SCAN
South East Scotland Cancer Network

NHS SCOTLAND

Working regionally to improve cancer services

SOUTH EAST SCOTLAND CANCER NETWORK (SCAN) PROSPECTIVE CANCER AUDIT

Melanoma 2015-2016
Comparative Audit Report

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Document history

Version	Circulation	Date	Comments
1	Lead clinicians	24/11/16	Draft results
2	SCAN Skin Lead clinicians	16/12/16	Action points and comments agreed
3	SCAN Audit Manager	20/02/17	Formatting done and actions added from sign off meeting
4	SCAN Skin Group	28/02/17	Actions ratified and additional comments provided. Lead Clinicians commentary added. QPI 6 and QPI 11 target errors corrected.
Final Version	SCAN Group SCAN Governance Framework SCAN Action Plan Board Leads	06/04/17	Any potentially disclosive data removed for website version.
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Action Points from 2015-16

QPI	Action required	Person Responsible
1	D&G to write to the 2 GPs who excised lesions in the community and remind them of guidelines.	Lindsey Yeo
2	A list of relevant clinicians to be provided to audit facilitators by the local clinical leads and updated annually	Mark Butterworth Simone Laube Megan Mowbray Lindsey Yeo
2 & 5	Update pathology colleagues in Lothian Fife and D&G with QPI requirements	Marie Mathers Megan Mowbray Lindsey Yeo
4	Action required to provide better documentation for this QPI especially in NHS Borders	Mark Butterworth Simone Laube Megan Mowbray
7	Audit facilitators to complete summary table detailing delays in time points of pathway from Dx to WLE for each patient waiting >84 days.	All Audit Facilitators
	Audit template to be updated to include blank tables for this delay information for initial reporting deadline 27/10/2017	Jon Pullman
	MM, MB, SL and LY to discuss the above delays with local team to determine whether action required.	Mark Butterworth Simone Laube Megan Mowbray Lindsey Yeo
Table 10	Continue to collect data regarding SLNB eligibility, activity and outcome.	All Audit Facilitators
Table 12	Borders to provide data regarding patients seen by general cancer nurse for 2016 2017 report (SL). D & G to provide data regarding patients seen by dermatology skin cancer link nurse for 2016 2017 report (LY).	Simone Laube Lindsey Yeo
	Communication required regarding the possibility of Phase 3 TCAT funding for a skin cancer link nurse in Borders	Megan Mowbray
	Lack of melanoma nurse support in Borders to remain ‘open’ on SCAN skin group risk register.	Susan Chambers

Action Points from 2014-2015

QPI	Action required	Progress
General	Continue to produce a comparative annual melanoma report that includes demographic and relevant clinical data in addition to QPI analysis number 'unclassifiable' lesions in D and G - 70% compared with 5% in the other 2 sites	See pages 24 - 36
QPI 2	A list of relevant clinicians to be provided to audit facilitator by the local clinical lead and updated annually	List updated at sign off meeting with clinical lead, service manager and cancer audit facilitator 03/03/16 Completed for 2015/2016 and ongoing review
QPI 2	Write to SCAN pathologists to inform them of the results of the QPIs and remind them of the dataset requirement for QPI 2	Letter sent to GPs
QPI 5	Write to SCAN and Tayside (who perform SLNBs for Fife) to inform them of the reasons for failure of QPI 5	Letter sent
QPI 4	Local clinical leads to remind colleague that QPI 4 requires recording the date of lymph node examination. This should be documented in the notes and clinic letter. Maximum effort should be made to inform/update MDM representatives of the date and outcome of lymph node examination.	Reminder sent and ongoing action
QPI 7	Local clinical leads to arrange discussion of delays to definitive treatment with the local MDM team. Options to minimise delay to be determined	MM has informed plastic surgery team, dermatology team and cancer services management of the current delays. Ongoing discussion as to how to resolve these delays. Further discussion to be held at cancer governance group to identify next steps
QPI 8-10	All regions to consider collecting QPI 8-10 data for ALL melanoma patients who are discussed at MDM with unresectable Stage III or IV disease.	MM has discussed this with Ewan Brown. Lothian dermatology trainee to perform an audit detailing this info for all unresectable stage III and IV melanoma patients discussed at MDM in 2014/2015. Consultants reminded of need for imaging
General	MM to write to all SCAN pathologists reminding them of the requirement of the QPIs to report melanomas using the RCP dataset. Additional comment to D&G pathology team requesting that they specify histogenetic type.	Letter sent

INTRODUCTION AND METHODS

Cohort

This report covers patients newly diagnosed with Melanoma in SCAN between 01/07/2015 and 30/06/2016. The results contained within this report have been presented by NHS board of diagnosis.

Dataset and Definitions

The QPIs have been developed collaboratively with the three Regional Cancer Networks, Information Services Division (ISD), and Healthcare Improvement Scotland. QPIs will be kept under regular review and be responsive to changes in clinical practice and emerging evidence.

The overarching aim of the cancer quality work programme is to ensure that activity at NHS board level is focussed on areas most important in terms of improving survival and patient experience whilst reducing variance and ensuring safe, effective and person-centred cancer care.

Following a period of development, public engagement and finalisation, each set of QPIs is published by Healthcare Improvement Scotland[1].

Accompanying datasets and measurability criteria for QPIs are published on the ISD website[2]. NHS boards are required to report against QPIs as part of a mandatory, publicly reported, programme at a national level.

The QPI dataset for Melanoma was implemented from 01/07/2014, and this is the second publication of QPI results for Melanoma within SCAN.

The standard QPI format is shown below:

QPI Title:	Short title of Quality Performance Indicator (for use in reports etc.)	
Description:	Full and clear description of the Quality Performance Indicator.	
Rationale and Evidence:	Description of the evidence base and rationale which underpins this indicator.	
Specifications:	Numerator:	Of all the patients included in the denominator those who meet the criteria set out in the indicator.
	Denominator:	All patients to be included in the measurement of this indicator.
	Exclusions:	Patients who should be excluded from measurement of this indicator.
	Not recorded for numerator:	Include in the denominator for measurement against the target. Present as not recorded only if the patient cannot otherwise be identified as having met/not met the target.
	Not recorded for exclusion:	Include in the denominator for measurement against the target unless there is other definitive evidence that the record should be excluded. Present as not recorded only where the record cannot otherwise be definitively identified as an inclusion/exclusion for this standard.
	Not recorded for denominator:	Exclude from the denominator for measurement against the target. Present as not recorded only where the patient cannot otherwise be definitively identified as an inclusion/exclusion for this standard.
Target:	Statement of the level of performance to be achieved.	

[1] QPI documents are available at www.healthcareimprovementscotland.org
[2] Datasets and measurability documents are available at www.isdscotland.org

Audit Process

Data was analysed by the audit facilitators in each NHS board according to the measurability document provided by ISD. SCAN data was collated by Jon Pullman, SCAN Audit Facilitator for Melanoma.

Data capture is focused round the process for the fortnightly multidisciplinary meetings ensuring that data covering patient referral, investigation and diagnosis is being picked up through the routine process.

Each of the 5 hospitals provides diagnostic and wider surgery but more serious disease requiring skin grafting and/or Lymph Node biopsy is provided by plastic surgery services in St Johns or Western General hospitals for Lothian patients, and Ninewells for Fife patients.

The process remains dependent on audit staff for capture and entry of data, and for data quality checking

Data was recorded on MS Access in Lothian. In Borders, Fife and Dumfries & Galloway data was recorded using eCase.

Lead Clinicians and Audit Personnel

SCAN Region	Hospital	Lead Clinician	Audit Support
NHS Borders	Borders General Hospital	Dr Simone Laube	Jon Pullman
NHS Dumfries & Galloway	Dumfries & Galloway Royal Infirmary	Dr Lindsay Yeo	Martin Keith
NHS Fife	Queen Margaret Hospital	Dr Megan Mowbray	Jackie Stevenson
SCAN & NHS Lothian	Lauriston Building St Johns Hospital	Mr Mark Butterworth	Jon Pullman

Data Quality
Estimate of Case Ascertainment

An estimate of case ascertainment (the percentage of the population with Melanoma recorded in the audit) is made by comparison with the Scottish Cancer Registry three year average data from 2013 to 2015. High levels of case ascertainment provide confidence in the completeness of the audit recording and contribute to the reliability of results presented. Levels greater than 100% may be attributable to an increase in incidence. Allowance should be made when reviewing results where numbers are small and variation may be due to chance.

Estimate of case ascertainment: calculated using the average of the most recent available three years of Cancer Registry Data

	Borders	D&G	Fife	Lothian	SCAN
Cases from Audit	36	23	74	201	334
Cancer Registry 3 Year Average	34	39	61	195	329
Case Ascertainment %	**105.9**	**59.0**	**121.3**	**103.1**	**101.5**

Clinical Sign-Off

This report compares data from reports prepared for individual hospitals and signed off as accurate following review by the lead clinicians from each service. The collated SCAN results are reviewed jointly by the lead clinicians, to assess variances and provide comments on results:

- Individual health board results were reviewed and signed-off locally.
- Collated results were presented and discussed at the SCAN Melanoma Leads Meeting on November 24th 2016
- In the light of significant decrease in D&G numbers from previous year, a cross check was carried out against MDM lists and the total was verified. The decrease may reflect small number variation and requires close monitoring.
- Results were discussed at the National Networks Meeting on 16th March 2017.
- Final report circulated to SCAN Skin Group and Clinical Governance Groups in April 2017.

Actions for Improvement

After final sign off, the process is for the report to be sent to the Clinical Governance groups with action plans for completion at Health Board level.

The report is placed on the SCAN website with completed action plans once it has been fully signed-off and checked for any disclosive material.

Comment by SCAN Skin Group Chair
I take this opportunity to thank the SCAN audit facilitators (Jon Pullman, Jackie Stevenson, Martin Keith) and the clinical staff who have worked together to produce this comparative melanoma report. This report is comprehensive, accurate and clinically useful.

The first half of this report details the government driven melanoma quality performance indicators (QPIs). There are 11 melanoma QPIs. The QPIs only provide information for patients presenting with a primary melanoma, or those presenting as first presentation with metastases within the reporting time period. Data collection for melanoma QPIs commenced in July 2014. The data collection period runs from 1st July to 30th June. Additional, invaluable, clinically useful, data for all melanoma patients is detailed at the end of the report.
SCAN - To continue to produce an annual comparative melanoma report that includes QPI performance, demographic and clinical data relevant to all melanoma patients.

This report details the second year of QPI data recording. A baseline review was performed after year 1. Some changes were made to the QPIs at this time. The next QPI review will take place after year 3. While compiling and discussing the data for this report we remain mindful of potential improvements which could be made to the QPIs at the 3 year review. The 2015/2016 data has been discussed at both a regional/SCAN level and at a National level. This allows for comment as to how SCAN and National data compare.

334 new melanoma patients were registered in SCAN during the reporting time period. This is in keeping with the cancer registry 3-year average of 329, giving a SCAN case ascertainment of 101.5%. The ratio of male:female is 1:1.1. The median age at presentation with a melanoma is, male 68 years, female 61 years. Women continue to present at a younger age than men. The incidence in people of working age remains high at 51%.

2015/2016 sees an improvement in performance in the majority of QPIs except QPI 7(i). The areas where there is further room for improvement remain the same as for 2014/2015 therefore the action list remains similar.

QPI 1 *requires that a patient with cutaneous melanoma should have their diagnostic excision biopsy carried out by a skin cancer clinician.* The definition of skin cancer clinician was changed at baseline review to include:

- Dermatologist,
- Plastic Surgeon,
- or a locally designated clinician with a special interest in skin cancer, who is also a member (or under the supervision of a member) of the melanoma MDT.

Target compliance >90%, SCAN 97%, Scotland 96.7%. Dumfries and Galloway (D & G) failed to meet this target as 3/18 melanomas were excised in general practice. Currently in Lothian a proportion of dermatology clinical service is provided by locums. This is likely to impact on QPI1 figures for 2016/2017.
SCAN – D&G to write to the general practitioners who excised a melanoma in the community and remind them of the Scottish skin cancer referral guidelines and QPIs (LY). A list of relevant clinicians to be provided to audit facilitators by the local clinical leads and updated annually (MB, LN, SL, MMow, LY).

QPI 2 *requires that surgical pathology reports for melanomas undergoing diagnostic excision biopsy contain a full set of data items, as defined by the Royal College of Pathologists (RCP) data set.* Target compliance > 90%, SCAN 62.6%, Scotland 68.9%. Following removal of the requirement for a SNOMED code the attainment of this QPI has improved significantly between 2014/2015 (14%) and 2015/2016 (62.6%). However, SCAN continue to fail this QPI due to inconsistent use of the RCP proforma. If a proforma is used a complete data set is always recorded. The missing data items are minor and do not have an implication on clinical management. There are two schools of thought regarding QPI 2: 1) continue to require a complete data set as this should be recognised as a 'best practice' aspiration. 2)

revise the measurability document to reflect a subset of 5 clinically relevant data items (Breslow, mitosis, ulceration, lateral and deep margins). On this basis all SCAN regions would achieve QPI 2 with 99-100%. This is a reassuring finding.

SCAN - Inform pathology colleagues in Lothian, D & G, and Fife of QPI 2015/2016 results and remind them of QPI 2 requirements (MMa, LY, MMow).

National - Discuss at year 3 QPI review the suggestions for changing this QPI. Consider the development of an electronic melanoma pathology reporting proforma that requires all data items to be complete before a final melanoma pathology report can be produced.

QPI 3 details that all patients with cutaneous melanoma should be discussed by a multi disciplinary team (MDT) prior to definitive treatment (wide local excision (WLE) +/- SLNB). Target compliance >95%, SCAN 96%, Scotland 89.5%. Fife and D & G failed this target. All patients were discussed at MDT but in a small number the MDT discussion was after definitive treatment or the patient declined WLE. These results have been discussed at regional and National level. All patients were stage 1, therefore it has been agreed that all patients were appropriately managed. Of note, this QPI has achieved the original goal of ensuring that all regions have MDT meetings. Prior to the launch of the melanoma QPIs the Highlands and Orkney did not have an MDT.

National – consider changing QPI 3 at year 3 review such that 1) the target compliance is lowered, to allow for stage 1 patients who have definitive treatment prior to MDT, or 2) QPI 3 only includes melanomas ≥ stage 2.

QPI 4 *requires that patients with primary cutaneous melanoma undergo clinical examination of their draining lymph node basins.* The date of this examination must be documented in the notes or at MDT. The date must fall after the diagnostic biopsy has been performed. Target >95%, SCAN 81.8%, Scotland 79.8%. This QPI is essentially detailing our ability as clinicians to document information. It has helped identify that we are good at the procedure of lymph node examination but poor at documenting this. Significant improvements have been made since 2014/2015, SCAN 45%. This is mainly due to the prompt at MDT discussion for lymph node examination to be recorded. Borders had the poorest result for this QPI, 36.7% shortfall (15 cases). More than half of these were under the care of a locum. As the requirement for documentation of lymph node examination becomes increasingly known by all clinicians managing melanoma patients we hope we will continue to see the performance of QPI 4 improve.

SCAN - Borders to consider how best to encourage documentation of lymph node examination in all patients (SL).

National – audit facilitators to provide clinicians with data definitions and clinicians to feedback additional key phrases to ensure clarity and accurate data capture.

QPI 5 *details that sentinel lymph node biopsy (SLNB) reports for melanoma patients undergoing (SLNB) should contain a full set of data items, as defined by the current RCP dataset.* Target compliance > 90%, SCAN 60.3%, Scotland 56.2%. As with QPI 2, the requirement for SNOMED codes was removed after baseline review. This has seen an improvement across all of SCAN in QPI 5. However, the compliance remains relatively poor at 60.3%. Macroscopic abnormality, 3 dimensional dimensions and comment re the presence of blue dye in tissue are the most inconsistently reported. Pathology colleagues have suggested that at 3-year review the requirement for macroscopic abnormality and 3 dimensional dimensions be removed as this is a comment required to be made by the technician at the point of preparation and not by the pathologist when reporting. As with QPI 2, performance of this QPI was better when a RCP proforma was used.

SCAN – inform colleagues in Lothian, D & G, and Tayside (Fife) of QPI 5 2015/2016 results and remind them of QPI 5 requirements.

National – Discuss at 3 year review the suggestion of removal of the need for comment re macroscopic abnormality and 3 dimensional dimensions.

QPI 6 states that a patient with primary cutaneous melanoma should undergo WLE. i) if diagnosed by excisional biopsy. Target compliance >95%, SCAN 93.3%, Scotland 92.6%. ii) if diagnosed by partial biopsy. Target compliance >95%, SCAN 98.6%, Scotland 95.1%. This target was not met in Lothian, D & G, and Fife. Reasons for not meeting this target were that the patient declined treatment, after MDT discussion no further treatment was required, co-morbidities contraindicated further treatment. On review it was agreed that all patients were appropriately clinically managed and therefore no action is required.

QPI 7 *details that a patient with primary cutaneous melanoma should have their WLE within 84 days of their diagnostic biopsy. i) if diagnosed by excisional biopsy.* Target compliance >95%, SCAN 76.2%, Scotland 71.4%. ii) if diagnosed by partial biopsy. Target compliance >95%, SCAN 86%, Scotland 84.8%. This QPI is not met across all 3 cancer networks. SCAN data for 7 i) has improved since 2014/2015 by 23%. Data for those diagnosed by partial biopsy was not included in the 2014/2015 report. It is encouraging to see that this group of patients are not having to wait longer than those diagnosed by excisional biopsy. It is important for clinicians to remember that of all the melanoma QPIs, QPI 7 is the one in which the patients would like to see an improvement. A table of time points within the pathway is provided for each patient who failed this QPI, Appendix 1 page 40.

SCAN – local teams to discuss table 1 and address the factors leading to delays (MB, MMow, LY, SL).

National – at 3 year review change national dataset to include 1) date of receipt of specimen in pathology lab, 2) date of issue of pathology report.

QPI 8 *requires that BRAF status is performed in all patients with unresectable stage III or IV disease.* **QPI 9** *requires that all patients with stage III or IV disease undergoing completion lymphadenectomy undergo a CT or CT PET prior to completion.* **QPI 10** *requires that all patients with unresectable stage III or IV cutaneous melanoma should receive systemic ant-cancer treatment.* QPI 8 target compliance >75%, SCAN 100%, Scotland 90%. QPI 9 target compliance >95%, SCAN 100%, Scotland 90%. QPI 10 target compliance >60%, SCAN 100%, Scotland 81.3%. The numbers for QPI 8,9, and 10 are very small as they only include patients who have progressed to stage III/IV disease within the reporting time period, or those presenting with stage IV disease with no previously diagnosed primary melanoma. This makes meaningful interpretation difficult. At the time of QPI writing it was acknowledged that this would be the case. QPIs 8-10 were agreed in the hope they would encourage clinicians to remain aware of these factors and consider them across all melanoma patients discussed at MDT. We await the results of an audit performed by Dr Van de Velde in SCAN looking at the performance for this QPI criteria for **all** melanoma patients who have stage III and IV disease who were discussed at MDT during the reporting time period. This data will provide a clearer picture of SCAN performance for this subset of melanoma patients with advanced disease.

SCAN – discussion of QPI 8-10 audit results at next SCAN meeting.

QPI 11 *requires that patients with primary cutaneous melanoma, who undergo groin block dissection, should be assessed for lymphoedema and have access to a lymphoedema clinic.* Target compliance >40%, SCAN 66.7%, Scotland 52.9%. This QPI is meaningless as the number of eligible patients in the SCAN region is small (2). It does not consider those having axillary lymph node dissection and it gives no information as to the quality of the lymphoedema service.

National – consider removing QPI 11 at 3 year review.

This report includes detail with regard patient demographics and melanoma QPI performance. Also provided is data specific to melanoma histology, body site, surgical management and support services. This latter data allows comment regarding epidemiology, pathophysiology and the patient pathway. The top 3 anatomical sites for male and females have remained similar over the past 4 years. Males - head and neck > trunk posterior > trunk anterior/arm above elbow. Females – leg below knee > head and neck > trunk posterior. This indicates that both chronic and intermittent sun exposure play a role in melanoma

development. This data is useful when educating patients with regards to sun exposure behaviour and self-examination.
Breslow depth remains the most important prognostic indicator for melanoma. The majority of melanomas are thin (Breslow <1mm), SCAN 50.9%, Fife 61.3%. Previously we have observed a higher proportion of thick (Breslow ≥4mm), poor prognosis, melanomas in Fife, Borders and D & G. The proportion of thick melanomas in Fife has decreased in 2015/2016. The proportion of thick melanomas in men in D & G remains high but overall numbers are low (n=8) so it is difficult to draw conclusions on this observation.
SLNB is offered to all patients with Breslow ≥1mm and those with a mitotic rate of ≥1 with a Breslow of any thickness. In SCAN, of 50.6% eligible for SLNB 34.3% (58) went on to have a SLNB, 22.4% (13) of those performed were positive. 12 went on to have clearance lymphadenectomy of which 5 were positive. The number eligible for SLNB has remained similar over the past 3 years. This number is likely to reduce over time as the SIGN melanoma guidelines published in March 2017 recommend SLNB only in those with Breslow ≥1mm, irrespective of mitotic rate. This data remains useful when counselling patients with regard SLNB and when reviewing service provision.
SCAN - To continue to collect data regarding SLNB eligibility, activity and outcome.

Patient contact with a cancer nurse specialist (CNS) or dermatology skin cancer link nurse (dSCLN) continues to vary across the region. A CNS is based in Lothian. Patients in Borders and D & G generally only come into contact with the CNS when referred to Lothian for further treatment (SLNB, oncology). This situation was similar in Fife until 2009. In 2009 the role of a dSCLN was developed in Fife. The dSCLN is a local dermatology nurse who has additional expertise in melanoma. This model has been adopted by D & G in 2016. We look forward to hearing of the success of this roll in 2016/2017. The Borders had hoped to follow the dSCLN model and a business case has been submitted. Unfortunately Borders management have not agreed to this, it has been suggested the skin cancer support roll is covered by a general cancer nurse. It is disappointing that a business plan, based on a model which has been shown to be effective, has been rejected.
SCAN - D & G to provide data regarding patients seen by dSCLN for 2016/2017 report (LY). Borders to provide data regarding patients seen by general cancer nurse for 2016/2017 report (SL). Lack of melanoma support in Borders to remain 'open' on SCAN skin group risk register.

This comparative report provides a comprehensive compilation of accurate information which allows us to critically assess and improve all aspects of melanoma patient care. Once again, I thank all those who have contributed to it.

Megan Mowbray
April 2017

Melanoma QPI attainment summary table 2014/15-2016/17			Borders			D&G			Fife			Lothian			SCAN		
		Target %	Yr1	Yr2	Yr3	Yr1	Yr2	Yr3	Yr1	Yr2	Yr3	Yr1	Yr2	Yr3	Yr1	Yr2	Yr3
QPI 1: Excision Biopsy. patients should have their diagnostic excision biopsy carried out by a skin cancer clinician		90	100	100		92.9	83.3		97.6	96.7		96.2	98.1		95.7	97.0	
QPI 2: Pathology Reporting. Surgical pathology reports cutaneous melanoma should contain full pathology information		90	0	61.3		28.6	5.6		68.3	83.3		0	61.5		14.0	62.6	
QPI 3: Multi-Disciplinary Team Meeting (MDT). Patients should be discussed prior to definitive treatment		95	100	97.1		60.9	82.6		96.4	90.5		100	97.4		92.7	96.0	
QPI 4: Clinical Examination of Draining Lymph Nodes. Patients should undergo clinical examination of relevant draining lymph node basins as part of clinical staging		95	51.4	58.3		30.4	95.7		71.9	93.2		90.0	80.1		45.3	81.8	
QPI 5: Sentinel Node Biopsy Pathology. Sentinel node biopsy (SNB) reports should contain full pathology information		90	0	100		50.0	50.0		0	44.4		0	63.6		3.5	60.3	
QPI 6 (i): Wide Local Excisions. Patients should undergo a wide local excision of the initial excision biopsy site to reduce the risk of local recurrence		95	96.7	96.8		85.7	83.3		97.6	93.3		90.4	93.8		91.8	93.3	
QPI 6 (ii): Wide Local Excisions. Patients should undergo a wide local excision of the initial partial biopsy site to reduce the risk of local recurrence		95	-	100		-	100		-	92.9		-	100		-	98.3	
QPI 7(i): Time to Wide Local Excision. Patients should have their wide local excision within 84 days of their diagnostic excision biopsy		95	75.9	80.6		79.2	64.7		72.5	60.3		85.9	82.7		81.7	76.2	
QPI 7(ii): Time to Wide Local Excision. Patients should have their wide local excision within 84 days of their diagnostic partial biopsy		95	-	75.0		-	100		-	76.9		-	88.6		-	86.0	
QPI 8: BRAF Status. Patients with unresectable stage III or IV cutaneous melanoma should have their BRAF status checked		75	100	100		-	-		100	100		75.0	100		83.0	100	
QPI 9: Imaging for Patients with Advanced Melanoma. Patients with stage III or IV cutaneous melanoma should be evaluated with appropriate imaging (CT/(PET) CT)		95	100	-		-	-		100	-		100	100		100	100	
QPI 10: Systemic Therapy. Patients with unresectable stage III or IV cutaneous melanoma should receive Systemic Anti Cancer Therapy (SACT)		60	0	100		-	-		0	100		75	100		50.0	100	
QPI 11: Access to Lymphoedema Service. Patients who undergo groin block dissection should be assessed for lymphoedema and have access to a lymphoedema service when clinically required		40	-	-		-	-		-	0		100	100		100	66.7	
Clinical Trials QPI	Interventional	7.5	-	0		-	0		-	0		-	0.5		-	0.3	
	Translational	15	-	-		-	-		-	-		-	-		-	-	

QPI Results pages:

QPI 1: Excision biopsy

Target = 90%

Numerator = All patients with cutaneous melanoma with diagnostic excision Biopsies carried out by skin cancer clinician

Denominator = All patients with cutaneous melanoma undergoing diagnostic excision biopsy (no exclusions)

Ineligible = non cutaneous melanoma, partial biopsies

Target 90%	**Borders**	**D&G**	**Fife**	**Lothian**	**SCAN**
2015-16 cohort	36	23	74	201	334
Ineligible for this QPI	5	5	14	40	64
Numerator	31	15	58	158	262
Not recorded for numerator	0	0	0	0	0
Denominator	31	18	60	161	270
Not recorded for denominator	0	0	0	0	0
% Performance	**100.0**	**83.3**	**96.7**	**98.1**	**97.0**

Comments

Borders: The target was met

D&G: The target was not met showing a shortfall of 6.7%.(3 cases).1 patient was diagnosed in general surgery and 2 by GPs who did not expect melanoma.

Fife: The target was met

Lothian: The target was met

Actions:

1. Action is required to remind D&G GPs of the guidelines

2. An updated list of designated skin cancer clinicians is required for all Health Boards

QPI 2: Pathology reporting

Target = 90%

Numerator = All patients with cutaneous melanoma undergoing diagnostic excision biopsy where the surgical pathology report contains a full set of data items (as defined by the current Royal College of Pathologists dataset)

Denominator = All patients with cutaneous melanoma undergoing diagnostic excision biopsy (no exclusions)

Ineligible = non cutaneous melanoma, partial biopsies

Target 90%	**Borders**	**D&G**	**Fife**	**Lothian**	**SCAN**
2015-16 cohort	36	23	74	201	334
Ineligible for this QPI	5	5	14	40	64
Numerator	19	1	50	99	169
Not recorded for numerator	0	0	0	0	0
Denominator	31	18	60	161	270
Not recorded for denominator	0	0	0	0	0
% Performance	**61.3**	**5.6**	**83.3**	**61.5**	**62.6**

Comments

Borders: The target was not met, showing a shortfall of 28.7% (12 cases).

D&G: The figures are especially low.

Fife: The target was not met, showing a shortfall of 6.7% (10 cases).

Lothian: The target was not met, showing a shortfall of 28.5% (62 cases).

Removing the requirement for the SNOMED code has had a significant positive impact on the figures from the previous year but SCAN is continuing to fail the QPI for inconsistent adherence to the Royal College of Pathologists' pro-forma

NB: It has been suggested that the measurability for this QPI be revised to reflect a key subset of data items that are considered significant for prognosis and further treatment management. It was agreed that the five such items could be Breslow thickness, mitosis, and ulceration, plus lateral and deep margins.

On this basis, Borders, D&G, Lothian and Fife would all comfortably achieve the QPI target with numbers of 99-100%.
It is reassuring to note that the missing data items are less clinically relevant.

Action:
Update pathology colleagues with QPI requirements

QPI 3: Multi-Disciplinary Team Meeting (MDT)

Target = 95%

Numerator = All patients with cutaneous melanoma discussed at the MDT before definitive treatment (wide local excision, chemo/SACT, supportive care and radiotherapy) Date discussed by care team (MDT) not coded as Not applicable and coded as before or equal to Date of Definitive treatment {Melanoma}

Denominator = All patients with cutaneous melanoma (excluding patients who died before treatment)

Ineligible = non cutaneous melanoma

Exclusions = died before treatment

Target 95%	**Borders**	**D&G**	**Fife**	**Lothian**	**SCAN**
2015-16 cohort	36	23	74	201	334
Ineligible for this QPI	0	0	0	5	5
Exclusions	1	0	0	0	1
Numerator	34	19	67	191	315
Not recorded for numerator	0	0	0	0	0
Denominator	35	23	74	196	328
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**97.1**	**82.6**	**90.5**	**97.4**	**96.0**

Comments

Borders: The target was met

D&G: The target was not met showing a shortfall of 12.4% (4 cases). 2 patients declined WLE, 1 had WLE performed prior to MDM and 1 patient was a watch and wait case.

Fife: The target was not met showing a shortfall of 4.5% (7 cases). 2 patients had excision margins deemed adequate, 2 had WLE carried out prior to MDM and 1 was diagnosed at WLE, 1 patient did not attend and 1 declined WLE.

Lothian: The target was met.

Based on the above comments, all patients have been appropriately clinically managed and no action is required.

QPI 4: Clinical Examination of Draining Lymph Node Basin

Target = 95%

Numerator = All patients with cutaneous melanoma who undergo clinical examination of relevant draining lymph node basins as part of clinical staging

Denominator = All patients with cutaneous melanoma (no exclusions)

Ineligible = non cutaneous melanoma

Target 95%	**Borders**	**D&G**	**Fife**	**Lothian**	**SCAN**
2015-16 cohort	36	23	74	201	334
Ineligible for this QPI	0	0	0	5	5
Numerator	21	22	69	157	269
Not recorded for numerator	0	0	0	0	0
Denominator	36	23	74	196	329
Not recorded for denominator	0	0	0	0	0
% Performance	**58.3**	**95.7**	**93.2**	**80.1**	**81.8**

Comments

Borders: The target was not met showing a shortfall of 36.7% (15 cases). These cases have been reviewed and more than half of unrecorded examinations were carried out by a locum. Consideration is ongoing as to how better document this QPI for Borders patients.

D&G: The target was met.

Fife: The target was not met showing a shortfall of 1.8% (5 cases).

Lothian: The target was not met showing a shortfall of 14.9% (39 cases).

Numbers show improvements on previous year, but there remains a lack of consistency in the clinical documentation of lymph node examinations.

Action:
Regional MDM to request documentation where not provided.
MDM Coordinator to ensure requests are sent to BGH clinicians.

QPI 5: Sentinel Node Biopsy Pathology

Target = 90%

Numerator = All patients with cutaneous melanoma who undergo SLNB where the SNB report contains a full set of data (as defined by the current Royal College of Pathologists dataset)

Denominator = All patients with cutaneous melanoma who undergo SLNB (No exclusions)

Ineligible = non cutaneous melanoma, patients with no SLNB

Target 90%	**Borders**	**D&G**	**Fife**	**Lothian**	**SCAN**
2015-16 cohort	36	23	74	201	334
Ineligible for this QPI	35	19	65	157	276
Numerator	1	2	4	28	35
Not recorded for numerator	0	1	0	0	1
Denominator	1	4	9	44	58
Not recorded for denominator	0	0	0	0	0
% Performance	**100.0**	**50**	**44.4**	**63.6**	**60.3**

Comments

Borders: The target was met

D&G: The target was not met showing a shortfall of 40% (1 case).The patient had no available pathology from Murrayfield Hospital.

Fife: The target was not met showing a shortfall of 45.6% (5 cases).

Lothian: The target was not met showing a shortfall of 26.4% (16 cases).

Removing the requirement for the SNOMED code has had a significant positive impact on the figures from the previous year but SCAN is continuing to fail the QPI for inconsistent adherence to the Royal College of Pathologists' pro-forma

Presence of blue dye in specimen and 3 dimensional measurements in particular are inconsistently reported.

Action:

Update pathology colleagues with QPI requirements.

QPI 6(i): Wide Local Excisions (following Excision biopsy)

Target = 95%

Numerator = All patients with cutaneous melanoma undergoing diagnostic excision biopsy who undergo a wide local excision

Denominator = All patients with cutaneous melanoma who undergo diagnostic excision biopsy (Excludes patients who died before treatment)

Ineligible = non cutaneous melanoma, partial biopsies

Exclusions = died before treatment

Target 95%	**Borders**	**D&G**	**Fife**	**Lothian**	**SCAN**
2015-16 cohort	36	23	74	201	334
Ineligible for this QPI	5	5	14	40	64
Exclusions	0	0	0	0	0
Numerator	30	15	56	151	252
Not recorded for numerator	0	0	0	0	0
Denominator	31	18	60	161	270
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**96.8**	**83.3**	**93.3**	**93.8**	**93.3**

Comments

Borders: The target was met

D&G: The target not met. 2 patients declined further treatment, and 1 patient no further treatment due to delicate area

Fife: The target was not met. 3 patients did not require further treatment as agreed at MDM (1 patient had adequate margins, 1 had early invasion and a decision was made to monitor and 1 had co-morbidities). 1 patient declined further treatment.

Lothian: The target was not met. 3 patients declined further treatment, 3 patients had adequate margins from first treatment, 1 patient had co-morbidities which contra-indicated further treatment and 1 patient had progressive disease. 2 other patients died prior to WLE being carried out.

Based on the comments, no action is required - all patients were appropriately clinically managed

QPI 6(ii): Wide Local Excisions (following partial biopsy)

Target = 95%

Numerator = All patients with cutaneous melanoma undergoing diagnostic partial biopsy who undergo a wide local excision

Denominator = All patients with cutaneous melanoma who undergo diagnostic partial biopsy (Excludes patients who died before treatment)

Ineligible = non cutaneous melanoma, excision biopsies

Exclusions: died before treatment

Target 95%	**Borders**	**D&G**	**Fife**	**Lothian**	**SCAN**
2015-16 cohort	36	23	74	201	334
Ineligible for this QPI	31	18	60	166	275
Exclusions	1	0	0	0	1
Numerator	4	5	13	35	57
Not recorded for numerator	0	0	0	0	0
Denominator	4	5	14	35	58
Not recorded for exclusions	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**100.0**	**100.0**	**92.9**	**100.0**	**98.3**

Comments:

NHS Fife: The target was not met. 1 patient declined treatment.

QPI 7(i): Wide Local Excision within 84 days (post Excision biopsy)

Target = 95%

Numerator = All patients with cutaneous melanoma undergoing wide local excision within 84 days of their diagnostic excision biopsy

Denominator = All patients with cutaneous melanoma who undergo Wide local excisions following diagnostic excision biopsy (No Exclusions)

Ineligible = non cutaneous melanoma, partial biopsies, no WLE carried out

Target 95%	**Borders**	**D&G**	**Fife**	**Lothian**	**SCAN**
2015-16 cohort	36	23	74	201	334
Ineligible for this QPI	5	6	16	51	78
Numerator	25	11	35	124	195
Not recorded for numerator	0	0	0	0	0
Denominator	31	17	58	150	256
Not recorded for denominator	0	0	0	0	0
% Performance	**80.6**	**64.7**	**60.3**	**82.7**	**76.2**

Comments:

Borders: The target was not met with a shortfall of 14.4% (6 cases).

D&G: The target was not met with a shortfall of 30.3% (6 cases). 3 patients declined WLE and fail according to the current measurability, 1 patient was delayed due to co-morbidities and 1 patient had additional investigations.

Fife: The target was not met with a shortfall of 37.4%. 5 were patient-induced delays. Most remaining patients were held up after referral to Plastics. There were specific reasons for problems with plastics in Fife for 2015-16, these have now been resolved. (See appendix 1 for Outliers Report).

Lothian: The target was not met with a shortfall of 12.3% (26 cases). These were mainly patient-induced delays. (See appendix 1 for Outliers Report).

Action:

1. Further discussion with local teams is required to address these delays.
2. Data on outliers to be provided by audit facilitators for inclusion in comparative report.

QPI 7(ii): Wide Local Excision within 84 days (post partial biopsy)

Target = 95%

Numerator = All patients with cutaneous melanoma undergoing wide local excision within 84 days of their diagnostic partial biopsy

Denominator = All patients with cutaneous melanoma who undergo Wide local excisions following diagnostic partial biopsy (No Exclusions)

Ineligible = non cutaneous melanoma, excision biopsies, no WLE carried out

Target 95%	**Borders**	**D&G**	**Fife**	**Lothian**	**SCAN**
2015-16 cohort	36	23	74	201	334
Ineligible for this QPI	32	18	61	166	277
Numerator	3	5	10	31	49
Not recorded for numerator	0	0	0	0	0
Denominator	4	5	13	35	57
Not recorded for denominator	0	0	0	0	0
% Performance	**75.0**	**100.0**	**76.9**	**88.6**	**86.0**

Comments:

Borders: The target was not met with a shortfall of 20% (1 case).

D&G: The target was met.

Fife: The target was not met with a shortfall of 18.1% (3 cases). (See appendix 1 for Outliers Report).

Lothian: The target was not met with a shortfall of 6.4% (4 cases). These were mainly patient-induced delays. (See appendix 1 for Outliers Report).

QPI 8: B-RAF Status

Target = 75%

Numerator = All patients with unresectable stage III or IV cutaneous melanoma who have their BRAF status checked

Denominator = All patients with unresectable stage III or IV cutaneous melanoma (No exclusions

Ineligible = non cutaneous melanoma, disease < III or resectable

Target 75%	**Borders**	**D&G**	**Fife**	**Lothian**	**SCAN**
2015-16 cohort	36	23	74	201	334
Ineligible for this QPI	35	23	73	200	331
Numerator	1	0	1	1	3
Not recorded for numerator	0	0	0	0	0
Denominator	1	0	1	1	3
Not recorded for denominator	0	0	0	0	0
% Performance	**100.0**	**-**	**100.0**	**100.0**	**100.0**

Comments:

The target was met in all Boards. There were no eligible patients in D&G

NB: unresectable cancers that are not cutaneous (e.g. mucosal) will not be included in the figures because B-RAF status is not applicable in these cases.

QPI 9: Imaging for Patients with Advanced Melanoma

Target = 95%

Numerator = All patients with stage III or IV cutaneous melanoma undergoing completion lymphadenectomy who undergo CT or PET CT prior to completion

Denominator = All patients with III or IV cutaneous melanoma undergoing completion lymphadenectomy (No exclusions

Ineligible = non cutaneous melanoma, disease <III or no completion lymphadenectomy

Target 95%	**Borders**	**D&G**	**Fife**	**Lothian**	**SCAN**
2015-16 cohort	36	23	74	201	334
Ineligible for this QPI	36	23	74	191	324
Numerator	0	0	0	10	10
Not recorded for numerator	0	0	0	0	0
Denominator	0	0	0	10	10
Not recorded for denominator	0	0	0	0	0
% Performance	**-**	**-**	**-**	**100.0**	**100.0**

Comments:

There were no eligible patients in Borders D&G and Fife.
The target was met in Lothian

QPI 10: Systemic Therapy

Target = 60%

Numerator = All patients with unresectable stage III or IV cutaneous melanoma who undergo SACT

Denominator = All patients with unresectable stage III or IV cutaneous melanoma

Ineligible = non cutaneous melanoma, disease <III or resectable

Target 60%	**Borders**	**D&G**	**Fife**	**Lothian**	**SCAN**
2015-16 cohort	36	23	74	201	334
Ineligible for this QPI	35	23	73	191	331
Numerator	1	0	1	1	3
Not recorded for numerator	0	0	0	0	0
Denominator	1	0	1	1	3
Not recorded for denominator	0	0	0	0	0
% Performance	**100.0**	**-**	**100.0**	**100.0**	**100.0**

Comments:

There were no eligible patients in D&G.
The target was met in Borders Fife and Lothian

Allowances should be made where small numbers and variation may be due to chance. Aggregation of results over time may be useful, in future years, to clarify results where numbers are small.

QPI 11: Access to Lymphoedema Service

Target = 40%

Numerator = All patients with cutaneous melanoma undergoing groin block dissection: (Access to Lymphoedema service codes as yes)

Denominator = All patients with cutaneous melanoma undergoing groin block dissection (No exclusions)

Ineligible = non cutaneous melanoma, no groin dissection

Target 40%	**Borders**	**D&G**	**Fife**	**Lothian**	**SCAN**
2015-16 cohort	36	23	74	201	334
Ineligible for this QPI	36	23	73	199	331
Numerator	0	0	0	2	2
Not recorded for numerator	0	0	0	0	0
Denominator	0	0	1	2	3
Not recorded for denominator	0	0	0	0	0
% Performance	**-**	**-**	**0.0**	**100.0**	**66.7**

Comments:

There were no eligible patients in Borders and D&G

Fife: The target was not met. The patient was reviewed by plastics twice prior to discharge. No Lymphoedema.

Lothian: The target was met.

Allowances should be made where small numbers and variation may be due to chance. Aggregation of results over time may be useful, in future years, to clarify results where numbers are small.

Clinical Trials QPI

Proportion of patients with Melanoma who are enrolled in an interventional clinical trial or translational research.

Interventional Clinical Trials Target = 7.5%
Translational Research Target = 15%

Numerator 1 Number of patients with Melanoma enrolled in an interventional clinical trial

Numerator 2 Number of patients with Melanoma enrolled in translational research.

Denominator All patients with Melanoma
Average 5 year incidence from Cancer Registry (2010 – 2014)

Interventional Target 7.5%	Borders	D&G	Fife	Lothian	SCAN
Numerator	0	0	0	1	1
Denominator	31	35	63	193	322
% Performance	**0**	**0**	**0**	**0.5**	**0.3**

Translational Target 15%	Borders	D&G	Fife	Lothian	SCAN
Numerator	0	0	0	0	0
Denominator	31	35	63	193	322
% Performance	**0**	**0**	**0**	**0**	**0**

Trials Registered on SCRN database

Interventional Trials in 2015-16	Numbers recruited
Paclitaxel +/- GSK1120212 or Pazopanib in Melanoma - PACMEL	**1**

Translational Trials in 2015-16	Numbers recruited
No trials open in 2016	**N/A**

Note: During 2015 there was a reduction in trials activity across the UK for patients with metastatic melanoma compared to previous years as a consequence of several large industry sponsored phase 3 trials of novel therapies completing recruitment in 2014. Dabrafenib and pembrolizumab were subsequently approved by the Scottish Medicines Consortium (SMC) in 2015 which improved treatment options available to patients in Scotland. Ewan Brown (February 2017)

Cancer Registry Figures

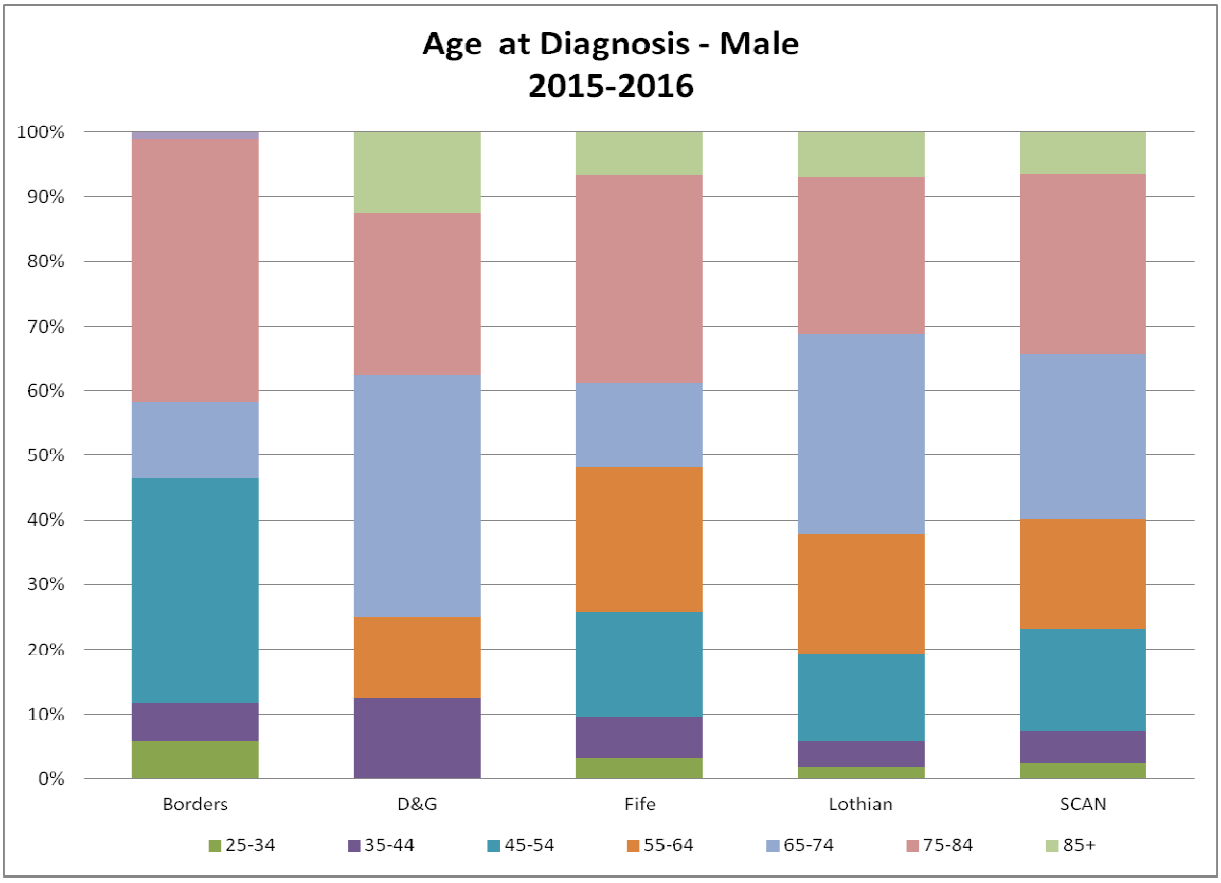
	2011	2012	2013	2014	2015	Sum	Average
NHS Borders	21	28	30	37	38	154	31
NHS D&G	24	33	41	48	29	175	35
NHS Fife	65	69	56	49	78	317	63
NHS Lothian	193	172	184	204	211	964	193
SCAN	303	302	311	338	356	1610	322

Non QPI results:

Table 1: Age at Presentation n334 lesions

Male	Borders		D&G		Fife		Lothian		SCAN	
Age	n	%	n	%	n	%	n	%	n	%
0-14	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
15-24	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
25-34	1	5.9	0	0.0	1	3.2	2	1.9	4	2.5
35-44	1	5.9	1	12.5	2	6.5	4	3.9	8	5.0
45-54	6	35.3	0	0.0	5	16.1	14	13.6	25	15.7
55-64	0	0.0	1	12.5	7	22.6	19	18.4	27	17.0
65-74	2	11.8	3	37.5	4	12.9	32	31.1	41	25.8
75-84	7	41.2	2	25.0	10	32.3	25	24.3	44	27.7
85+	0	0.0	1	12.5	2	6.5	7	6.8	10	6.3
Total	17	100.0	8	100.0	31	100.0	103	100.0	159	100.0

Female	Borders		D&G		Fife		Lothian		SCAN	
Age	n	%	n	%	n	%	n	%	n	%
0-14	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
15-24	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
25-34	0	0.0	0	0.0	3	7.0	11	11.2	14	8.0
35-44	1	5.3	1	6.7	5	11.6	13	13.3	20	11.4
45-54	3	15.8	3	20.0	8	18.6	14	14.3	28	16.0
55-64	8	42.1	5	33.3	9	20.9	21	21.4	43	24.6
65-74	4	21.1	2	13.3	7	16.3	13	13.3	26	14.9
75-84	2	10.5	0	0.0	4	9.3	20	20.4	26	14.9
85+	1	5.3	4	26.7	7	16.3	6	6.1	18	10.3
Total	19	100.0	15	100.0	43	100.0	98	100.0	175	100.0


Age at Diagnosis - Male
2015-2016
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Borders
D&G
Fife
Lothian
SCAN
25-34
35-44
45-54
55-64
65-74
75-84
85+

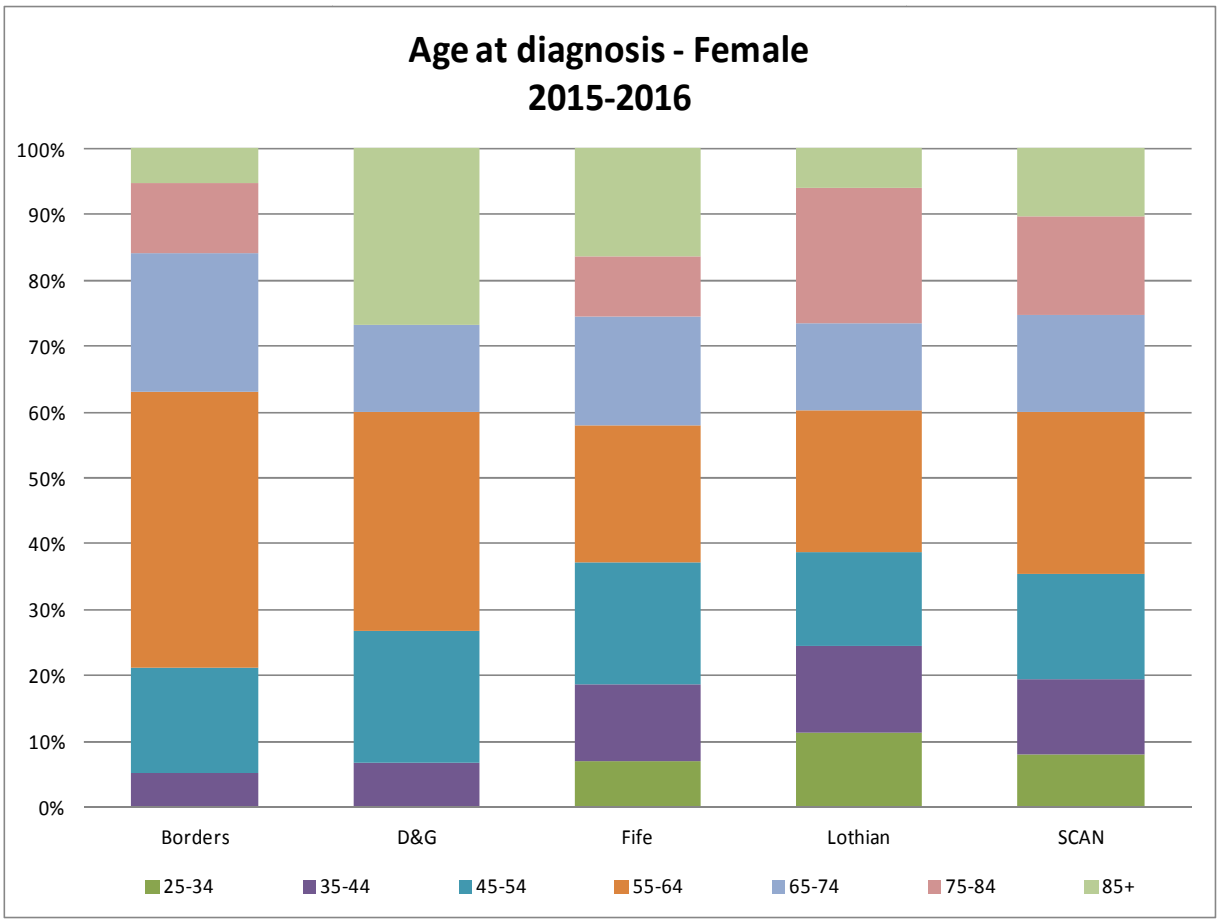

Age at diagnosis - Female
2015-2016
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Borders
D&G
Fife
Lothian
SCAN
25-34
35-44
45-54
55-64
65-74
75-84
85+

Table 1a: Incidence in Working Age Population (18 to 64)

	Borders		D&G		Fife		Lothian		SCAN	
	n	%	n	%	n	%	n	%	n	%
2015-16	20	55.6	11	47.8	40	54	98	48.8	169	50.6
2014-15	12	34.2	15	32.6	21	36.8	95	47.5	143	42.3

Table 1b: Incidence in Working Age Population Year on Year (18 to 64)

Year	Number of working age people	% of Total
2015-16	169	50.6
2014-15	143	42.3
2013	135	45.3
2012	155	48.6
2011	156	51.5

Table 1c: Median age at Diagnosis

	Borders		D&G		Fife		Lothian	
	Male	Female	Male	Female	Male	Female	Male	Female
2015-16	66	59	69.5	61	65	61	69	61

Table 1d: Median age at Diagnosis Year on Year

Year	Male	Female	Area Covered
2015-16	68	61	B F L D&G
2014-15	71	66	B F L D&G
2013	68.5	63.5	B F L D&G
2012	66	66	B F L
2011	65	61	B F L
2010	65	54	B L
2009	64	53	B L
2008	64	56	B F L
2007	64	55	B F L

Table 1e: Gender Incidence Ratio

Year	Male	Female
2015-16	1	1.1
2014-15	1	1.0
2013	1	1.0
2012	1	1.2
2011	1	1.0
2010	1	1.1
2009	1	1.1
2008	1	1.4
2007	1	1.7

Table 2: Anatomical Site

Site	SCAN 2015-16				SCAN 2012-15			
	n	%	n	%	n	%	n	%
	Male		Female		Male		Female	
Head and Neck	42	26.4	31	17.7	136	29.2	92	18.8
Trunk anterior	19	11.9	20	11.4	53	11.4	27	5.5
Trunk Posterior	40	25.2	28	16.0	121	26.0	71	14.5
Arm	5	3.1	1	0.6	6	1.3	14	2.9
Arm above elbow	19	11.9	24	13.7	32	6.9	61	12.5
Arm below elbow	12	7.5	15	8.6	33	7.1	44	9.0
Leg	1	0.6	4	2.3	5	1.1	9	1.8
Leg above knee	4	2.5	15	8.6	21	4.5	36	7.4
Leg below knee	10	6.3	32	18.3	29	6.2	102	20.9
Acral	2	1.3	0	0.0	9	1.9	18	3.7
Mucosal	1	0.6	1	0.6	4	.9	5	1.0
Subungual	2	1.3	1	0.6	1	.2	2	0.4
Mets at Presentation	2	1.3	3	1.7	15	3.2	8	1.6
SCAN	159	100	175	100	465	100	489	100

Top 3 anatomical sites 2015-16			
Male	Head and Neck (26.4%)	Trunk Posterior (25.2%)	Trunk anterior/Arm above elbow (11.9%)
Female	Leg below Knee (18.3%)	Head and Neck (17.7%)	Trunk Posterior (16.0%)

Top 3 anatomical sites 2012-15			
Male	Head and Neck (29.2%)	Trunk Posterior (26.0%)	Trunk anterior/Arm above elbow (11.4%)
Female	Leg below Knee (20.9%)	Head and Neck (18.8%)	Trunk Posterior (14.5%)

Table 3: Histogenetic Type of Melanoma

Histogenetic Type	SCAN 2015-16			
	n	%	n	%
	Male		Female	
Lentigo maligna melanoma	31	19.5	27	15.4
Superficial spreading	88	55.3	111	63.4
Nodular	27	17.0	23	13.1
Acral	2	1.3	3	1.7
Mucosal	1	0.6	1	0.6
Desmoplastic	2	1.3	0	0.0
Mixed (desmopastic)	3	1.9	0	0.0
not assessable	1	0.6	0	0.0
Unclassifiable (Melanoma NOS)	1	0.6	3	1.7
Spitzoid	1	0.6	1	0.6
Other*	0	0.0	3	1.7
secondary MM	2	1.3	3	1.7
TOTAL	159	100.0	175	100.0

* 2 x Naevoid
1 Fife pathology unassessable

Table 3a: Unclassifiables by board

Fife		Lothian		Borders		D & G	
n	%	n	%	n	%	n	%
0	0	4	2.0	0	0	0	0

Table 4: Method of diagnosis n334 lesions

	Borders		D&G		Fife		Lothian		SCAN	
	n	%	n	%	n	%	n	%	n	%
Sample biopsy*	5	13.9	6	26.1	14	18.9	35	17.4	60	18.0
Excision/Amputation	31	86.1	17	73.9	58	78.4	160	79.6	266	79.6
FNA	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other	0	0.0	0	0.0	2	2.7	5	2.5	7	2.1
Not known/Inapplicable	0	0.0	0	0.0	0	0.0	1	0.5	1	0.3
Total	36	100	23	100	74	100	201	100	334	100

*****Sampling of suspect lesions is used when there is diagnostic doubt or for planning/staging purposes in larger lesions or those on cosmetically challenging areas**.**

Table 4a: Sample biopsy Year on Year

	Borders		D&G		Fife		Lothian		SCAN	
	n	%	n	%	n	%	n	%	n	%
2015-16	5	13.9	6	26.1	14	18.9	35	17.4	60	18.0
2014-15	5	14.3	19	41.3	17	29.8	37	18.5	78	23.1
2013	6	20.0	18	40.0	14	29.8	43	23.8	81	26.7
2012	5	15.2	8	27.6	15	23.1	49	25.5	77	24.1
2011	5	25.0	8	34.8	12	21.4	58	28.3	83	27.3

Table 5: Pathology: Time from diagnosis to issue of Pathology report
n334 lesions

Time interval in days	Borders		D&G		Fife		Lothian		SCAN	
	n	%	n	%	n	%	n	%	n	%
0 -14	5	13.9	n/a		53	71.6	35	17.9	93	30.4
15-28	31	86.1	n/a		19	25.7	150	76.5	200	65.4
>28	0	0.0	n/a		2	2.7	10	5.1	12	3.9
Data n/a	0	0.0	n/a		0	0.0	0	0	0	0.0
Inapplicable	0	0.0	n/a		0	0.0	1	0.5	1	0.3
Median	16		n/a		11		16			
Range	8 to 33		n/a		4 to 31		6 to 73			

Table 5a: Median Time from diagnosis to Pathology Report (Year on Year)

	Borders and Lothian	D&G	Fife
Year of Report	days	days	days
2015-16	16	n/a	11
2014-15	15	n/a	8
2013	14	6	10
2012	14	7	9
2011	13	5	8
2010	14	9	7

Table 6: Breslow Depth n334 lesions

Male	Borders		D&G		Fife		Lothian		SCAN	
mm	n	%	n	%	n	%	n	%	n	%
0-0.99	10	58.8	2	25.0	19	61.3	50	48.5	81	50.9
1-1.99	1	5.9	2	25.0	5	16.1	20	19.4	28	17.6
2-2.99	1	5.9	1	12.5	2	6.5	10	9.7	14	8.8
3-3.99	3	17.6	1	12.5	1	3.2	2	1.9	7	4.4
>=4	2	11.8	2	25.0	4	12.9	18	17.5	26	16.4
Mets	0	0.0	0	0.0	0	0.0	2	1.9	2	1.3
Unrecorded	0	0.0	0	0.0	0	0.0	1	1.0	1*	0.6
Total	17	100.0	8	100.0	31	100.0	103	100.0	159	100.0

*1 unrecorded (anal mucosal)

Female	Borders		D&G		Fife		Lothian		SCAN	
mm	n	%	n	%	n	%	n	%	n	%
0-0.99	16	84.2	7	46.7	27	62.8	60	61.2	110	62.9
1-1.99	1	5.3	6	40.0	5	11.6	17	17.3	29	16.6
2-2.99	1	5.3	1	6.7	5	11.6	5	5.1	12	6.9
3-3.99	0	0.0	0	0.0	2	4.7	2	2.0	4	2.3
>=4	1	5.3	1	6.7	2	4.7	12	12.2	16	9.1
Mets	0	0.0	0	0.0	2	4.7	1	1.0	3	1.7
Unrecorded	0	0.0	0	0.0	0	0.0	1	1.0	**1**	0.6
Total	19	100.0	15	100.0	43	100.0	98	0.0	175	100.0

1 unrecorded (anal mucosal)

Table 7: Pathology - Mitotic Rate n334 lesions

	Borders		D&G		Fife		Lothian		SCAN	
Mitotic rate per mm	n	%	n	%	n	%	n	%	n	%
0 - .99	26	72.2	7	30.4	31	41.9	109	54.2	173	51.8
>= 1	10	27.8	16	69.6	40	54.1	87	43.3	153	45.8
Not applicable	0	0.0	0	0.0	2	2.7	5	2.5	7	2.1
Not recorded	0	0.0	0	0.0	1	1.3	0	0.0	1	0.3
Total	36	100.0	23	100.0	74	100.0	201	100.0	334	100.0

NB: 7 x not applicables = metastases at presentation

Table 8: Pathology - Ulceration n334 lesions

	Borders		D&G		Fife		Lothian		SCAN	
	n	%	n	%	n	%	n	%	n	%
Ulceration	2	5.6	6	26.1	11	14.9	32	15.9	51	15.3
No Ulceration	34	94.4	17	73.9	57	77.0	163	81.1	271	81.1
Not applicable	0	0.0	0	0.0	2	2.7	6	3.0	8	3.0
Not recorded	0	0.0	0	0.0	4	5.4	0	0.0	4	1.2
Total	36	100.0	23	100.0	74	100.0	201	100.0	334	100.0

Table 9: Median Wait in days for 2nd stage WLE treatment following diagnosis (Year on Year)

	Borders	D&G	Fife	Lothian
Year of Report	days	days	days	days
2015-16	55	46	74	57
2014-15	57	48	71	51
2013	67	51	66	51
2012	61	59	64	47
2011	65	48	58	48
2010	58	53	57	51

Table 9a: Patient wait > 84 days for 2nd stage WLE treatment following diagnosis

	Borders		D&G		Fife		Lothian	
Year of Report	n	%ofTotal WLE	n	%ofTotal WLE	n	%ofTotal WLE	n	%ofTotal WLE
2015-16	6	19.4	6	27.3	26	36.6	30	15.4
2014-15	7	24.1	5	20.8	11	27.5	20	14.1
2013	5	21.0	6	17.1	11	24.4	13	7.8

See appendix 1 for outliers reports summarizing pathway for patients waiting >84 days for second stage treatment

Table 10: Sentinel Lymph Node Biopsy (SLNB)

	Borders		D&G		Fife		Lothian		SCAN	
	n	% of Total	n	% of Total	n	% of Total	n	% of Total	n	% of Total
Patients eligible for SLNB	12	33.3	18	78.3	39	52.7	100	49.8	169	50.6
Patients receiving SLNB	1	2.8	4	17.4	9	12.2	44	21.9	58	17.4
Patients with +ve SLNB	0	0.0	1	4.3	2	2.7	10	5.0	13	3.9

Table 10a: Patients Eligible for SLNB – Year on Year

	Borders		D&G		Fife		Lothian		SCAN	
	n	% of Total	n	% of Total	n	% of Total	n	% of Total	n	% of Total
2015-16	12	33.3	18	78.3	39	52.7	100	49.8	169	50.6
2014-15	20	57.1	33	71.1	40	70.2	87	43.5	180	61.6
2013	16	53.3	29	64.4	33	70.2	82	45.3	160	52.3
2012	20	60.6	13	44.8	40	61.5	83	43.2	156	48.9

Table 10b: Sentinel Node Biopsy (SLNB) – Year on Year

	% SLNB Eligible of patient total	No of SLNB carried out of patient total	No of SLNB carried out (% total of eligible)	Positive SLNB no of patient total	Positive % SLNB of total carried out
2015-16	50.6	58	34.3	13	22.4
2014-15	61.6	56	31.1	14	25.0
2013	52.3	51	31.9	15	29.4
2012	48.9	65	41.7	11	16.9
2011	53.9	92	56.1	15	16.3
2010	46.9	86	70.0	15	16.7

Table 11: Lymph Node Dissection

	Borders		D&G		Fife		Lothian		SCAN	
	n36	% of Total	n23	% of Total	n74	% of Total	n201	% of Total	n334	% of Total
Lymph Node dissection	0	0.0	0	0.0	2	2.7	10	5.0	12	3.6
Positive lymph nodes	0	0.0	0	0.0	1	1.4	4	2.0	5	1.5

Current practice is for patients with a positive sentinel node to proceed to radical node dissection. Note also that some patients may undergo node clearance without previous SLNB

Table 11a: Lymph Node dissection (Year on Year)

Year of Report	SCAN Total	% of total patients	No of Positive	Dissection % Positive
2015-16	12	3.6	5	41.7
2014-15	11	3.3	5	45.5
2013	19	6.3	11	57.9
2012	16	5.0	5	31.3
2011	20	6.6	8	40.0
2010	17	5.6	4	23.5

Table 12: contact with Cancer Nurse Specialist (CNS) for Melanoma

	Borders		D&G		*Fife		Lothian		SCAN	
	n36	% of Total	n/a	n/a	n74	% of Total	n201	% of Total	n311	% of Total
Contact	9	25.0	n/a	n/a	63	85.1	166	82.6	238	76.5
No contact	27	75.0	n/a	n/a	11	14.9	35	17.4	73	23.5
Total	36	100	n/a	n/a	74	100	201	100	311	100

* FIFE figures apply to Skin Cancer Link Nurse

Table 12a: Contact with Cancer Nurse Specialist (CNS) for Melanoma (Year on Year)

Patient contact % of Total / Year of report	Borders	D&G	Fife	Lothian	SCAN
2015-16	25.0	n/a	85.1	82.6	76.5
2014-15	45.7	15.2	86.0	85.7	80.0
2013	36.7	35.6	37.0	87.3	61.4
2012	60.6	17.2	61.5	80.7	67.4
2011	65.0	26.1	87.5	82.9	78.8
2010	82.1	n/a	64.6	90.6	86.9

Appendix 1 – QPI 7 Outliers Report
Patients waiting >84 days for 2nd stage treatment following diagnosis

Borders – Excision biopsy

Pt	No of Days	Breslow	Dermatology Consultant	Diagnosis to Path	Path to MDM	MDM to ref to Plastics	Ref to Seen By Plastics	Plastics to WLE	Cons	Hosp of WLE	Comments
235	85	2.7	SL	14	18	6	29	18	MB	SJH	
226	85	0.8	SL	14	9	18	28	16	HB	SJH	
158	85	3.2	SL	26	4	17	11	27	NC	SJH	
075	112	0.45	SL	33	4	n/r	n/r	75	n/r	?	
209	117	6.0	SL	17	4	40	30	26	MAZ	SJH	
243	119	0.5	SL	15	8	-	In	96		BGH	Patient-induced delay

Lothian – Excision Biopsy

Pt	No of Days	Breslow	Dermatology Consultant	Diagnosis to Pathology	Path to MDM	MDM to ref to Plastics	Ref to Seen By Plastics	Plastics to WLE	Cons	Hosp of WLE	Comments
008	85	0.78	OS	7	11	0	39	29	MB	STJ	Patient induced delay
120	86	1.2	VRD	14	10	0	25	37	MB	WGH	Christmas
183	86	0.7	VRD	15	16	0	14	41	MB	WGH	Patient induced delay
030	86	0.28	SAH	15	2	20	37	12	MB	WGH	
013	87	4.2	LN	12	9	5	17	44	MB	STJ	Patient induced delay (DNA)
066	90	1.2	VRD	18	3	4	3	62	MB	WGH	Service cancellation (Lymphoscint) and Patient induced delay
096	90	0.6	SAH	14	3	12	28	33	MB	STJ	Christmas
112	90	2.0	CR	12	6	2	0	60	CR	STJ	Christmas
070	92	0.81	VRD	14	3	20	In	55	VRD	LB	Christmas and Patient induced delay
095	93	2.5	VRD	14	3	12	17	47	MB	STJ	Christmas and Patient induced delay
201	93	0.91	VRD/SAH	20	4	-	In	69	VRD	LB	Patient induced delay
139	93	1.1	VRD	15	9	0	7	62	MB	WGH	Patient induced delay
108	93	0.75	VRD	21	10	6	29	27	MB	WGH	Christmas
129	100	0.68	DK	15	2	20	11	52	CR	STJ	Patient induced delay
151	101	2.2	GMK	42	4	4	7	44	CR	WGH	Christmas
050	106	1.6	SAH	14	11	5	37	39	MB	WGH	Patient illness

Pt	No of Days	Breslow	Dermatology Consultant	Diagnosis to Pathology	Path to MDM	MDM to ref to Plastics	Ref to Seen By Plastics	Plastics to WLE	Cons	Hosp of WLE	Comments
144	107	0.4	EO	20	4	-	In	83	EO	LB	Patient induced delay
081	108	1.9	MJT	25	7	5	27	44	MB	WGH	Christmas
182	104	0.7	SAH	15	16	33	40	6	PA	STJ	Patient induced delay
161	111	0.81	SAR	19	4	0	In	78		LB	
087	112	0.2	MJT	8	45	0	0	59	MB	STJ	Long wait for MDM. Then patient holiday
176	112	0.37	DMcK	16	28	12	27	29	SH	STJ	
190	116	0.45	Medinet	73	10	5	2	26	MB	SJH	
004	125	5.0	GP	17	11	0	38	59	MB	WGH	Patient induced delay
154	133	0.55	SAR	40	10	-	In	83		rood	
032	136	0.41	VRD	16	8	38	36	38	CR	SJH	Comorbidities

Lothian – Partial Biopsy

Pt	No of Days	Breslow	Dermatology Consultant	Diagnosis to Pathology	Path to MDM	MDM to ref to Plastics	Ref to Seen By Plastics	Plastics to WLE	Cons	Hosp of WLE	Comments
242	94	0.31	SAH	17	4	6	52	15	DW	STJ	Patient induced delay. NB: 20 days between issue and receipt of plastics referral
177	114	0.1	SAH	15	16	0	15	69	MB	WGH	Patient induced delay
178	119	7.5	SAH	20	18	0	7	74	MB	SJH	Patient induced delay
237	136	0.89	PA	14	4	23	61	34	MB	WGH	

Fife – Excision Biopsy

Pt	No of Days	Breslow	Dermatology Consultant	Diagnosis to Pathology	Path to MDM	MDM to ref to Plastics	Ref to Seen By Plastics	Plastics to WLE	Cons	Hosp of WLE	Comments
1	127	1.69	SA	20	30	-15	32	60		VHK	
2	121	0.86	MM	15	17	-4	29	64		VHK	
3	119	0.7	SF	7	9	5	27	71		VHK	Patient induced delay
4	115	2.7	GP	31	7	10	22	45		QMH	More detailed path report required & patient induced delay
5	113	2.69	MM	9	30	-22	33	63		VHK	
6	113	3.7	SF	11	25	-8	25	60		VHK	

Pt	No of Days	Breslow	Dermatology Consultant	Diagnosis to Pathology	Path to MDM	MDM to ref to Plastics	Ref to Seen By Plastics	Plastics to WLE	Cons	Hosp of WLE	Comments
7	109	0.8	AM	18	17	3	8	63		VHK	
8	108	0.56	SR	14	17	-4	22	59		VHK	
9	102	6.3	OQ	11	10	n/a	39	42		NW	
10	101	0.45	LOCUM	8	18	n/a	n/a	75		VHK	patient induced delay
11	97	0.4	SF	12	11	-1	26	49		VHK	patient induced delay
12	94	0.46	SA	15	44	0	24	11		NW	
13	92	4.4	KA	7	11	10	22	42		VHK	
14	91	1.0	SF	8	8	5	34	36		VHK	patient induced delay
15	90	0.6	SF	18	18	6	25	23		VHK	2nd opinion required on pathology
16	90	2.6	SF	9	7	-2	20	56		VHK	
17	87	1.9	KA	11	21	-4	21	38		VHK	
18	86	0.6	YM	14	30	-23	34	31		NW	
19	85	0.8	SF	6	24	-9	22	42		VHK	

Fife – Partial Biopsy

Pt	No of Days	Breslow	Dermatology Consultant	Diagnosis to Pathology	Path to MDM	MDM to ref to Plastics	Ref to Seen By Plastics	Plastics to WLE	Cons	Hosp of WLE	Comments
20	127	0.6	SA	7	15	-10	41	74		NW	Path from excision not available at time of 1st Plastics OPA
21	95	1.8	AS	11	10	13	4	57		VHK	
22	90	4.4	MM	8	15	0	11	56		VHK	FNA prior to WLE

Appendix 2 – NHS Board Action Plans

A summary of actions for each NHS Board has been included within the following Action Plan templates. Completed Action Plans should be returned to SCAN office within 4 weeks of publication of this report.

Action / Improvement Plan

Area:	SCAN
Action Plan Lead:	
Date:	

KEY (Status)	
1	**Action fully implemented**
2	**Action agreed but not yet implemented**
3	**No action taken (please state reason)**

No.	**Action Required**	**Health Board Action Taken**	**Timescales**		**Lead**	**Progress/Action Status**	**Status (see Key)**
			Start	**End**			
	Ensure actions mirror those detailed in Audit Report.	*Detail specific actions that will be taken by the NHS Board.*	*Insert date*	*Insert date*	*Insert name of responsible lead for each specific action.*	*Provide detail of action in progress, change in practices, problems encountered or reasons why no action taken.*	*Insert No. from key above*.
1.							
2.							
3.							