*
innap. 2	*0.7*

Note 1. Borders and Lothian histology reported by NHS Lothian, University Hospitals Division, Edinburgh
Note 2. Fife histology reported by Fife Area Laboratory, Kirkcaldy

Comment: in 2007 55.6% of cases were reported by Lothian in <15 days compared to 47.6% in 2008.

Table 9a: Specialty of Clinican Diagnosing melanoma and Health Board of diagnosis n281

	n23	**%**	**n69**	**%**	**n189**	**%**	**n281**	**%**	*2007*	
	Borders	*Borders*	**Fife**	*Fife*	**Lothian**	*Lothian*	**SCAN**	*SCAN*	*n269*	*%*
									SCAN	*SCAN*
Dermatologist	10	*43.5*	50	*72.5*	153	*81.0*	213	*75.8*	*199*	*73.9*
General Surgeon*	0	*0.0*	1	*1.4*	3	*1.6*	4	*1.4*	*1*	*0.4*
Plastic Surgeon*	0	*0.0*	9	*13.0*	10	*5.3*	19	*6.8*	*24*	*8.9*
GP	12	*52.2*	4	*5.8*	17	*9.0*	33	*11.7*	*34*	*12.6*
Other	1	*4.3*	5	*7.2*	6	*3.2*	12	*4.3*	*10*	*3.7*

Table 9b: Specialty of Clinician undertaking second procedure of patients diagnosed initially in these Health Boards

	Borders	**%**	**Fife**	**%**	**Lothian**	**%**	**SCAN**	**%**	*2007*	
									SCAN	*%*
Dermatologist	12	*52.2*	14	*20.3*	31	*16.4*	57	*20.3*	*65*	*24.2*
General Surgeon WGH*	7	*30.4*	0	*0.0*	65	*34.4*	72	*25.6*	*59*	*21.9*
Plastic Surgeon ST J*	3	*13.0*	23	*33.3*	80	*0.0*	106	*37.7*	*120*	*44.6*
Plastic Surgeon QMH*	0	*0.0*	22	*31.9*	0	*0.0*	22	*7.8*	*10*	*3.7*
Other	1	*4.3*	4	*5.8*	4	*0.0*	9	*3.2*	*7*	*2.6*
No 2nd procedure	0	*0.0*	6	*8.7*	7	*3.7*	13	*4.6*	*8*	*2.9*
n/a	0	*0.0*	0	*0.0*	2	*1.1*	2	*0.7*		

* with special interest in melanoma

SCAN Draft Clinical Effectiveness Measure: All patients should be treated or have their treatment reviewed by clinicians with expertise in the management of melanoma and who have an active role in the MDM.

Comment: The vast majority of cases are first diagnosed by Dermatologists (63% of whom regularly attend the MDM). Wide excisions are more frequently being undertaken by Dermatologists. Results show that across Lothian, Borders, and Fife the majority of patients are diagnosed and treated by clinicians with expertise in the management of melanoma with excision of more complex lesions by general or plastic surgeons with a special interest in melanoma.

Table 10: Specialty of diagnosis and specialty and location of second procedure n281

Borders n23	**Derm**	*%*	**Gen Surg**	*%*	**Plastics**	*%*	**Other**	**%**
Diagnosed by:	**BGH**		**WGH**		**St John's**			
BGH Derm n10	4	*40.0*	4	*40.0*	1	*10.0*	1	*10.0*
GP n12	8	*66.7*	2	*16.7*	2	*16.7*	0	*0.0*
Other n1	0	*0.0*	1	*100.0*	0	*0.0*	0	*0.0*

Lothian n140	**Derm**	*%*	**Gen Surg**	*%*	**Plastics**	*%*	**Other**	**%**	**n/a**	**%**
Diagnosed by:	**Laur**		**WGH/MF**		**StJ/MF**					
Lauriston Derm n100	29	*29.0*	40	*40.0*	31	*31.0*				
Roodlands derm n11			9	*81.8*	2	*18.2*				
General Surgeon n2			2	*100.0*						
GP n17	3	*17.6*	9	*52.9*	5	*29.4*				
Murrayfield n3					1	*33.3*			2	*66.7*
Other n7			3	*42.9*	2	*28.6*	1	*14.3*	1	*14.3*

St John's n49	**Derm**	*%*	**Gen Surg**	*%*	**Plastics**	*%*	**Other**	**inapplicable**
Diagnosed by:	**StJ**		**WGH**		**StJ**			
Dermatology n37			2	*5.4*	34	*91.9*		1
Plastic Surgeon n11					7	*63.6*		4
Other n1								1

Fife n69	**Derm**	*%*	**Derm**	*%*	**Plastics**			**%**	**Other**	**n/a**
Diagnosed by:	**VHK**	*VHK*	**QMH**	*QMH*	**St John's**	**QMH**	**VHK**	*Plastics*		
Dermatology n23 (QMH)			5	*21.7*	9	4	5	*78.3*		
Dermatology n27 (VHK)	7	*25.9*			9	3	7	*70.4*		1
General Surgeon n1										1
Plastic Surgeon n9					5		1	*66.7*		3
Other n5									4	1
GP n4	1	*25.0*	1	*25.0*		1	1	*50*		

27.3% of patients diagnosed by Dermatologists in BGH, Roodlands and Lauriston also had their second procedure undertaken in dermatology. In contrast the majority of patients diagnosed by Dermatologists at St John's had the second procedure undertaken by Plastic Surgeons which reflects the level of dermatology resource there. St John's and Roodlands melanoma cases tend to be diagnosed by dermatologists but second procedure is with other specialties.

Table 11 : Time from Diagnosis to Wide Local Excision n281

Time Interval (Days)	Borders	Fife	Lothian	SCAN	*SCAN*	*SCAN*	2007 *SCAN*	2007 *SCAN*
n	**n23**	**69**	**n189**	**n281**	***%***	***% cumulative***	*n268*	*%*
1-14		1	2	3	*1.1%*	*1.1%*	*3*	*1.2*
15-28		3	14	17	*6.0%*	*7.1%*	*23*	*8.6*
29-42	6	7	37	50	*17.8%*	*24.9%*	*41*	*15.2*
43-56	7	12	40	59	*21.0%*	*45.9%*	*47*	*17.5*
57-70	4	16	29	49	*17.4%*	*63.3%*	*46*	*17.1*
71-84	2	10	29	41	*14.6%*	*77.9%*	*27*	*10.0*
85-98	1	8	15	24	*8.5%*	*86.5%*	*19*	*7.1*
99-112	1	2	6	9	*3.2%*	*89.7%*	*11*	*4.1*
113-126		2	1	3	*1.1%*	*90.7%*	*12*	*4.5*
127-140		0	1	1	*0.4%*	*91.1%*	*2*	*0.7*
>140		2	2	4	*1.4%*	*92.9%*	*5*	*2.2*
Inapplicable*	2	6	13	21	*7.5%*	*100.0%*	*32*	*11.9*
Range	**34-104**	**0-265**	**14-290**					
Median	**48**	**63**	**55**					

*** Inapplicable**: declined, single procedure, co-morbidity, partially/wholly treated in private sector, unable to calculate (missing date)

Comment: In this cohort, just over half patients waited over 8 weeks for wide excision. There are no guidelines on optimal timing of wide excision. Not infrequently some of delay is by patient preference.

Overall in SCAN there is a slight increase from 2007 in number (3.5%) of patients having 2nd procedure in <57 days. However, number in Lothian dropped by 2.4% whilst in Fife percentage has increased from 19% in 2007 to 33% in 2008.

Table 12: Number of patients having sentinel lymph node biopsy (SLNB) n92

SLNB Status	Borders n8	Fife n17	Lothian n67	SCAN n92
Patients having slnb	8	17	67	92
Positive slnb	0	2 (11.8%)	8 (11.9%)	10 (10.9%)

2007

SCAN n78
77
21 (27.3%)

Note: SIGN Guideline: "Biopsy of this node can assist in staging patients at risk of metastastic disease."

Data shows the number of patients having sentinel lymph node biopsy and percentage of those where nodes are positive. Currently there is no national standard for when patients should be considered for sentinel lymph node biopsy. Data on patients offered SLNB is recorded at the Multidisciplinary Meeting.

According to current protocol in SCAN region (Borders, Fife and Lothian) a further n53 patients met the criteria of being eligible for consideration of SLNB ie Breslow depth >=1mm or Clark Level IV with Breslow depth <1mm but did not undergo the procedure. This could be due to co-morbidity, contra indications or patient refusal; this may also apply to lymph node clearances.

Overall 10.9% SLNB were positive compared to (27.3%) in 2007. All 10 positive SLNB had Breslow >1.0m; of 82 negative SLNB, 19 were Clark Level IV with Breslow <1.0m .

Current practice is for patients with a positive sentinel node to proceed to radical node dissection

Table 13: Patients Having Lymph Node Clearance n15

	Borders	Fife n4	LUHT n11	SCAN n
Lymph Node Clearance	0	4*	11*	15*
Positive Lymph Nodes	0	2	8	10

* Overall includes 5 patients with no previous sentinel lymph node biopsy

Table 14: Discussion at Multidisciplinary Meeting (MDM) n281

Discussed at MDM	Borders	Fife	Lothian	SCAN
	n23	**n69**	**n189**	**n281**
Yes	23	69	186	278
No	0	0	3*	3
% discussed	**100%**	**100%**	**98.4%**	**98.9%**

2007
SCAN
n260
464
3
90.4

Scottish Core Cancer Standards 2008 2b: (and SCAN Draft Clinical Effectiveness Measures): Patients are treated and managed within the context of a Multidisciplinary Team Meeting

Note: includes *2 private patients who were not referred to MDM and were registered retrospectively on SCAN melanoma database in 2009.

Comment: 94% of patients discussed at fortnightly meetings were diagnosed and/or treated by clinicians who are regular attendees at MDM. From January 2010 meetings may be held on a weekly basis.

Table 15: Contact with Skin Cancer Nurse Specialist (CNS) n281

Contact with CNS	Borders	Fife	Lothian	SCAN
	n23	**n69**	**n189**	**n281**
Yes	22	47	168	237
No	1	22	21	44
% contact	**95.7**	**68.1**	**88.9**	**84.3**

2007
SCAN
n260
235
25
90.4

Scottish Core Cancer Standards 2008 3c: Patients have access to appropriate specialist nursing staff.

All patients are offered contact number of regional specialist nurse and are asked if she can contact them.

In Fife there are additional Link Cancer Nurses available. Clinicians in Fife continue to appreciate support of specialist nurse especially when Fife domiciled patients are being treated in Lothian.

Table 16: Five Year Follow-up of Patients diagnosed with malignant melanoma in 2003 n197

Clark Level II to V and metastatic disease at presentation n197

Borders, Fife and Lothian																	
Number and Percentage by Breslow depth																	
Breslow Depth	Alive, previous recurrence now disease free		Alive with ongoing recurrence		Alive, disease free		Dead of melanoma		Dead other causes		Dead cause n/a		Lost to Follow up		Total Male	Total Female	Overall Totals
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M/F
0 - 0.99		1(1.9%)			29(85.3%)	47 (88.7%)	2(5.9%)		2(5.9%)	1(1.9%)		2(3.8%)	1(2.9%)	2(3.8%)	34	53	87
1 - 1.99		1(3.7%)			8(50%)	20 (74.1%)	2(12.5%)	2 (7.4%)	1(6.3%)	1(3.7%)	3(18.8%)	1(3.7%)	2(12.5%)	2(7.4%)	16	27	43
2 - 2.99				1 (20.0%)	1(16.7%)	4 (80.0%)	1(16.7%)		1(16.7%)		2(33.3%)		1(16.7%)		6	5	11
3 - 3.99	1(12.5%)				4(50%)	4 (57.1%)	3(37.5%)	2 (28.6%)				1(14.3%)			8	7	15
4 +	3(21.4%)	3(23.1%)	1(7.1%)		3(21.4%)	2 (15.4%)	3(21.4%)	7 (53.8%)	2(14.3%)		2(14.3%)	1(7.7%)			14	13	27
Breslow n.a					1(100%)			2 (100%)							1	2	3
Mets	1 (12.5%)						6(75%)	2 (66.7%)			1(12.5%)	1(33.3%)			8	3	11
Total	5	5	1	1	46	77	17	15	6	2	8	6	4	4	87	110	197
% Total	5.7	4.5	1.1	0.9	52.9	70	19.5	13.6	6.9	1.8	9.2	5.5	4.6	3.6			

Note: Follow-up data extracted during 2009 for presentation at The Scottish Melanoma Group Annual General Meeting in November 2009

Protocol for Followup: current Dermatology practice is for 3 year followup for lesions Breslow <1mm and 5 years for Breslow >=1mm:

10 visits over 3 years and 16 over 5

Plastic Surgery practice is identical for all melanomas regardless of depth; first 2 years 3 monthly; 3rd year 4 monthly and 4th & 5th years six monthly: 15 visits over 5 years

In both services followup may be extended beyond this if patient has recurrence

62.4% were alive and disease free and 6.1% were alive with or having had recurrence (combined figures for 2000 - 2002 were 69.5% and 6% respectively). The small number of patients (n8, 4.1%) lost to followup had all moved outwith the area.

Table 17: Clinical Trials

Adjuvant:

1. AVAST-M

Adjuvant aVAStin Trial in high risk Melanoma; a randomised trial evaluating the VEGF inhibitor, Bevacizumab (Avastin), as adjuvant therapy following resection of AJCC stage IIB, IIC and III cutaneous melanoma
(Protocol v4 10.07.08)

5 patients entered: 3 treatment arm (Tx arm), 2 observation arm (Obs arm). Study remains open to recruitment as of 4.1.2010

Metastatic:

1. APL-B-016-05

Phase I-II multicenter, randomized, open-label, clinical and pharmacokinetic study of plitidepsin, administered alone or in combination with dacarbazine, as frontline therapy to subjects with unresectable advanced melanoma
(Protocol Final version amendment 2 22.03.07)

5 patients entered: 1 patient continues on treatment
Study now closed to recruitment

2. BRIM 3

A Randomized, open-label, controlled, multicenter, phase III Study in previously untreated patients with unresectable stage IIIC or stage IV melanoma. For patients with V6000E BRAF mutation only, randomised to dacarbazine or RO5185426.

Study to open around March 2010.