NOSCAN
North of Scotland Cancer Network

NHS SCOTLAND

NORTH OF SCOTLAND PLANNING GROUP

Haematology
Managed Clinical Network

Audit Report

Lymphoma
Quality Performance Indicators

Patients diagnosed October 2013 – September 2014

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The North of Scotland Cancer Network (or NOSCAN), is one of the 3 regional Scottish Cancer Networks, which report to their respective regional NHS Board Planning Groups and for specific workstreams, to the Scottish Cancer Taskforce Group.

The principle role of NOSCAN is to support the organization, planning and delivery of regional and national cancer services, and thereby to ensure consistent and high quality cancer care is being provided equitably across the North of Scotland.

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EXECUTIVE SUMMARY

This publication reports the performance of lymphoma services in the six NHS Boards in the North of Scotland (NoS) against the Lymphoma Quality Performance Indicators (QPIs) for patients diagnosed between October 2013 and September 2014. This is the first year in which QPIs results for lymphoma have been collected.

In the North of Scotland during the 2013-2014 period audited:

- There were 281 patients diagnosed with lymphoma,
- Overall case ascertainment was high at 92.3%
- Results were considered to be representative of lymphoma services in the region.

Summary of QPI Results

QPI	QPI Target	Performance by Board	
		NOSCAN	Range[b]
QPI 1: Radiological Staging - Proportion of patients with lymphoma who undergo Computed Tomography (CT) scanning of the chest, abdomen and pelvis prior to treatment and within 2 weeks of radiology request.	90%	**65%**	43% -79%
QPI 2: Treatment Response - Proportion of patients with DLBCL who are undergoing chemotherapy treatment with curative intent, who have their response to treatment evaluated with Computed Tomography (CT) scan of the chest, abdomen and pelvis.	90%	**60%**	42% - 68%
QPI 3: Positron Emission Tomography (PET CT) Staging - Proportion of patients with Classical Hodgkin Lymphoma (CHL) who undergo PET CT scan prior to first treatment and within 2 weeks of radiology request.	95%	**86%**	-
QPI 4: Cytogenetic Testing - Proportion of patients with Burkitt lymphoma and DLBCL who have MYC testing as part of diagnostic process and prior to treatment.	80%	**59%**	50% - 68%
QPI 5: Lymphoma MDT - Proportion of patients with lymphoma who are discussed at MDT meeting within 6 weeks of diagnosis.	85%	**81%**	68% - 96%
QPI 6: Treatment for Follicular Lymphoma and Diffuse Large B-Cell Lymphoma - Proportion of patients with follicular lymphoma and DLBCL undergoing treatment with chemotherapy who receive Rituximab.	95%	**96%**	92% - 100%
QPI 7: Treatment of Grade 3b Follicular Lymphoma - Proportion of patients with grade 3b follicular lymphoma who receive treatment with R-CHOP.	95%	**100%**	-
QPI 8: Treatment for Stage 1a Diffuse Large B Cell Lymphoma - Proportion of patients with nodal, non-bulky stage 1a DLBCL who receive local radiotherapy, in combination with chemotherapy.	90%	**0%**	-

QPI 9: Treatment for Classical Hodgkin Lymphoma - Proportion of patients with early stage (stage 1a or 2a) CHL who receive combined modality treatment (chemotherapy and radiotherapy).	80%	**43%**	-
QPI 10: Primary Cutaneous Lymphoma - Proportion of patients with primary cutaneous lymphoma who are discussed at a specialist MDT meeting which includes representation from pathology, dermatology, oncology ± haemato-oncology.	95%	**67%**	-
QPI 11: Hepatitis and HIV Status - Proportion of patients with lymphoma undergoing Rituximab based treatment who have hepatitis B, hepatitis C and HIV status checked prior to treatment.	100%	**86%**	68% - 94%

Performance shaded pink where QPI target has not been met.
[b] Excluding Boards with less than 5 patients.

It is acknowledged that there has been a significant learning at all levels during this the first year of QPI reporting for lymphoma. This knowledge gained will enable further refinement of QPI definitions and data collection to ensure that reporting will, in future years provide more clinically relevant results.

To date, areas identified requiring further work to improve on the clinical appropriateness of the Lymphoma QPIs and to better evaluate patient and service outcomes in the NoS include:

- Further discussion required at national level/with national partners regarding some of the current QPI definitions, such as the appropriate timescale by which imaging should be performed after requesting.
- There were some difficulties in Tayside with the collection of required staging information. This has now been addressed and will result in improved performance in the next iteration of these QPIs.
- Some emerging issues with the existing capacity of clinical service. Radiology services in the North of Scotland are recognised to be facing increasing workload pressures, thereby making achievement of scan appointing within 2 weeks of request very difficult. Given that all Boards have achieved their time to treatment targets, and that further analysis of the data identifies that the majority of patients in the NoS were successfully scanned within a clinically appropriate timeframe, it is unclear whether this is a clinically meaningful QPI in its present format.

As a result of the first year of reporting of Lymphoma QPIs, the following actions have been identified:

- **At Lymphoma QPI Baseline Review NOSCAN to suggest amendments to QPI definitions and / or calculations for eight of the 11 QPIs, as outlined in this report.**
- **NHS Grampian to explore why some patients were not discussed at MDT or discussed at MDT more than 6 weeks after diagnosis.**

- **NHS Grampian and NHS Highland to consider rearrangement of MDT to include appropriate skin cases.**

- **NHS Highland and NHS Tayside to monitor the effectiveness of changes implemented in virological testing for patients undergoing Rituximab treatment.**

Contents

1. Introduction

In 2010, the Scottish Cancer Taskforce established the National Cancer Quality Steering Group (NCQSG) to take forward the development of national Quality Improvement Indicators (QPIs) for all cancer types to enable national comparative reporting and drive continuous improvement for patients. In collaboration with the three Regional Cancer Networks (NoSCAN, SCAN & WoSCAN) and Information Services Division (ISD), the first QPIs were published by Healthcare Improvement Scotland (HIS) in January 2012. CEL 06 (2012) mandates all NHS Boards in Scotland to report on specified QPIs on an annual basis. Data definitions and measurability criteria to accompany the Ovarian Cancer QPIs are available from the ISD website[1].

The need for regular reporting of activity and performance (to assure the quality of care delivered) was first nationally set out as a fundamental requirement of a Managed Clinical Network (MCN) in NHS MEL(1999)10[2]. This has since been further restated and reinforced in HDL(2002)69[3], HDL (2007) 21[4], and most recently in CEL 29 (2012)[5].

This report assesses the performance of the North of Scotland (NoS) lymphoma services using clinical audit data relating to patients diagnosed with lymphoma in the twelve months from 1st October 2013 to 30th September 2014. Results are measured against the Lymphoma Quality Performance Indicators (QPIs)[6] which were implemented for patients diagnosed on or after 1st October 2013. Regular reporting of activity and performance is a fundamental requirement of a Managed Clinical Network (MCN) to assure the quality of care delivered across the region.

This report presents performance against 11 Lymphoma QPIs using clinical audit data.

2. Background

Six NHS Boards across the North of Scotland serve the 1.38 million population[7]. There were 281 patients diagnosed with lymphoma in the North of Scotland between 1st October 2013 and 30th September 2014. The configuration of the Multidisciplinary Teams (MDTs) in the region is set out below.

MDT	Constituent Hospitals
Grampian	Aberdeen Royal Infirmary
Highland	Raigmore Hospital, Inverness
Tayside	Ninewells Hospital, Dundee

Best practice recommends that patients diagnosed with cancer should have all aspects of their clinical management multidisciplinary considered thereby ensuring enhanced consistency and quality of patient care and clinical outcomes. It should be noted that patients diagnosed in Orkney and Shetland will be discussed at the NHS Grampian MDT, (and those diagnosed in NHS Eileanan Siar (W.Isles) will be discussed at the NHS Highland MDT).

On that basis, it is recognised that patients diagnosed with lymphoma should be discussed at a Multidisciplinary Team Meeting (customarily referred to as either an MDT or MDTM), which is usually convened on a weekly basis.

2.1 National Context

Non-Hodgkin's lymphoma is the seventh most common cancer type in Scotland, while incidence of Hodgkin's disease is much lower. Incidences of Non-Hodgkin's lymphoma have increased in recent year, and although immunosuppression has been associated with the development of this disease the reasons for this trend are still unclear[8]. Incidences of lymphoma are predicted to continue to increase[9].

Relative survival from lymphoma is increasing[10]. The table below details the percentage change in 1 and 5 year relative survival for patients diagnosed 1983-1987 to 2003-2007.

Relative age-standardised survival for lymphoma in Scotland at 1 year and 5 years showing percentage change from 1983-1987 to 2003-2007[10].

	Sex	Relative survival at 1 year (%)		Relative survival at 5 years (%)	
		2003-2007	% change	2003-2007	% change
Non-Hodgkin's Lymphoma	Male	72.0%	+ 22.0%	58.3%	+ 25.8%
	Female	75.2%	+ 16.3%	61.0%	+ 21.2%
Hodgkin's Disease	Male	88.0%	+ 7.6%	78.5%	+ 15.5%
	Female	88.0%	+ 5.9%	78.5%	+ 12.7%

2.2 North of Scotland Context

A total of 281 cases of lymphoma were recorded through audit as diagnosed in the North of Scotland between 1st October 2013 and 30th September 2014. The number of patients diagnosed within each Board is presented in Figure 1.

	Grampian	Highland[a]	Orkney	Shetland	Tayside	W Isles	NoS
Number of Patients	127	60	3	4	86	1	**281**
% of NoS total	45.2%	21.4%	1.1%	1.4%	30.6%	0.4%	**100%**

[a] Highland results include patients from Argyll & Clyde.

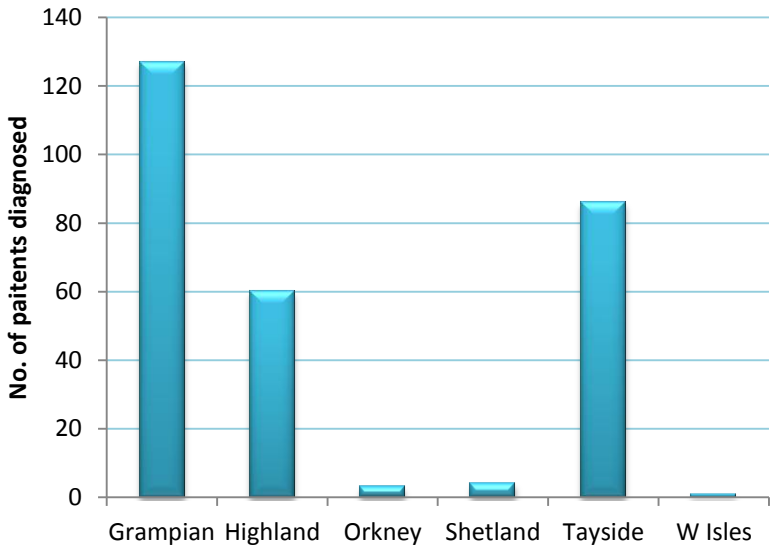


Figure 1: Number of patients diagnosed with lymphoma by Board of diagnosis, October 2013 – September 2014.

3. Methodology

The clinical audit data presented in this report was collected by clinical audit staff in each NHS Board in accordance with an agreed dataset and definitions[1]. The data was entered locally into the electronic Cancer Audit Support Environment (eCASE): a secure centralised web-based database.

Data for patients diagnosed between 1st October 2013 and 30th September 2014 were collated by cancer audit staff within individual NHS Boards. These data and any comments on QPI results were then signed-off at NHS Board level to ensure that the data were an accurate representation of service in each area prior to submission to NOSCAN for collation at a regional level. The reporting timetable was developed to take into account the patient pathway and ensure that a complete treatment record was available for the vast majority of cases.

Where the number of cases meeting the denominator criteria for any indicator is between one and four, the results have not been shown in any associated charts or tables. This is to avoid any unwarranted variation associated with small numbers and to minimise the risk of disclosure. Any charts or tables impacted by this are denoted with an asterisk (*). However, any commentary provided by NHS Boards relating to the impacted indicators will be included as a record of continuous improvement.

4. Results

4.1 Case Ascertainment

Audit data completeness can be assessed from case ascertainment, the proportion of expected patients that have been identified through audit. Case ascertainment is calculated by comparing the number of new cases identified by cancer audit with a five year average of the numbers recorded by the National Cancer Registry, by NHS Board of diagnosis. Cancer Registry figures were extracted from ACaDMe (Acute Cancer Deaths and Mental Health), a system provided by NHS Information Services Division (ISD). Due to timescale of data

collection and verification processes, National Cancer Registry data are not available for 2013-2014. Consequently an average of the previous five years' figures is used to take account of annual fluctuations in incidence within NHS Boards.

Overall case ascertainment for the North of Scotland is high at 92.3% which indicates good data capture through audit. Case ascertainment figures are provided for guidance and are not an exact measurement of audit completeness as it is not possible to compare the same cohort of patients. Case ascertainment for each Board across the North of Scotland is illustrated in Figure 2. There is variation in percentage case ascertainment across the Boards ranging from 82.9% to 102.6%.

	Grampian	Highland	Orkney*	Shetland*	Tayside	W Isles*	NoS
Cases from audit	127	60	-	-	86	-	**281**
ISD Cases (2009-2013)	124	72	-	-	100	-	**304**
% Case ascertainment	102.6%	82.9%	-	-	86.0%	-	**92.3%**

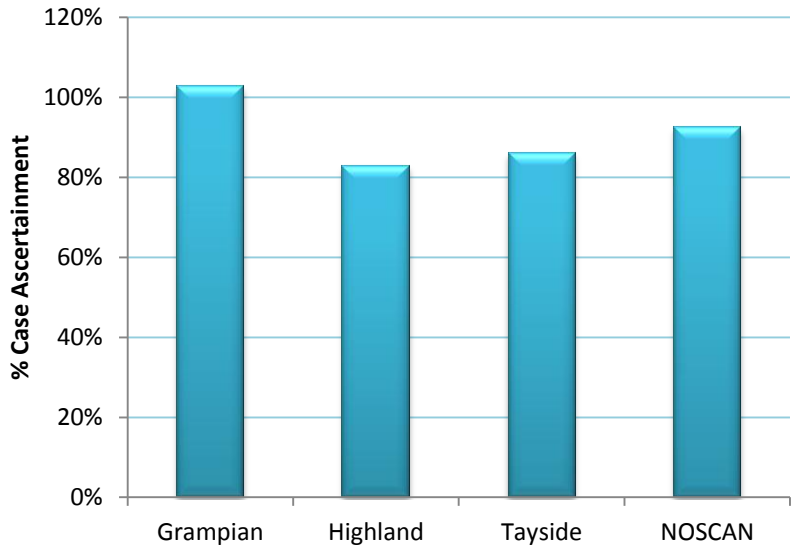


Figure 2: Case ascertainment by NHS Board for patients diagnosed with lymphoma October 2013 – September 2014 (ISD Cases for ISD-10 codes C81-C85).

Audit data were considered to be sufficiently complete to allow QPI calculations. The number of instances of data not being recorded was very low, with the only notable gaps being the lack of information on Cotswold stage in NHS Tayside, which prevented NHS Tayside from selecting patients for analysis for QPIs 8 and 9. These data are now being captured for future analysis.

4.2 Performance against Quality Performance Indicators (QPIs)

Results of the analysis of Lymphoma Quality Performance Indicators are set out in the following sections. Graphs and charts have been provided where this aids interpretation and, where appropriate, numbers have also been included to provide context. Data are presented by Board of diagnosis and for the whole of the North of Scotland. Where performance is shown to fall below the target, commentary from the relevant NHS Board is often included to provide context to the variation. Specific regional and NHS Board actions have been identified to address issues highlighted through the data analysis.

QPI 1: Radiological Staging

QPI 1: Radiological Staging: Patients with lymphoma should be evaluated with appropriate imaging to detect the extent of disease and guide treatment decision making.

Proportion of patients with lymphoma who undergo Computed Tomography (CT) scanning of the chest, abdomen and pelvis prior to treatment and within 2 weeks of radiology request.

Numerator: Number of patients with lymphoma who undergo CT of chest, abdomen and pelvis prior to treatment and within 2 weeks of radiology request.

Denominator: All patients with lymphoma.

Exclusions:

- Patients who refuse investigation.
- Patients with primary cutaneous lymphoma.

Target: 90%

QPI 1 Performance against target

Of the 270 patients diagnosed with lymphoma in the North of Scotland, 176 had Computed Tomography (CT) scanning of the chest, abdomen and pelvis prior to treatment and within 2 weeks of the radiology request. This equates to a rate of 65.2% and is well below the target rate of 90%.

At NHS Board level only NHS Shetland and NHS Western Isles (where numbers are in the order of 3 or 4 patients only) met the target rate. Following a review of the data, there is a concern that in its present form, this QPI fails to properly reflect the appropriateness of clinical practice in the North of Scotland but instead has set a target that without significant additional resource unlikely to be service achievable/desirable.

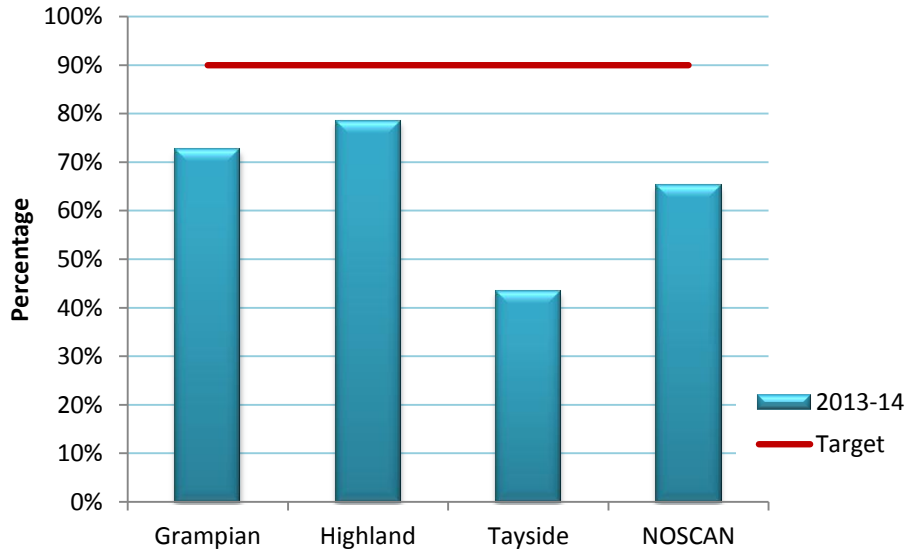
Further analysis of the data indicates that across NOSCAN 94% of patients did have CT scanning of the chest, abdomen and pelvis prior to treatment. Failure to meet the QPI target was due to scanning not being undertaken within two weeks of the request being received, rather than patients not being properly evaluated in advance of treatment commencement, which remains the prime clinical concern.

It is suggested that the two elements of this QPI requires to be reported separately in future i.e. proportion of patients who received CT, and proportion that received within 2 weeks of request. Alternatively, the QPI be amended to identify a more appropriate timescale within which imaging should be undertaken.

It is further suggested that patients for palliative care only should be excluded from this QPI and for the QPI to be amended to look at the number of patients that undergo CT or PET scans.

Actions Required:

- **At Baseline Review NOSCAN to suggest amendment of QPI 1 to consider timescale in which imaging is required, the inclusion of PET scans and the exclusion of patients for palliative care only.**



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	**72.6%**	90	124	0	0%	0	0%	0
Highland	**78.6%**	44	56	0	0%	0	0%	0
Orkney*	**-**	-	-	-	-	-	-	-
Shetland*	**-**	-	-	-	-	-	-	-
Tayside	**43.4%**	36	83	1	1.2%	0	0%	0
W Isles*	**-**	-	-	-	-	-	-	-
NoS	**65.2%**	**176**	**270**	**1**	**0.4%**	**0**	**0%**	**0**

QPI 2: Treatment Response

QPI2: Treatment Response: Patients with Diffuse Large B Cell Lymphoma (DLBCL) who are treated with curative intent should have their response to treatment evaluated with appropriate imaging.

Proportion of patients with DLBCL who are undergoing chemotherapy treatment with curative intent, who have their response to treatment evaluated with Computed Tomography (CT) scan of the chest, abdomen and pelvis.

Numerator:	Number of patients with DLBCL who are undergoing chemotherapy treatment with curative intent who undergo CT of chest, abdomen and pelvis at end of chemotherapy treatment (following 6 or 8 cycles).
Denominator:	All patients with DLBCL who are undergoing chemotherapy treatment with curative intent.
Exclusions:	No exclusions
Target:	90%

QPI 2 Performance against target

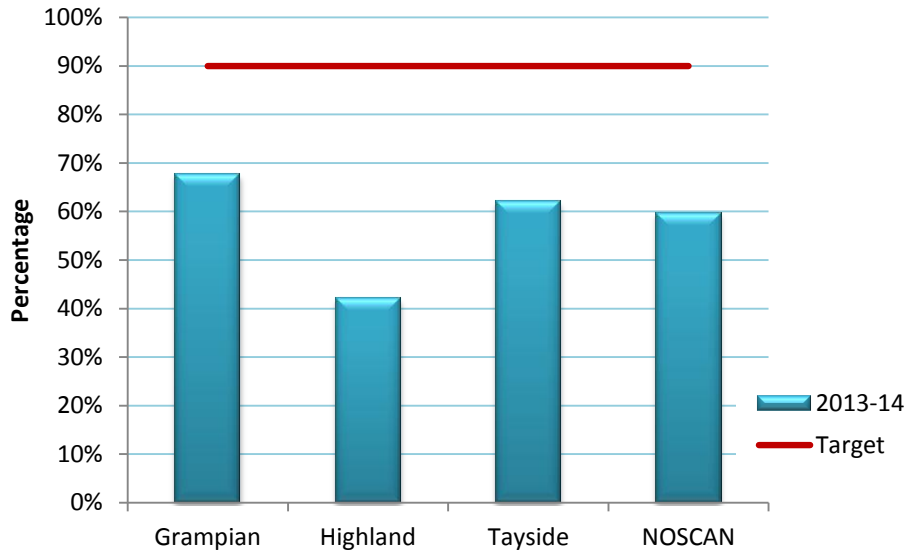
Overall results for the North of Scotland indicate that 59.8% of patients with Diffuse Large B Cell Lymphoma had their response to treatment evaluated with CT scan of the chest, abdomen and pelvis following 6 or 8 cycles of chemotherapy. This is well below the target rate of 90%.

Furthermore, none of the NHS Boards within the North of Scotland individually met this QPI target. More detailed analysis indicates that this can be attributed to the way in which this QPI measured, which only counts patients as meeting the QPI if they have had 6 or 8 cycles of their first chemotherapy treatment ***and*** have then had a CT scan within 6 weeks of the last treatment date.

As with QPI 1, review indicates that nearly all (91%) of patients did receive post treatment imaging. Non-compliance was due to the timescales within which scans were undertaken and the fact that patients not having 6 or 8 cycles of chemotherapy will always fail this QPI.

Actions required:

- **At Baseline Review NOSCAN to suggest amendment of QPI 2 to consider timescale in which imaging is required, SACT (or radiotherapy) end dates to be used, requirement for compliance to be dependent on the delivery of 6 or 8 cycles of chemotherapy, the inclusion of PET scans and the exclusion of patients who die before the end of treatment.**



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	**67.6%**	25	37	0	0%	0	0%	0
Highland	**42.1%**	8	19	0	0%	0	0%	0
Orkney	**-**	0	0	0	-	0	-	0
Shetland*	**-**	-	-	-	-	-	-	-
Tayside	**62.1%**	18	29	0	0%	0	0%	1
W Isles	**-**	0	0	0	-	0	-	0
NoS	**59.8%**	**52**	**87**	**0**	**0%**	**0**	**0%**	**1**

QPI3: Positron Emission Tomography (PET CT) Staging

QPI3: Positron Emission Tomography (PET CT) Staging: Patients with Classical Hodgkin Lymphoma should be evaluated with PET CT scanning to detect the extent of disease and guide treatment decision making.

Proportion of patients with Classical Hodgkin Lymphoma (CHL) who undergo PET CT scan prior to first treatment and within 2 weeks of radiology request.

Numerator:	Number of patients with CHL who undergo PET CT prior to treatment and within 2 weeks of radiology request.
Denominator:	All patients with CHL.
Exclusions:	Patients who refuse investigation.
Target:	95%

QPI 3 Performance against target

Eighteen out of 21 patients diagnosed with Classical Hodgkin Lymphoma in the North of Scotland during the period audited (85.7%) were evaluated with PET CT scanning prior to first treatment and within 2 weeks of the radiology request; this means that at a regional level, the target of 95% was not met.

Whilst numbers were low across all Boards (and therefore these data are not shown graphically) only NHS Grampian (n=13) failed to meet the target.

Of the 3 patients who didn't have a PET scan, 2 were elderly (and it was felt a PET scan would not affect their treatment plan), and the other patient died before treatment. Consequently there were very legitimate clinical reasons why this target was not met. In this QPI similar issues to QPI 1 are raised regarding the timing of scans.

Actions required:

- **NOSCAN to suggest amendment to timing requirement for PET CT scans at baseline review.**

	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	**76.9%**	10	13	0	0%	0	0%	0
Highland*	**-**	-	-	-	-	-	-	-
Orkney*	**-**	-	-	-	-	-	-	-
Shetland*	**-**	-	-	-	-	-	-	-
Tayside*	**-**	-	-	-	-	-	-	-
W Isles	**-**	0	0	0	-	0	-	0
NoS	**85.7%**	**18**	**21**	**0**	**0%**	**0**	**0%**	**0**

QPI 4: Cytogenetic Testing

QPI 4: Cytogenetic Testing: Patients with Burkitt lymphoma and Diffuse Large B-Cell Lymphoma (DLBCL) should have MYC testing as part of diagnostic process, to identify those who may require central nervous system (CNS) prophylaxis and alternative treatment.

Proportion of patients with Burkitt lymphoma and DLBCL who have MYC testing as part of diagnostic process and prior to treatment.

Numerator: Number of patients with Burkitt lymphoma and DLBCL who have MYC testing prior to treatment.

Denominator: All patients with Burkitt lymphoma and DLBCL.

Exclusions: No exclusions.

Target: 80%

QPI 4 Performance against target

Of the 107 patients diagnosed with Burkitt Lymphoma and Diffuse Large B-Cell Lymphoma in the North of Scotland in 2013 – 2014, overall results indicated that 63 (58.9%) had MYC testing prior to treatment. This was well below the target rate of 80%.

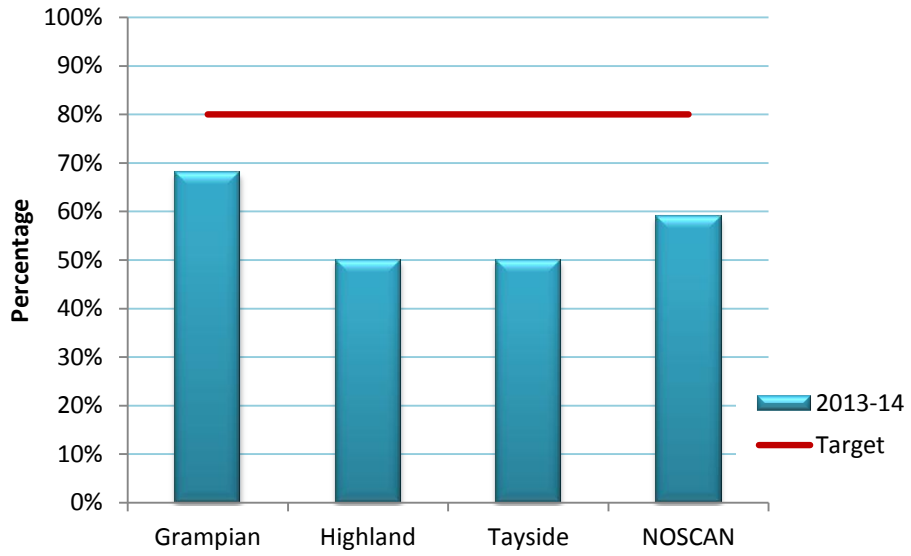
At individual Board level, NHS Shetland was the only NHS Board to meet this target: although numbers here were very small (n=2). NHS Shetland patients had their testing undertaken by the NHS Grampian service, and therefore the apparent better performance in NHS Shetland is a statistical artefact based on the small numbers of patients involved rather than a real difference in the service provided in NHS Grampian and NHS Shetland.

It requires noting however, that some patients diagnosed with Burkitt Lymphoma and Diffuse Large B-Cell Lymphoma are unlikely to ever be fit enough to consider increasing the intensity of treatment as a result of the presence of a c-myc rearrangements. Consequently, this test is not clinically relevant for all patients as is presently suggested by the QPI in its existing format (ie 'no exclusions').

However, it is also acknowledged that some Health Boards in the North of Scotland continue to have a problem with receiving a result in a timely enough manner to affect treatment, and it is noted that there is a separate workstream planned for October 2015 with NHS National Services Scotland (NSS) to clarify diagnostic testing pathways in haematological malignancy.

Actions required:

- **At Baseline Review NOSCAN to suggest amendment of the target for QPI 4.**



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	**68.1%**	32	47	0	0%	0	0%	0
Highland	**50.0%**	10	20	0	0%	0	0%	0
Orkney	**-**	0	0	0	-	0	-	0
Shetland*	**-**	-	-	-	-	-	-	-
Tayside	**50.0%**	19	38	0	0%	0	0%	0
W Isles	**-**	0	0	0	-	0	-	0
NoS	**58.9%**	**63**	**107**	**0**	0%	**0**	0%	**0**

QPI 5: Lymphoma MDT

QPI 5: Lymphoma MDT: Patients with lymphoma should be discussed by a multidisciplinary team following diagnosis.

Proportion of patients with lymphoma who are discussed at MDT meeting within 6 weeks of diagnosis.

Numerator: Number of patients with lymphoma discussed at the MDT within 6 weeks of diagnosis.

Denominator: All patients with lymphoma.

Exclusions:

- Patients who died before first treatment.
- Patients with primary cutaneous lymphoma.

Target: 85%

QPI 5 Performance against target

Overall in 2013 - 2014, 207 out of 256 patients diagnosed with lymphoma in the NoS were discussed at the MDT within 6 weeks of diagnosis. At a rate of 80.9%, this did not meet the required target of 85% of patients.

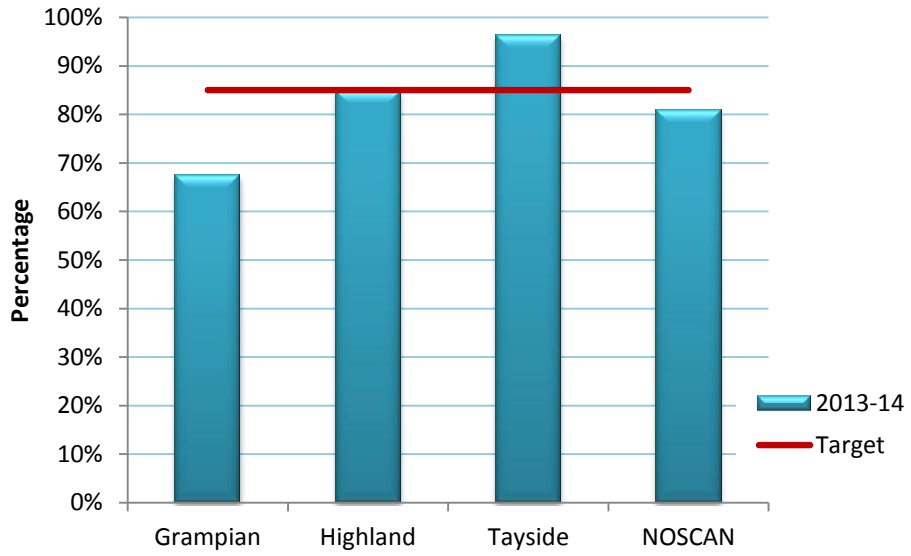
However, at a NHS board level this QPI was met by NHS Tayside, NHS Orkney, NHS Shetland and NHS Western Isles.

In NHS Grampian (n=120), a total of 45 patients were not discussed at an MDT within the time required, of which 6 were never discussed, and the other 39 were discussed out with the 6 weeks.

NHS Highland note that the QPI target was met in North Highland area. The target was not met for Argyle and Clyde patients, who are managed by Greater Glasgow, where management of the MDT for these patients is out with the control of NHS Highland.

Actions required:

- **NHS Grampian to explore why some patients were not discussed at MDT or discussed at MDT more than 6 weeks after diagnosis.**



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	**67.5%**	81	120	0	0%	0	0%	0
Highland	**84.8%**	39	46	0	0%	0	0%	0
Orkney*	**-**	-	-	-	-	-	-	-
Shetland*	**-**	-	-	-	-	-	-	-
Tayside	**96.4%**	80	83	0	0%	0	0%	0
W Isles*	**-**	-	-	-	-	-	-	-
NoS	**80.9%**	**207**	**256**	**0**	**0%**	**0**	**0%**	**0**

QPI 6: Treatment for Follicular Lymphoma and Diffuse Large B-Cell Lymphoma

QPI 5: Treatment for Follicular Lymphoma and Diffuse Large B-Cell Lymphoma: Patients with symptomatic advanced follicular lymphoma and diffuse Large B Cell Lymphoma (DLBCL) should undergo treatment with Rituximab in combination with chemotherapy.

Proportion of patients with follicular lymphoma and DLBCL undergoing treatment with chemotherapy who receive Rituximab.

Numerator: Number of patients with follicular lymphoma and DLBCL who receive chemotherapy in combination with Rituximab.

Denominator: All patients with follicular lymphoma and DLBCL who receive chemotherapy.

Exclusions:

- Patients who refuse chemotherapy.
- Patients enrolled in clinical trials.

Target: 95%

QPI 6 Performance against target

In 2013 - 2014, 95.8% of patients diagnosed with Follicular Lymphoma and Diffuse Large B-Cell Lymphoma and receiving chemotherapy in the North of Scotland also received Rituximab. This is higher than the target of 95%.

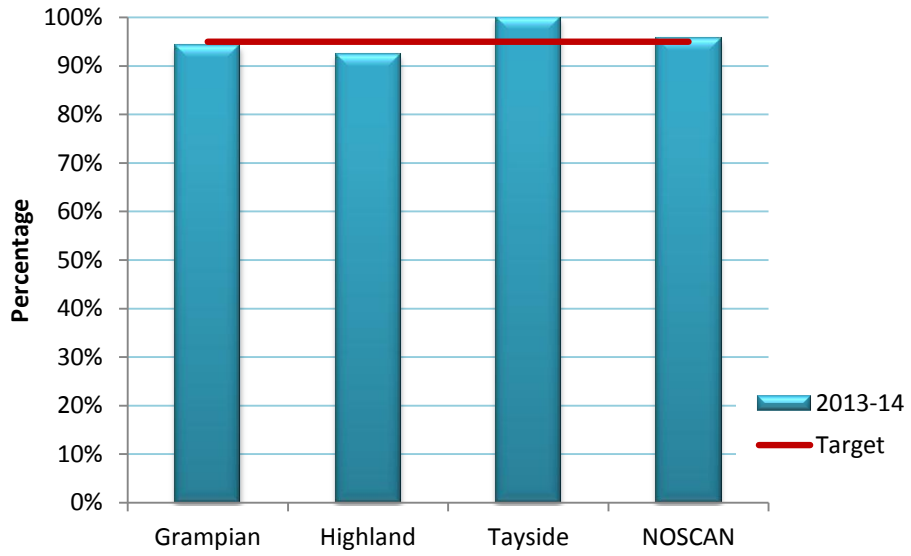
At Board level, NHS Highland and NHS Grampian did not meet the target for this QPI.

In NHS Highland, 24 out of 26 patients included within this QPI calculation received Rituximab: the 2 patients who did not have Rituximab were for palliative care only, which is presently not accounted for in the existing exclusions criteria.

We are currently exploring whether the patients not treated with Rituximab in NHS Grampian were also for palliative care.

Actions required:

- **At Baseline Review NOSCAN to suggest patients for palliative care only should be excluded from the denominator of this QPI. In the absence of such an exclusion, the present 95% target may be set too high.**



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	**94.2%**	49	52	**0**	**0%**	**0**	**0%**	**0**
Highland	**92.3%**	24	26	**0**	**0%**	**0**	**0%**	**0**
Orkney	**-**	0	0	**0**	**-**	**0**	**-**	**0**
Shetland*	**-**	-	-	-	-	-	-	-
Tayside	**100%**	38	38	**0**	**0%**	**2**	**5.3%**	**1**
W Isles	**-**	**0**	**0**	**0**	**-**	**0**	**-**	**0**
NoS	**95.8%**	**113**	**118**	**0**	**0%**	**2**	**1.7%**	**1**

QPI 7: Treatment of Grade 3b Follicular Lymphoma

QPI 7: Treatment of Grade 3b Follicular Lymphoma: Patients with grade 3b follicular lymphoma should be treated as per Diffuse Large B-cell Lymphoma (DLBCL).

Proportion of patients with grade 3b follicular lymphoma who receive treatment with R-CHOP.

Numerator: Number of patients with grade 3b follicular lymphoma who receive R-CHOP chemotherapy.

Denominator: All patients with grade 3b follicular lymphoma.

Exclusions:

- Patients who refuse chemotherapy.
- Patients enrolled in clinical trials.

Target: 95%

QPI 7 Performance against target

All of the three patients with grade 3b follicular lymphoma during 2013-2014 in the NoS received R-CHOP chemotherapy (100%), which exceeds the target rate of 95%.

Due to small numbers data are not presented at NHS Board level and it is not possible to compare results between NHS Boards in the North of Scotland.

Actions required:

- **No actions were identified based on the results of this QPI.**

QPI 8: Treatment for Stage 1a Diffuse Large B Cell Lymphoma

QPI 8: Treatment for Stage 1a Diffuse Large B Cell Lymphoma – Patients with stage 1a Diffuse Large B-Cell Lymphoma (DLBCL) should receive combination modality treatment.

Proportion of patients with nodal, non-bulky stage 1a DLBCL who receive local radiotherapy, in combination with chemotherapy.

Numerator: Number of patients with nodal, non-bulky stage 1a DLBCL who receive local radiotherapy, in combination with limited chemotherapy (3 cycles).

Denominator: All patients with nodal, non-bulky stage 1a DLBCL.

Exclusions:

- Patients who refuse chemotherapy or radiotherapy treatment.
- Patients with contraindication to local radiotherapy (e.g. prior radiotherapy or severe connective tissue disease).
- Patients enrolled in clinical trials.

Target: 90%

QPI 8 Performance against target

In 2013-2014 in the NoS, there were four patients recorded as having nodal, non-bulky stage 1a Diffuse Large B-Cell Lymphoma. Of these none (0%) received local radiotherapy in combination with limited chemotherapy, which is well below the required target of 90%.

Due to small numbers data are not presented at NHS Board level and it is not possible to compare results between NHS Boards in the North of Scotland.

However, it is known that all patients included in this QPI were diagnosed in NHS Grampian, and the clinicians involved have since advised that they all received chemoimmunotherapy and radiotherapy. It has now been widely acknowledged that patients receiving chemoimmunotherapy and radiotherapy should meet this QPI and therefore failure to achieve is due to an error in the QPI measurability.

The required NHS Tayside data were not available for reporting this cycle, as Cotswold stage was not collected prospectively during the period audited. However, a retrospective survey undertaken of those with 'early' stage disease in NHS Tayside during 2013-2014 shows that 100% of this group of patients had appropriate combined modality therapy. Furthermore, plans have since been put in place locally that will ensure Cotswold stage will be collected prospectively in the next audit cycle.

Actions required:

- **At Baseline Review NOSCAN to suggest amending QPI calculations so that patient receiving chemoimmunotherapy and radiotherapy meet this QPI.**

QPI 9: Treatment for Classical Hodgkin Lymphoma

QPI 9: Treatment for Classical Hodgkin Lymphoma – Patients with early stage Classical Hodgkin Lymphoma (CHL) should receive combined modality treatment.

Proportion of patients with early stage (stage 1a or 2a) CHL who receive combined modality treatment (chemotherapy and radiotherapy).

Numerator: Number of patients with stage 1a or 2a CHL who receive combined modality treatment (chemotherapy and radiotherapy).

Denominator: All patients with stage 1a or 2a CHL.

Exclusions:

- Patients who refuse chemotherapy or radiotherapy treatment.
- Patients with contraindication to local radiotherapy (e.g. prior radiotherapy or severe connective tissue disease).
- Patients enrolled in clinical trials.

Target: 80%

QPI 9 Performance against target

Though numbers are small n 2013-2014 (n=7), three patients (ie 42.9%) identified with stage 1a or 2a Classical Hodgkin Lymphoma in the NoS received combined modality treatment. This is well below the required target of 80%.

Due to small numbers data are not presented at NHS Board level and it is not possible to compare results between NHS Boards in the North of Scotland.

In NHS Tayside, as for QPI 8, as Cotswold stage was not collected prospectively during 2013-2014, these data were not available. However, a retrospective survey of those with 'early' stage disease shows that 100% had appropriate combined modality therapy, and consequently all patients with 'early' stage disease were treated appropriately. As has been indicated previously, arrangements have now been put in place locally in NHS Tayside to ensure that Cotswold stage will be collected prospectively in the next audit cycle.

It is also understood that there are emerging data from the RAPID trial[11] demonstrating that in some patients who are PET negative after chemotherapy, it is appropriate to withhold radiotherapy in order to minimise late effects (especially in younger patients where the radiotherapy field would include breast, lung or cardiac tissue). On that basis, present indications are that advances in clinical practice indicate changes required in this QPI as it currently stands.

Actions required:

- **At Baseline Review NOSCAN to suggest reducing the target in order to reflect the recent change in clinical practice as a result of the RAPID trial.**

QPI 10: Primary Cutaneous Lymphoma

QPI 10: Primary Cutaneous Lymphoma – Patients with primary cutaneous lymphoma should be discussed at a specialist MDT meeting.

Proportion of patients with primary cutaneous lymphoma who are discussed at a specialist MDT meeting which includes representation from pathology, dermatology, oncology ± haemato-oncology.

Numerator: Number of patients with primary cutaneous lymphoma who are discussed at a specialist MDT meeting.

Denominator: All patients with primary cutaneous lymphoma.

Exclusions: No exclusions.

Target: 95%

QPI 10 Performance against target

In 2013-2014 there were nine patients diagnosed with primary cutaneous lymphoma in the NoS. Of these six (66.7%) were discussed at specialist MDT meetings, which is below the required target of 95%.

Due to small numbers data are not presented at NHS Board level and it is not possible to compare results between NHS Boards in the North of Scotland.

Actions required:

- **At Baseline Review NOSCAN to encourage discussion on which cases of skin lymphoma are relevant for discussion with Haematology, as many can be managed solely by Dermatologists.**

- **NHS Grampian and NHS Highland to consider rearrangement of the specialist MDT to include appropriate skin cases.**

QPI 11: Hepatitis and HIV Status

QPI 11: Virological testing for Human Immunodeficiency Virus (HIV), hepatitis B and C should be undertaken for patients undergoing Rituximab treatment.

Proportion of patients with lymphoma undergoing Rituximab based treatment who have hepatitis B, hepatitis C and HIV status checked prior to treatment.

Numerator: Number of patients with lymphoma undergoing rituximab based treatment who have hepatitis B, C and HIV status checked prior to treatment.

Denominator: All patients with lymphoma undergoing Rituximab based treatment.

Exclusions: No exclusions.

Target: 100%

QPI 11 Performance against target

In 2013-2014 there were 141 patients diagnosed with lymphoma and undergoing Rituximab based treatment in the North of Scotland. Of these 121 (85.8%) had their hepatitis B, C and HIV status checked prior to treatment, which is below the required target of 100%.

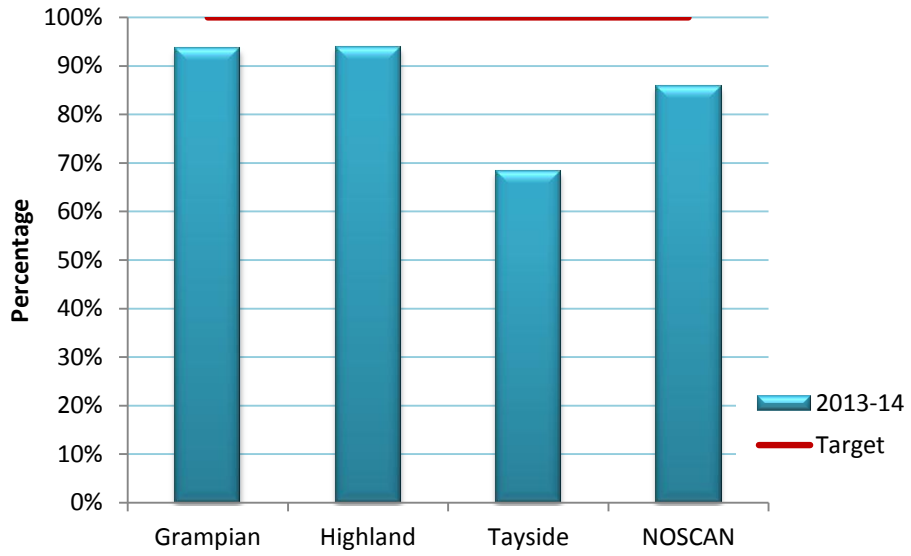
Although the target was met in NHS Shetland and NHS Orkney where numbers of patients included in this QPI were very small, a 100% target is likely to always present challenge. Accordingly, results in the larger NHS Boards ranged widely, with NHS Grampian and NHS Highland achieving performance of around 94% while NHS Tayside figures were much lower at 68%.

In NHS Highland two patients didn't have hepatitis and HIV status checked: one patient didn’t have either checked (with no reason for this recorded) and one further patient had Hepatitis status checked but not HIV (due to a request or laboratory error which has since been rectified).

In NHS Tayside, 14 out of 44 (ie 31.8%) of patients do not appear to have been hepatitis and HIV status checked, the reasons for this which are still being explored. However, education regarding this QPI has already been delivered, and improvement is anticipated in the next audit cycle. Of all those tested, no positive results have been detected to date.

Actions required:

- **NHS Highland and NHS Tayside to monitor the effectiveness of changes implemented in virological testing for patients undergoing Rituximab treatment.**



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	**93.5%**	58	62	0	0%	0	0%	0
Highland	**93.8%**	30	32	0	0%	0	0%	0
Orkney*	**-**	-	-	-	-	-	-	-
Shetland*	**-**	-	-	-	-	-	-	-
Tayside	**68.2%**	30	44	0	0%	0	0%	0
W Isles	**-**	0	0	0	-	0	-	0
NoS	**85.8%**	**121**	**141**	**0**	**0%**	**0**	**0%**	**0**

5. Conclusions

The Quality Performance Indicators programme was developed to drive continuous improvement and ensure equity of care for cancer patients across Scotland. As part of this the North of Scotland is initiating a programme of annual reporting of regional performance against QPIs. This is the first time the results of the Lymphoma QPIs have been reported in the North of Scotland, providing a clearer measure of performance across the region and a more formal structure around which improvements will be made.

Overall, results of Lymphoma QPI reporting for patients diagnosed in 2013-2014 are mixed. Case ascertainment and data capture was of an overall high standard, although some recording issues were identified, for example recording of staging in NHS Tayside.

The first NoS comparative performance report indicates that QPI targets were met over the North of Scotland for two of the 11 QPIs. However, more detailed interrogation of the data suggests that these QPI results reflect inaccuracies in how they are defined and measured rather than material deficiencies in clinical practice. NOSCAN will therefore raise the concerns identified as part of the Baseline Review, which is currently underway.

These are:

- To consider amendment of QPI 1 to consider timescale in which imaging is required, the inclusion of PET scans and the exclusion of patients for palliative care only.
- To consider amendment of QPI 2 to consider timescale in which imaging is required, SACT (or radiotherapy) end dates to be used, requirement for compliance to be dependent on the delivery of 6 or 8 cycles of chemotherapy, the inclusion of PET scans and the exclusion of patients who die before the end of treatment.
- QPI 3 raised similar issues to QPI 1 regarding the timing of scans. Timing requirement for PET CT scans to be discussed at baseline review.
- To reconsider the target for QPI 4.
- To consider whether patients for palliative care only should be excluded from the denominator of QPI 6. In the absence of such an exclusion the 95% target may be too high.
- To consider amending QPI calculations so that patient receiving chemoimmunotherapy and radiotherapy meet QPI 8.
- To consider reducing the target for QPI 9 in order to reflect the recent change in clinical practice as a result of the RAPID trial.
- To discuss which cases of skin lymphoma are relevant for discussion with Haematology, as many can be managed solely by Dermatologists.

Following review and refinement of the QPIs and how they are measured it is hoped that future years of QPI reporting for lymphoma patients will produce more clinically relevant results. Never-the-less there are a number of clinical issues that have been raised by this report, including arrangements for MDTs and virological testing for Hepatitis and HIV status. Actions to address these are as follows:

- NHS Grampian to explore why some patients were not discussed at MDT or discussed at MDT more than 6 weeks after diagnosis.

- NHS Grampian to consider rearrangement of MDT to include appropriate skin cases.

- NHS Highland and NHS Tayside to monitor the effectiveness of changes implemented in virological testing for patients undergoing Rituximab treatment.

The MCN will actively take forward regional actions identified and NHS Boards are asked to develop local Action / Improvement Plans in response to the findings presented in the report. A blank Action Plan template is provided in the Appendix.

Completed Action Plans should be returned to NOSCAN within two months of publication of this report.

Progress against these plans will be monitored by the MCN Advisory Board and any service or clinical issue which the Advisory Board considers not to have been adequately addressed will be escalated to the NHS Board Lead Cancer Clinician and Regional Lead Cancer Clinician.

Additionally, progress will be reported to the Regional Cancer Advisory Forum (RCAF) annually by NHS Board Lead Cancer Clinicians and MCN Clinical Leads, as part of the regional audit governance process to enable RCAF to review and monitor regional improvement.

6. References

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Appendix: Blank NHS Board Action Plan Template

Completed Action Plans should be returned to NOSCAN within two months of publication of this report.

NOSCAN
North of Scotland Cancer Network

Action Plan: Lymphoma

Board:	
Action Plan Lead:	
Date:	

Status key	
1	**Action Fully Implemented**
2	**Action agreed but not yet implemented**
3	**No action taken (please state reason)**

QPI	Action Required	NHS Board Action Taken	Date		Lead	Progress	Status
			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 action.*	*Detail actions in progress, changes in practice, problems encountered of reasons why no action has been taken.*	*Insert no. from key*