Publication Report

Lymphoma Quality Performance Indicators

Patients diagnosed between October 2013 and September 2016

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Contents

Introduction

The cancer strategy 'Beating Cancer: Ambition and Action' published in March 2016 builds on the commitment made in the Better Cancer Care plan to 'develop a work programme which will define how we will take forward… quality indicators for cancer services' by further supporting a culture of continuous quality improvement in cancer care across NHSScotland. The new cancer strategy states a commitment to improving data collection to advance the quality and delivery of care for cancer patients.

To achieve this, the Scottish Cancer Taskforce established the National Cancer Quality Steering Group (NCQSG), which includes responsibility for:

- The development of small sets (approximately 10-15 indicators) of tumour specific national quality performance indicators (QPIs) as a proxy measure of quality care.
- Overseeing the implementation of the national governance framework that underpins the reporting of performance against these national QPIs.

The QPIs have been developed collaboratively with the three Regional Cancer Networks: North of Scotland Cancer Network (NOSCAN), South East Scotland Cancer Network (SCAN), West of Scotland Cancer Network (WoSCAN), Information Services Division (ISD), and Healthcare Improvement Scotland. The QPIs are published on the Healthcare Improvement Scotland website.

These indicators, used to drive quality improvement in cancer care across NHSScotland are kept under regular review; NHS Boards will be required to report against QPIs as part of a mandatory national cancer quality programme.

ISD support NHS Boards in improving the quality of local data collection and reporting through the production of data validation specifications, and measurability criteria for QPIs. The current data sets are outlined on the Cancer Audit website.

A rolling programme of reporting is planned across many tumour sites. National reports will include comparative reporting of performance against QPIs at NHS Board level across NHS Scotland, trend analysis and survival analysis (where applicable). This approach will help overcome existing issues relating to the reporting of small volumes in any one year.

This report assesses performance against 11 Lymphoma QPIs using clinical audit data relating to patients diagnosed with lymphoma for the period from October 2013 to September 2016.

Data collection and analysis

Lymphoma QPI data for patients diagnosed between October 2013 and September 2016 were collected by NHS Boards, supported by the regional cancer networks, and then analysed against the Lymphoma measurability document. Aggregated analysed data were then submitted to ISD via a data collection template for collation to allow comparisons at NHS Board level.

Data quality and completeness

Small numbers:

Where the number of cases meeting the denominator criteria for any indicator is between one and four, the percentage calculation has not been shown on 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 a dash (-). However, any commentary provided by NHS Boards relating to the impacted indicators will be included as a record of continuous improvement.

Baseline Review:

Following baseline review and year 1 publication of lymphoma QPIs data, some changes were made to measurability in order that the QPIs appropriately measured what they were intended to. These were positive changes and led to more focussed analysis in year 2. However, the alterations to measurability mean that year 1 and year 2 results may not be directly comparable for some QPIs.

Formal Review:

In order to ensure the success of the National Cancer QPIs in driving quality improvement in cancer care across NHS Scotland it is critical that the QPIs continue to be clinically relevant and focus on areas which will result in improvements to the quality of patient care.

It was proposed that a formal review of all QPIs should take place following 3 years national comparative reporting, with tumour specific Regional Clinical Leads undertaking a key role in determining the need and extent of the review required.

For lymphoma, this review has already taken place; revised lymphoma QPIs for implementation from year 4 onwards will be published later in 2017, following public consultation. Any proposed changes to the QPIs as a result of this review will be noted in this report.

Survival Analysis:

For future tumour specific survival analyses, it has been agreed to use the Cancer Audit QPI dataset rather than the Cancer Registry dataset that has been used in the past. This should provide benefits in terms of improved accuracy and more specific and detailed analysis. Due to time limitations and availability of data in time for this release, therefore, it has been agreed to undertake lymphoma survival analysis at a later date.

Foreword from Lymphoma Clinical Leads

The three Regional Cancer Networks aim to promote the highest standards of cancer care and equity of access to cancer services across Scotland. The development and introduction of national Quality Performance Indicators (QPI) across Scotland represents a major step forward for patients diagnosed with lymphoma.

The lymphoma QPIs were developed by clinical staff across the three Regional Cancer Networks in collaboration with Information Services Division, Healthcare Improvement Scotland, Scottish Cancer Coalition and the Scottish Government. The outcome focussed measures have facilitated national comparative analysis to identify areas of good practice and areas of variance.

Only by collecting accurate and relevant audit data can we identify areas for service improvement to ensure a consistently high level of care for patients. Where QPIs targets have not been achieved, NHS Boards have reviewed cases and provided detailed clinical feedback, which has been incorporated into this report. In the main this feedback indicates valid clinical reasons, or that in some cases patient choice or co-morbidities have influenced patient management.

This first report of a cumulative three year data is an impressive piece of work based on data for 3468 patients diagnosed with lymphoma in Scotland between 2013-2016, of which 872 were diagnosed in NOSCAN, 897 in SCAN and 1699 in WOSCAN.

Key Recommendations / Key Points to Note
Overall performance against the 11 lymphoma QPIs was generally good across all NHS Boards; however, no individual NHS Board met all 11 QPI targets. This suggests that the target levels for the QPIs are challenging and that there remains further room for improvement. It should also be noted that overall percentages are affected by the small numbers of patients meeting the denominator criteria for some of the measures.

The QPI results highlight the pressure on radiology resources which have resulted in constraints on the timely radiology reporting. This has affected performance against indicators for radiological staging (QPI 1(ii)), appropriate imaging for DLBCL patients being treated with curative intent (QPI2) and PET CT prior to treatment for patients with Classical Hodgkin Lymphoma (QPI3). Although the target for discussing patients with primary cutaneous lymphoma at a specialist MDT was missed at a national level (QPI10) and very small patient numbers are noted, this is recognised as an important area where networks should work collaboratively to ensure these patients are managed appropriately.

With regards to the results for the Clinical Trials QPI it should be noted that there is a lack of NCRI first line trials available for the most common lymphoma subtypes and this has undoubtedly affected performance against this measure.

It is encouraging that improvement is evident across the three years for a number of QPIs. For example all boards met the target for measures relating to radiological staging (QPI 1i), and rituximab in combination with chemotherapy for patients with follicular lymphoma and DLBCL (QPI6). Additionally, steady improvement has been noted across Scotland for QPIs relating to cytogenetic testing (QPI4), virological testing (QPI 11) and imaging within two weeks of radiology request (QPI 1ii).

Where variance has been noted or targets not achieved, NHS Boards should develop action plans for improvement and progress against these plans will be monitored by the regional cancer networks.

It should be noted that QPI results in the first years of reporting were affected by recording issues in some NHS Boards and changes to QPI definitions. Consequently apparent poor performance against QPI targets in these early years does not necessarily reflect the quality of clinical service delivery at the time. Data recording issues and QPI definitions have been resolved over time so that QPI results are now considered to provide a better representation of the quality of the lymphoma services across Scotland.

Following the first three years of QPI reporting, a Formal Review of the Lymphoma QPIs was undertaken in 2017. As part of this review a number of new indicators have been developed while some existing QPIs based on very small numbers of patients will be archived. We are confident that updates to the Lymphoma QPIs will drive further quality improvement in lymphoma services across NHS Scotland.

A significant volume of data has been collated and analysed for this report and the information and audit teams across NHS Scotland are to be congratulated. We would like to thank those teams involved for their hard work. Without their considerable efforts this level of progress would not be possible.

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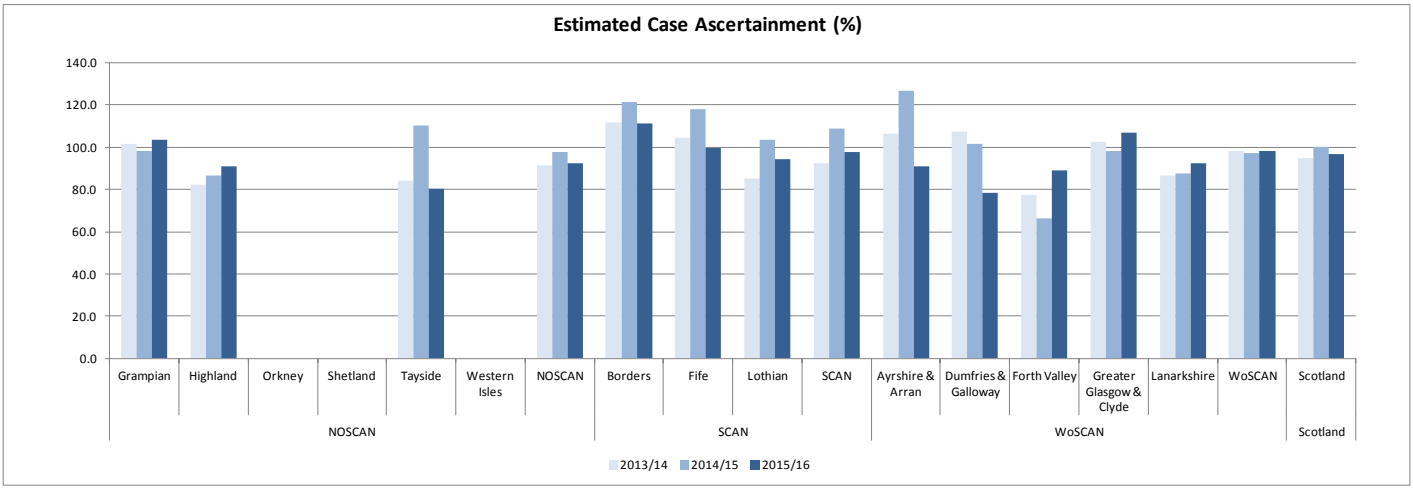
Results and Commentary

Case Ascertainment

Case ascertainment is a measure of data quality and is calculated by comparing the number of new patients captured by the cancer audit with a five year average of the numbers recorded on the cancer registry. A five year average is used for registry data as the information is not available until sometime after the year under examination. This is due to data collection and verification processes. As the number of cases will vary each year, it is possible for case ascertainment to be over or under 100%. Therefore, the figures presented should be seen as an indication only.

The average case ascertainment across Scotland in the year to March 2016 was 96.5%:



	No. of Audit Records Diagnosed in 2015/16	Average No. of Cancer Registrations: 2011-2015	Estimated Case Ascertainment %	No. of Audit Records Diagnosed in 2014/15	Average No. of Cancer Registrations: 2010-2014	Estimated Case Ascertainment %	No. of Audit Records Diagnosed in 2013/14	Average No. of Cancer Registrations: 2009-2013
NOSCAN	**287**	**310**	**92.6**	**304**	**311**	**97.7**	**281**	**308**
Grampian	137	133	103.3	127	130	98.0	127	125
Highland	63	69	90.8	64	74	86.7	60	73
Orkney	-	-	-	-	-	-	-	-
Shetland	-	-	-	-	-	-	-	-
Tayside	80	100	80.2	110	100	110.2	86	102
Western Isles	-	-	-	-	-	-	-	-
SCAN	**292**	**299**	**97.5**	**325**	**299**	**108.7**	**280**	**304**
Borders	34	31	111.1	35	29	121.5	31	28
Fife	74	74	99.7	86	73	117.8	77	74
Lothian	184	195	94.6	204	197	103.4	172	202
WoSCAN	**564**	**575**	**98.2**	**569**	**585**	**97.3**	**566**	**578**
Ayrshire & Arran	76	83	91.1	103	81	126.5	84	79
Dumfries & Galloway	34	43	78.3	43	42	101.4	42	39
Forth Valley	50	56	89.0	38	57	66.2	46	59
Greater Glasgow & Clyde	309	289	107.0	292	297	98.2	302	294
Lanarkshire	95	103	92.4	93	106	87.6	92	106
Scotland	**1143**	**1184**	**96.5**	**1198**	**1195**	**100.3**	**1127**	**1189**

- Data not shown due to small numbers

Overall Performance Summary

The tables below summarise the overall performance across the country for each QPI.

NOSCAN:

	Grampian			Highland			Orkney			Shetland			Tayside			WI			NOSCAN		
	2013/14	2014/15	2015/16	2013/14	2014/15	2015/16	2013/14	2014/15	2015/16	2013/14	2014/15	2015/16	2013/14	2014/15	2015/16	2013/14	2014/15	2015/16	2013/14	2014/15	2015/16
QPI 1 (i) – Radiological Staging - ≥90%		99%	98%		100%	98%		*	*		-	-		73%	91%		*	*		91%	96%
QPI 1 (ii) – Radiological Staging - ≥90%	73%	77%	84%	79%	80%	91%	-	*	*	-	-	-	43%	52%	66%	-	*	*	65%	70%	82%
QPI 2 – Treatment Response - ≥90%	68%	94%	94%	42%	93%	95%	*	*	*	-	*	-	62%	62%	100%	*	*	*	60%	84%	96%
QPI 3 (i) – Positron Emission Tomography (PET CT) Staging - ≥95%		100%	100%		100%	100%		*	*		*	-		89%	100%		*	*		95%	100%
QPI 3 (ii) – Positron Emission Tomography (PET CT) Staging - ≥95%	77%	100%	100%	-	60%	83%	-	*	*	-	*	-	-	83%	100%	*	*	*	86%	82%	95%
QPI 4 – Cytogenetic Testing - ≥60%	68%	53%	54%	50%	66%	35%	*	*	*	-	*	-	50%	29%	58%	*	*	*	59%	49%	51%
QPI 5 – Lymphoma MDT - ≥85%	68%	72%	76%	85%	89%	90%	-	-	-	-	-	-	96%	100%	99%	-	*	*	81%	85%	85%
QPI 6 – Treatment for Follicular Lymphoma and Diffuse Large B-Cell Lymphoma - ≥95%	94%	100%	100%	92%	96%	100%	*	*	-	-	*	-	100%	85%	100%	*	*	*	96%	94%	100%
QPI 7 – Treatment of Grade 3b Follicular Lymphoma - ≥95%	*	-	-	-	*	-	*	*	*	*	*	*	-	-	*	*	*	*	-	-	100%
QPI 8 – Treatment for Stage 1a Diffuse Large B Cell Lymphoma - ≥90%	-	*	-	*	-	*	*	*	*	*	*	*	*	*	-	*	*	*	-	-	-
QPI 9 – Treatment for Classical Hodgkin Lymphoma - ≥80%	-	-	-	-	-	*	-	*	*	*	*	*	*	-	-	*	*	*	43%	-	-
QPI 10 – Primary Cutaneous Lymphoma - ≥95%	-	-	-	-	*	*	-	*	*	*	*	*	-	-	-	*	*	*	67%	-	-
QPI 11 – Hepatitis and HIV Status - 100%	94%	91%	94%	94%	97%	98%	-	*	-	-	*	-	68%	77%	84%	*	*	*	86%	88%	93%

SCAN:

	Borders			Fife			Lothian			SCAN		
	2013/14	2014/15	2015/16	2013/14	2014/15	2015/16	2013/14	2014/15	2015/16	2013/14	2014/15	2015/16
QPI 1 (i) – Radiological Staging - ≥90%		100%	100%		98%	98%		96%	95%		97%	96%
QPI 1 (ii) – Radiological Staging - ≥90%	94%	96%	88%	84%	98%	72%	70%	73%	75%	76%	83%	76%
QPI 2 – Treatment Response - ≥90%	50%	100%	-	72%	92%	91%	87%	91%	79%	80%	92%	83%
QPI 3 (i) – Positron Emission Tomography (PET CT) Staging - ≥95%		-	-		100%	-		88%	88%		91%	90%
QPI 3 (ii) – Positron Emission Tomography (PET CT) Staging - ≥95%	-	-	-	67%	71%	-	91%	63%	42%	87%	66%	52%
QPI 4 – Cytogenetic Testing - ≥60%	64%	100%	100%	21%	27%	43%	31%	62%	65%	32%	55%	60%
QPI 5 – Lymphoma MDT - ≥85%	84%	78%	88%	88%	84%	67%	82%	78%	79%	84%	80%	77%
QPI 6 – Treatment for Follicular Lymphoma and Diffuse Large B-Cell Lymphoma - ≥95%	100%	100%	100%	100%	100%	100%	97%	99%	97%	98%	99%	98%
QPI 7 – Treatment of Grade 3b Follicular Lymphoma - ≥95%	*	-	-	*	*	*	-	-	-	-	100%	-
QPI 8 – Treatment for Stage 1a Diffuse Large B Cell Lymphoma - ≥90%	*	-	-	*	-	*	-	-	-	-	57%	100%
QPI 9 – Treatment for Classical Hodgkin Lymphoma - ≥80%	*	*	-	-	-	*	43%	-	70%	38%	80%	67%
QPI 10 – Primary Cutaneous Lymphoma - ≥95%	*	-	-	-	-	-	-	100%	-	100%	100%	100%
QPI 11 – Hepatitis and HIV Status - 100%	100%	95%	100%	77%	88%	94%	95%	99%	99%	90%	95%	97%

WoSCAN:

	AA			DG			FV			GGC			Lanarkshire			WoSCAN			Scotland		
	2013/14	2014/15	2015/16	2013/14	2014/15	2015/16	2013/14	2014/15	2015/16	2013/14	2014/15	2015/16	2013/14	2014/15	2015/16	2013/14	2014/15	2015/16	2013/14	2014/15	2015/16
QPI 1 (i) – Radiological Staging - ≥90%		98%	98%		100%	95%		96%	100%		91%	89%		100%	93%		94%	92%		94%	95%
QPI 1 (ii) – Radiological Staging - ≥90%	59%	68%	81%	82%	74%	100%	91%	100%	95%	60%	89%	83%	74%	92%	84%	66%	85%	85%	68%	80%	82%
QPI 2 – Treatment Response - ≥90%	71%	72%	62%	36%	85%	88%	75%	100%	100%	40%	84%	69%	36%	79%	52%	44%	83%	68%	57%	86%	80%
QPI 3 (i) – Positron Emission Tomography (PET CT) Staging - ≥95%		83%	100%		-	-		-	-		100%	81%		90%	90%		95%	88%		94%	91%
QPI 3 (ii) – Positron Emission Tomography (PET CT) Staging - ≥95%	47%	73%	100%	80%	-	-	92%	-	-	88%	91%	81%	63%	90%	80%	76%	82%	82%	80%	77%	76%
QPI 4 – Cytogenetic Testing - ≥60%	57%	32%	48%	60%	57%	55%	64%	59%	78%	42%	60%	80%	31%	52%	70%	44%	55%	71%	45%	54%	63%
QPI 5 – Lymphoma MDT - ≥85%	89%	63%	76%	67%	76%	91%	98%	89%	79%	64%	73%	72%	64%	80%	78%	69%	74%	75%	76%	79%	78%
QPI 6 – Treatment for Follicular Lymphoma and Diffuse Large B-Cell Lymphoma - ≥95%	93%	95%	97%	100%	100%	100%	100%	100%	100%	95%	97%	97%	97%	100%	96%	96%	98%	97%	97%	97%	98%
QPI 7 – Treatment of Grade 3b Follicular Lymphoma - ≥95%	-	-	-	*	-	*	*	-	*	-	-	-	-	-	*	-	57%	-	91%	79%	90%
QPI 8 – Treatment for Stage 1a Diffuse Large B Cell Lymphoma - ≥90%	*	-	*	-	-	*	-	-	*	0%	40%	20%	-	*	-	20%	55%	29%	23%	53%	50%
QPI 9 – Treatment for Classical Hodgkin Lymphoma - ≥80%	-	-	-	-	-	*	-	-	-	30%	33%	83%	40%	-	-	41%	38%	70%	41%	50%	60%
QPI 10 – Primary Cutaneous Lymphoma - ≥95%	-	-	-	-	-	-	*	*	*	73%	100%	94%	-	*	-	83%	100%	96%	82%	93%	86%
QPI 11 – Hepatitis and HIV Status - 100%	81%	83%	90%	95%	95%	100%	85%	90%	100%	91%	98%	96%	98%	96%	94%	91%	94%	95%	89%	92%	95%

Clinical Trials Summary Table – by Scottish Cancer Research Network (SCRN)

	SCRN - North & East			SCRN - South East			SCRN - West		
	2013/14	2014/15	2015/16	2013/14	2014/15	2015/16	2013/14	2014/15	2015/16
Clinical Trials - Interventional - ≥7.5%	3.2%	2.3%	0.3%	0%	0.3%	0.3%	6.1%	4.3%	3.7%
Clinical Trials - Translational - ≥15%	1%	4.8%	5.5%	0%	0.3%	0.3%	0%	7.4%	4.3%

Target not met

Met or exceeded target

- Data not shown due to small numbers

* No data matching QPI criteria

Note – clinical trials data was not reported with audit data in the West in 2013/14

Quality Performance Indicators

The following section includes a detailed summary of each of the eleven lymphoma QPIs outlining the variation at NHS Board level. Charts are colour coded by reporting year or by network if reporting a single year. Where performance at either level is shown to fall below the target, commentary from the relevant NHS Board is included to provide context to the variation. Information in this report is shown by the Health Board of diagnosis. Further information at hospital level is available from the data tables, where applicable.

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

Accurate staging is important to ensure appropriate treatment is delivered and futile interventions avoided.

Numerator: Number of patients with lymphoma undergoing treatment with curative intent who undergo CT of chest, abdomen and pelvis or PET CT scanning prior to treatment.

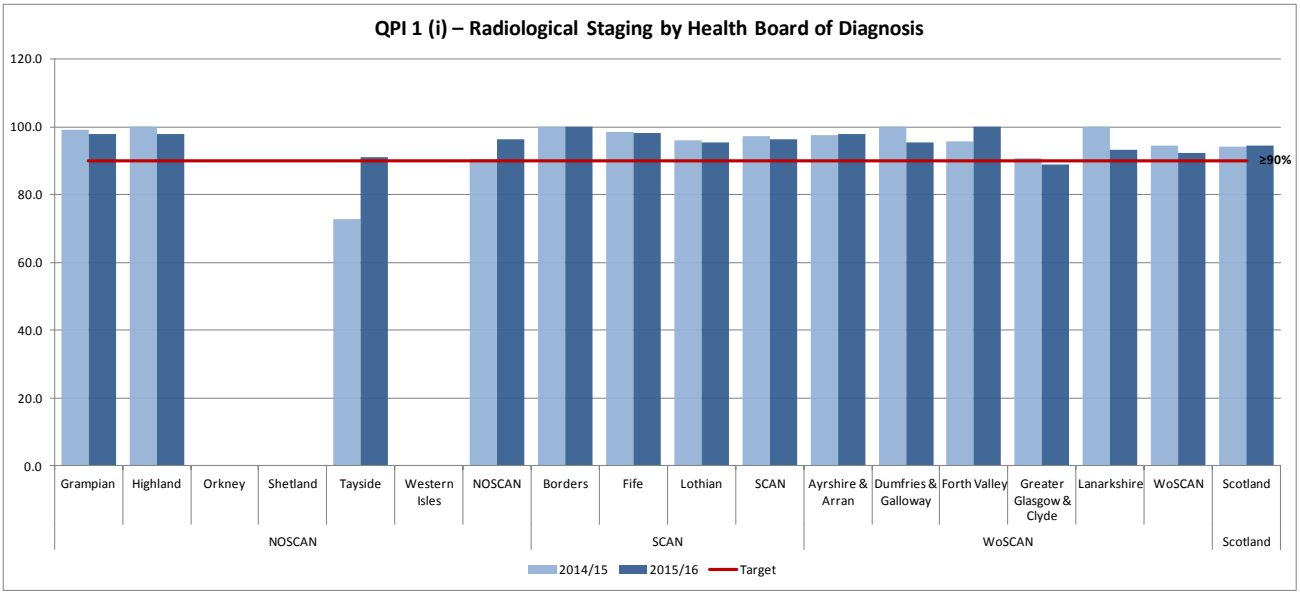
Denominator: All patients with lymphoma undergoing treatment with curative intent.

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

Target: 90%

After the baseline review following review of year 1 data, it was agreed to split the specification of this indicator into two parts to look at all patients who undergo the required imaging (i) and those who undergo the scans within 2 weeks of the radiology request (ii). Consequently, there is no data for year 1 for part (i) of the specification.

Of the 691 patients diagnosed with lymphoma undergoing treatment with curative intent in Scotland during 2015/16, 94.5% (653) of patients received a CT of the chest, abdomen and pelvis or a PET CT scan to determine the extent of the disease prior to treatment. This exceeds the 90% target with only NHS Greater Glasgow & Clyde narrowly missing the target. It was a similar pattern in year 2 where overall 94% of patients in Scotland met the target, with NHS Tayside showing significant improvement across the 2 years.



NHS Board/Region	2015/16 % Performance	Numerator	Denominator	NR for Numerator	NR for Exclusion	NR for Denominator	Past % Performance 2013/14	2014/15
Grampian	97.9	94	96				*	99.0
Highland	97.7	43	44				*	100.0
Orkney	*	*	*			2	*	*
Shetland	-	-	-				*	-
Tayside	90.9	40	44			2	*	72.6
Western Isles	*	*	*				*	*
NOSCAN	**96.3**	181	188			**4**	*	90.5
Borders	100.0	16	16				*	100.0
Fife	98.0	49	50	1			*	98.3
Lothian	95.4	124	130				*	96.1
SCAN	**96.4**	189	196	**1**			*	97.2
Ayrshire & Arran	97.9	46	47			1	*	97.7
Dumfries & Galloway	95.2	20	21				*	100.0
Forth Valley	100.0	21	21				*	95.7
Greater Glasgow & Clyde	88.8	142	160			4	*	90.7
Lanarkshire	93.1	54	58				*	100.0
WoSCAN	**92.2**	283	307			**5**	*	94.4
Scotland	**94.5**	653	691	**1**		**9**	*	94.1

Source: Cancer audit
- Data not shown due to small numbers
* No data matching QPI criteria

NHS Greater Glasgow and Clyde reviewed cases and provided detailed reasons for patients not meeting the QPI, including patient frailty.

In year 2, NHS Grampian stated that patients not undergoing oncological treatment should be excluded as currently these patients do not meet the QPI.

This point was raised at the formal review and it was proposed that the measurability be updated to ensure that those patients who have appropriate imaging but no oncological treatment will meet the QPI. In addition to this, it was suggested that the target is increased to 95%.

QPI 1(ii): Radiological Staging - Patients with lymphoma should be evaluated with appropriate imaging (within 2 weeks of radiology request) to detect the extent of disease and guide treatment decision making.

Accurate staging is important to ensure appropriate treatment is delivered and futile interventions avoided.

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

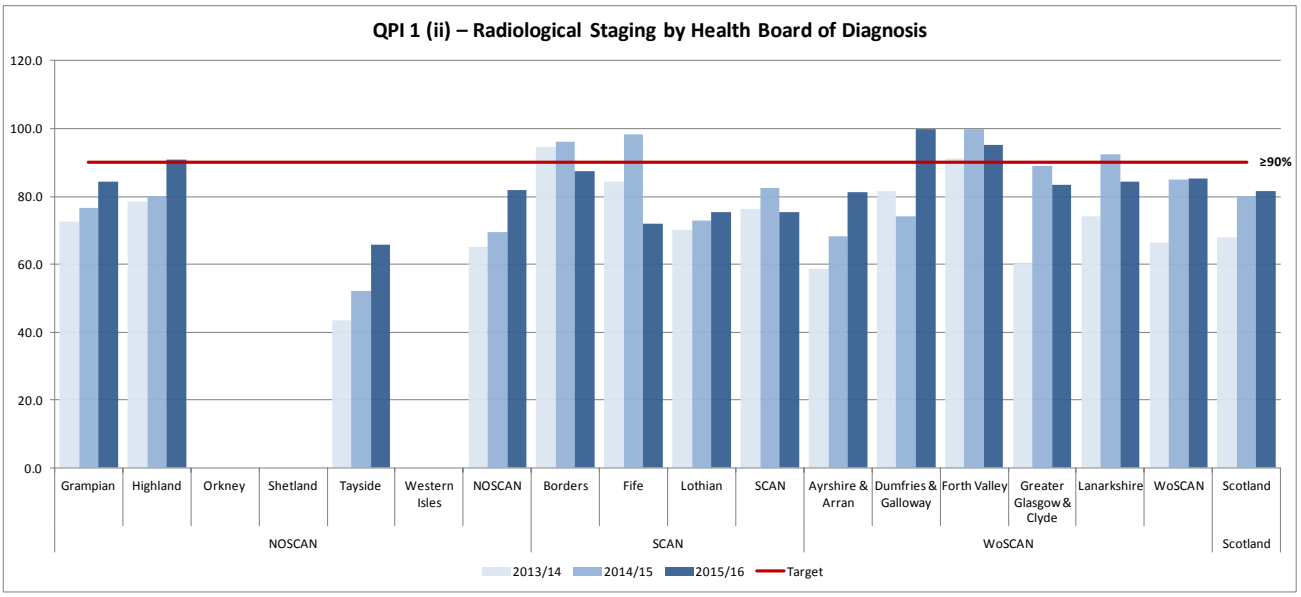
Denominator: All patients with lymphoma undergoing treatment with curative intent.

Exclusions:

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

Target: 90%

Adding the additional criteria for the scans to be completed within 2 weeks of the request results in Scotland overall missing target in each of the 3 reporting years, although there is evidence of an improving trend. In 2015/16, 82% of patients were scanned within 2 weeks up from 68% in 2013/14. Many of the Boards also show this improving trend although only NHS Highland, NHS Dumfries & Galloway and NHS Forth Valley met target in year 3.



NHS Board/Region	2015/16 % Performance	Numerator	Denominator	NR for Numerator	NR for Exclusion	NR for Denominator	Past % Performance 2013/14	2014/15
Grampian	84.4	81	96				72.6	76.8
Highland	90.9	40	44				78.6	80.0
Orkney	*	*	*			2	-	*
Shetland	-	-	-				-	-
Tayside	65.9	29	44			2	43.4	52.1
Western Isles	*	*	*				-	*
NOSCAN	**81.9**	154	188			**4**	65.2	69.5
Borders	87.5	14	16				94.4	96.0
Fife	72.0	36	50	1			84.4	98.3
Lothian	75.4	98	130				70.3	72.9
SCAN	**75.5**	148	196	**1**			76.4	82.6
Ayrshire & Arran	81.3	39	48			1	58.5	68.2
Dumfries & Galloway	100.0	21	21				81.6	74.1
Forth Valley	95.2	20	21	1			91.1	100.0
Greater Glasgow & Clyde	83.3	135	162	1		4	60.4	89.1
Lanarkshire	84.5	49	58				74.2	92.3
WoSCAN	**85.2**	264	310	**2**		**5**	66.4	85.1
Scotland	**81.6**	566	694	**3**		**9**	67.9	79.9

Source: Cancer audit
- Data not shown due to small numbers
* No data matching QPI criteria

NHS Highland commented that the QPI should not just be limited to those patients being treated with 'curative' intent but apply to those patients being treated in the expectation of major and sustained responses i.e. only omit those being treated in very limited/palliative fashion.

NHS Greater Glasgow & Clyde, NHS Ayrshire & Arran and NHS Lanarkshire carried out a review of patients not meeting this QPI and provided detailed clinical reasons.

In SCAN in year 3, the majority of patients not meeting target had complete imaging but not within the required timeframe.

At the formal review, a change to the denominator criteria for this specification was proposed. It was proposed to change the denominator cohort to focus only on those patients who have undergone PET CT or CT CAP (chest, abdomen, pelvis) prior to treatment i.e. those patients who have met part (i) of the indicator. As a result of this, the exclusions will be removed as they will no longer be applicable. In addition to this, a further specification (iii) will be added to look at patients undergoing PET CT or CT CAP prior to treatment with the report available within 3 weeks of radiology request. These changes will be in place for future reporting of this indicator.

QPI 2: 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.

CT scanning is recommended as the most appropriate method of response assessment following chemotherapy for DLBCL as treatment response may not be clinically obvious.

Numerator: Number of patients with DLBCL who are undergoing chemotherapy treatment with curative intent who undergo CT of chest, abdomen and pelvis or PET CT at end of chemotherapy treatment*

Denominator: All patients with DLBCL who are undergoing chemotherapy treatment with curative intent.

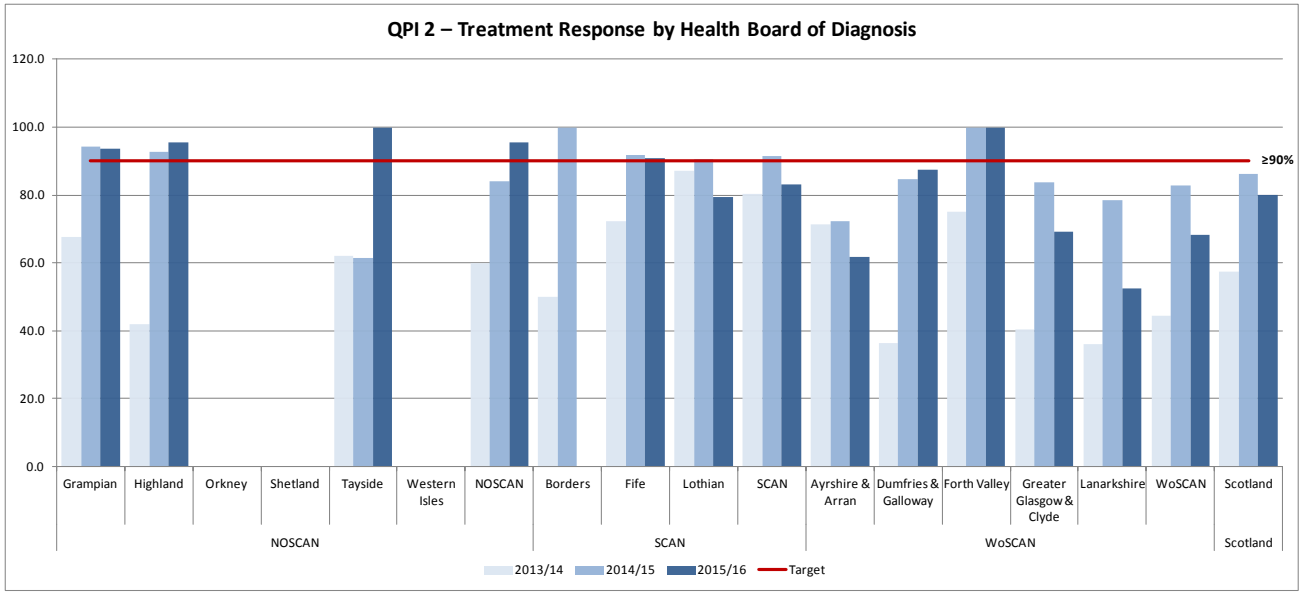
Exclusions:

- Patients who died during treatment.

Target: 90%

There were several changes to the definition of this indicator after the baseline review including the addition of an exclusion for patients who died during treatment, removing the specification of the number of chemotherapy cycles and changing the end of treatment timescale from 6 weeks to 3 months (*CT scans within 3 months of the final cycle of chemotherapy, or final fraction of radiotherapy in patients undergoing combined modality treatment, will be classified as an end of treatment scan).

It is clear that these changes have improved the performance of this indicator for many NHS Boards from year 1 to year 2. This improvement is also seen at Scotland level; however, performance was still below target in each of the 3 years. Since the baseline review changes, only NHS Grampian, NHS Highland, NHS Fife and NHS Forth Valley have achieved target consistently.



NHS Board/Region	2015/16 % Performance	Numerator	Denominator	NR for Numerator	NR for Exclusion	NR for Denominator	Past % Performance 2013/14	2014/15
Grampian	93.8	45	48				67.6	94.3
Highland	95.5	21	22				42.1	92.6
Orkney	*	*	*			1	*	*
Shetland	-	-	-				-	*
Tayside	100.0	21	21				62.1	61.5
Western Isles	*	*	*				*	*
NOSCAN	**95.7**	88	92			**1**	59.8	84.1
Borders	-	-	-				50.0	100.0
Fife	90.9	20	22				72.2	91.7
Lothian	79.5	31	39				87.2	90.6
SCAN	**83.1**	54	65				80.3	91.6
Ayrshire & Arran	61.9	13	21	4	4		71.4	72.2
Dumfries & Galloway	87.5	7	8				36.4	84.6
Forth Valley	100.0	8	8				75.0	100.0
Greater Glasgow & Clyde	69.1	56	81	2	2		40.5	83.9
Lanarkshire	52.4	11	21	1	1		36.0	78.6
WoSCAN	**68.3**	95	139	**7**	**7**		44.4	82.7
Scotland	**80.1**	237	296	**7**	**7**	**1**	57.3	86.3

Source: Cancer audit
- Data not shown due to small numbers
* No data matching QPI criteria

Those NHS Boards which did not meet the target in year 2 or 3 cited a number of specific reasons as contributing factors in their performance. In particular, patients who died after completing treatment but before the CT scan, patient fitness and patient not attending appointments were given as valid reasons for patients not receiving the appropriate end of treatment scan.

A review of the data in WoSCAN highlighted that a data recording issue which resulted in a small number of patients who had died during treatment being incorrectly included within the denominator for this QPI, had impacted upon west of Scotland results.

At the formal review no changes were proposed to this QPI.

QPI 3(i): Positron Emission Tomography (PET CT) Staging - Patients with Classical Hodgkin Lymphoma (CHL) should be evaluated with PET CT scanning to detect the extent of disease and guide treatment decision making.

Accurate staging is important to ensure appropriate treatment is delivered and futile interventions avoided.

Numerator: Number of patients with CHL undergoing treatment with curative intent who undergo PET CT prior to treatment.

Denominator: All patients with CHL undergoing treatment with curative intent.

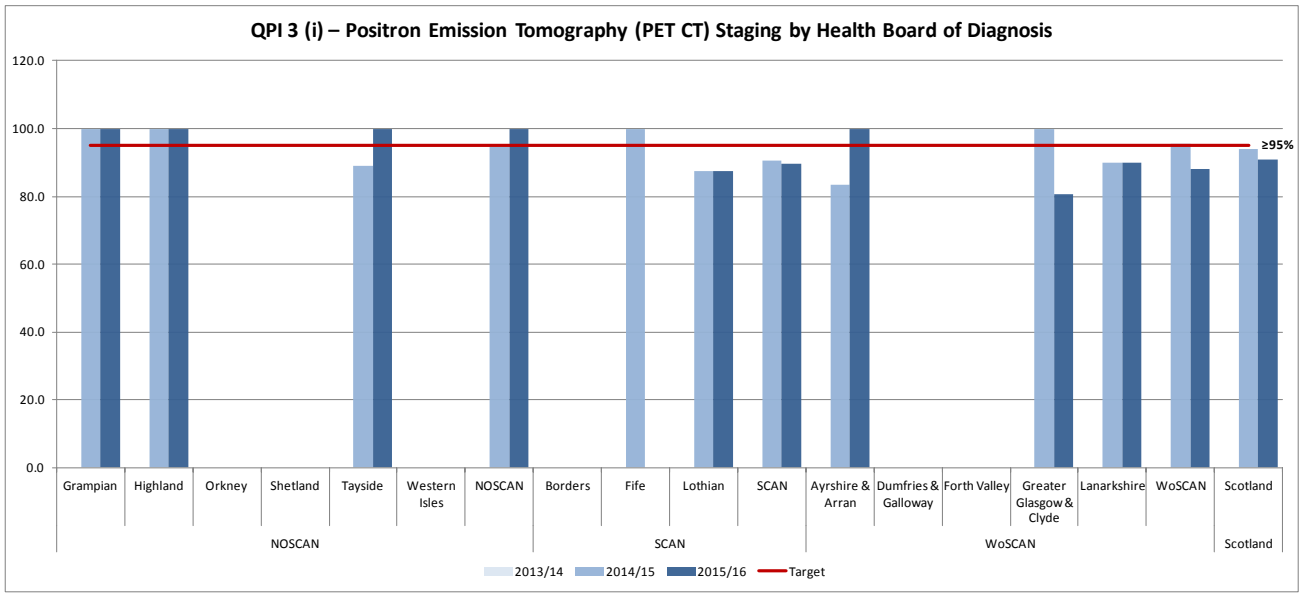
Exclusions:

- Patients who refuse investigation.

Target: 95%

After the baseline review following review of year 1 data, it was agreed to split the specification of this indicator into two parts to look at all patients who undergo PET CT imaging prior to treatment (i) and those who undergo the scans within 2 weeks of the radiology request (ii). Consequently, there is no data for year 1 for part (i) of the specification. Additionally the QPI was amended to include only patients treated with curative intent.

Overall in Scotland in 2015/16, 91% of patients with Classical Hodgkin Lymphoma received a PET CT scan prior to treatment with curative intent. This is slightly lower than in the previous year with both years below the 95% target. Due to the small numbers involved, comparison at Board level may not be meaningful, therefore, at network level, only NOSCAN achieved target in 2015/16 with 100% of patients meeting the QPI.



NHS Board/Region	2015/16 % Performance	Numerator	Denominator	NR for Numerator	NR for Exclusion	NR for Denominator	Past % Performance 2013/14	2014/15
Grampian	100.0	5	5				*	100.0
Highland	100.0	6	6				*	100.0
Orkney	*	*	*			1	*	*
Shetland	-	-	-				*	*
Tayside	100.0	8	8				*	88.9
Western Isles	*	*	*				*	*
NOSCAN	**100.0**	20	20			**1**	*	94.7
Borders	-	-	-				*	-
Fife	-	-	-				*	100.0
Lothian	87.5	21	24				*	87.5
SCAN	**89.7**	26	29				*	90.6
Ayrshire & Arran	100.0	7	7				*	83.3
Dumfries & Galloway	-	-	-				*	-
Forth Valley	-	-	-				*	-
Greater Glasgow & Clyde	80.8	21	26				*	100.0
Lanarkshire	90.0	9	10				*	90.0
WoSCAN	**88.2**	45	51				*	95.5
Scotland	**91.0**	91	100			**1**	*	93.9

NHS Greater Glasgow & Clyde and NHS Lanarkshire reviewed those cases not meeting the QPI and provided detailed clinical reasons, including patients being unfit for investigation and treatment.

In NHS Lothian, all cases not meeting target were reviewed and valid clinical reasons for patients not receiving a PET scan were provided (e.g. pregnancy and psychiatric problems).

At the formal review, no changes were proposed to this indicator.

QPI 3(ii): Positron Emission Tomography (PET CT) Staging - Patients with Classical Hodgkin Lymphoma (CHL) should be evaluated with PET CT scanning (within 2 weeks of radiology request) to detect the extent of disease and guide treatment decision making.

Accurate staging is important to ensure appropriate treatment is delivered and futile interventions avoided.

Numerator: Number of patients with CHL undergoing treatment with curative intent who undergo PET CT prior to treatment and within 2 weeks of radiology request.

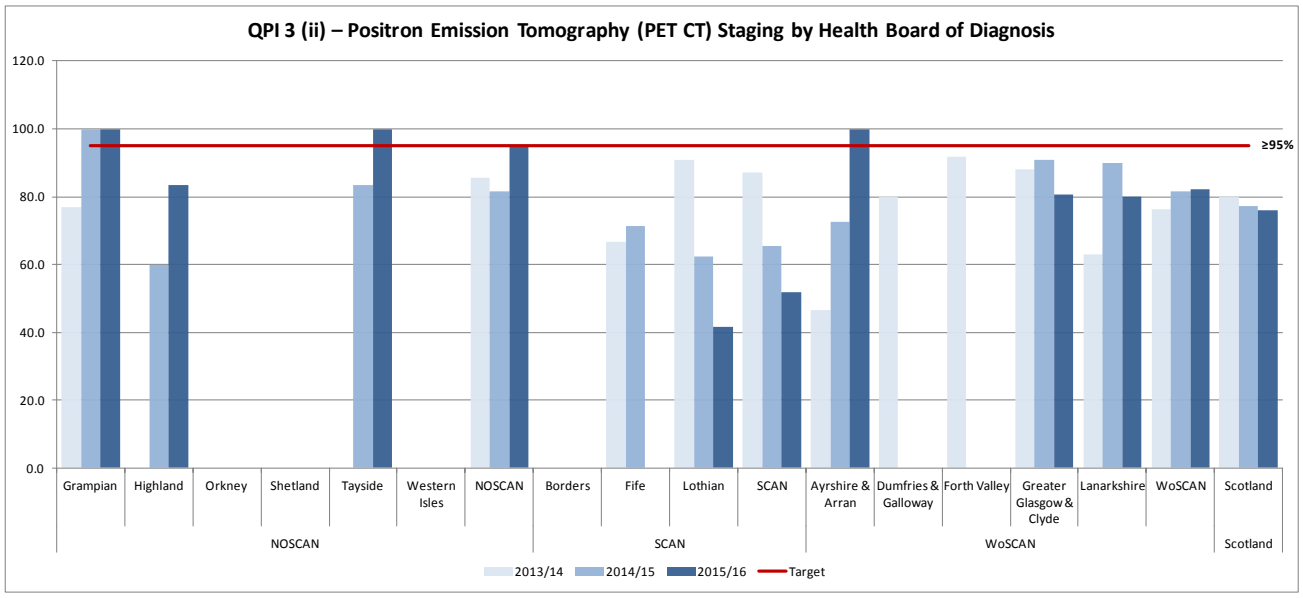
Denominator: All patients with CHL undergoing treatment with curative intent.

Exclusions:

- Patients who refuse investigation.

Target: 95%

Adding the additional criteria for the scans to be completed within 2 weeks of the request, results in Scotland overall missing the target and decreasing across the 3 reporting years. This is largely driven by the decrease in performance in SCAN from 87% in 2013/14 to 52% in year 2015/16.



NHS Board/Region	2015/16 % Performance	Numerator	Denominator	NR for Numerator	NR for Exclusion	NR for Denominator	Past % Performance 2013/14	2014/15
Grampian	100.0	5	5				76.9	100.0
Highland	83.3	5	6				-	60.0
Orkney	*	*	*			1	-	*
Shetland	-	-	-				-	*
Tayside	100.0	8	8				-	83.3
Western Isles	*	*	*				*	*
NOSCAN	**95.0**	19	20			**1**	85.7	81.6
Borders	-	-	-				-	-
Fife	-	-	-				66.7	71.4
Lothian	41.7	10	24				90.9	62.5
SCAN	**51.7**	15	29				87.1	65.6
Ayrshire & Arran	100.0	7	7				46.7	72.7
Dumfries & Galloway	-	-	-				80.0	-
Forth Valley	-	-	-	2			91.7	-
Greater Glasgow & Clyde	80.8	21	26				88.1	90.9
Lanarkshire	80.0	8	10				63.2	90.0
WoSCAN	**82.4**	42	51	**2**			76.3	81.6
Scotland	**76.0**	76	100	**2**		**1**	80.0	77.3

Source: Cancer audit
- Data not shown due to small numbers
* No data matching QPI criteria

NHS Highland stated that PET scanning is carried out in NHS Grampian for their patients and, therefore, this may contribute to the delays.

NHS Forth Valley commented that the PET request date is not recorded or held in Forth Valley and was not available from NHS Greater Glasgow & Clyde.

NHS Greater Glasgow & Clyde and NHS Lanarkshire reviewed cases and provided reasons for cases not meeting the QPI. In some cases scans were carried out within 15 days of radiology request and therefore narrowly missed the 14 day target.

In SCAN, it was acknowledged that the times to PET CT need to improve, therefore the SCAN lead clinician and the radiology lead clinician will assess areas for improvement.

At the formal review, it was proposed to change the denominator cohort to focus only on those patients with CHL who have undergone PET CT prior to treatment i.e. those patients who have met part (i) of the indicator. As a result of this, the exclusions will be removed as they will no longer be applicable. In addition to this, a further specification (iii) will be added to look at patients with CHL undergoing PET CT prior to treatment with the report available within 3 weeks of the radiology request. These changes will be in place for future reporting of this indicator.

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.

Classical cytogenetic or Fluorescence in Situ Hybridization (FISH) analysis is essential for the diagnosis of Burkitt lymphoma.

Rearrangements of MYC (a regulator gene in chromosome 8) in DLBCL are a strong prognostic factor and will guide treatment options and provide important information to help inform patients and carers about the nature of the disease and prognosis.

Numerator: Number of patients with Burkitt Lymphoma and DLBCL undergoing treatment with curative intent who have MYC testing prior to treatment.

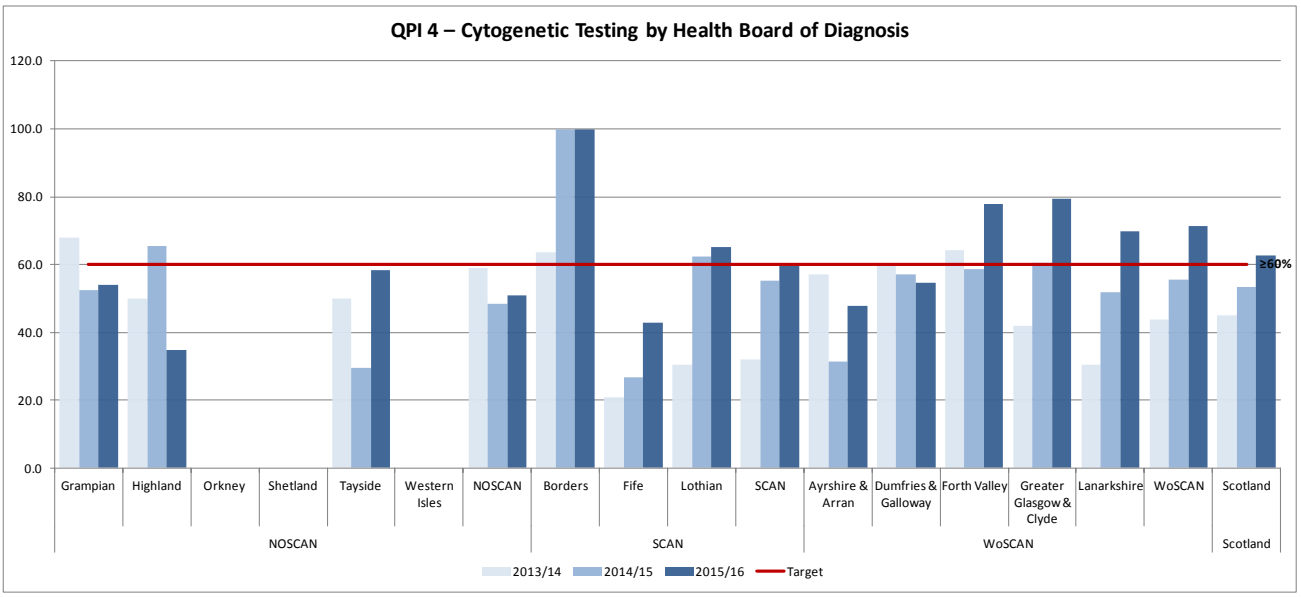
Denominator: All patients with Burkitt Lymphoma and DLBCL undergoing treatment with curative intent.

Exclusions:

- No exclusions.

Target: 60%

Over the 3 years there has been a steady improvement nationally in the percentage of patients in this cohort receiving cytogenetic testing as part of the diagnostic process, resulting in Scotland achieving target in 2015/16. Several NHS Boards show a similar improvement over the three years, notably, NHS Greater Glasgow & Clyde, NHS Lothian and NHS Lanarkshire.



NHS Board/Region	2015/16 % Performance	Numerator	Denominator	NR for Numerator	NR for Exclusion	NR for Denominator	Past % Performance 2013/14	2014/15
Grampian	54.0	27	50	2			68.1	52.6
Highland	34.8	8	23				50.0	65.5
Orkney	*	*	*			1	*	*
Shetland	-	-	-				-	*
Tayside	58.3	14	24				50.0	29.4
Western Isles	*	*	*				*	*
NOSCAN	**51.0**	50	98	**2**		**1**	58.9	48.5
Borders	100.0	5	5				63.6	100.0
Fife	42.9	12	28				20.8	26.7
Lothian	65.3	32	49				30.5	62.3
SCAN	**59.8**	49	82				31.9	55.3
Ayrshire & Arran	47.8	11	23				57.1	31.6
Dumfries & Galloway	54.5	6	11				60.0	57.1
Forth Valley	77.8	7	9				64.3	58.8
Greater Glasgow & Clyde	79.5	70	88			2	42.0	60.4
Lanarkshire	69.7	23	33				30.6	51.7
WoSCAN	**71.3**	117	164			**2**	43.9	55.4
Scotland	**62.8**	216	344	**2**		**3**	45.1	53.5

Source: Cancer audit
- Data not shown due to small numbers
* No data matching QPI criteria

Several NHS Boards (NHS Grampian, NHS Highland, NHS Dumfries & Galloway and NHS Ayrshire & Arran) all commented that treatment had started before the MYC results were available.

In NHS Fife, it was recognised that the reporting times for MYC testing have improved in year 3 although further work is required to achieve the target.

To address these issues, at the formal review it was agreed to revise the wording of the QPI to specifically state chemotherapy treatment. In addition to this, there will be a specification (ii) added to focus on the availability of MYC results within 3 weeks of the chemotherapy start date with a target of 85%.

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

Evidence suggests that patients with cancer managed by a multi-disciplinary team have a better outcome. There is also evidence that the multidisciplinary management of patients increases their overall satisfaction with their care.

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

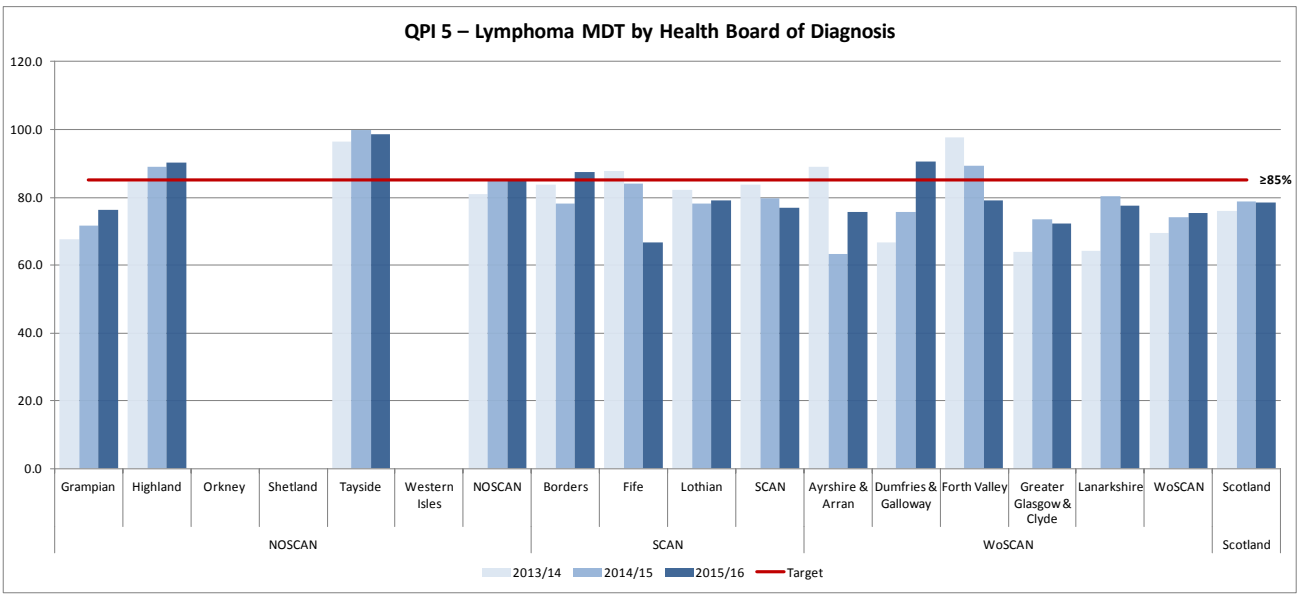
Denominator: All patients with lymphoma.

Exclusions:

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

Target: 85%

In each of the 3 reporting years the target was missed at a national level. At NHS Board level, only NHS Highland, NHS Tayside, NHS Dumfries & Galloway and NHS Borders met target in 2015/16.



NHS Board/Region	2015/16 % Performance	Numerator	Denominator	NR for Numerator	NR for Exclusion	NR for Denominator	Past % Performance 2013/14	2014/15
Grampian	76.2	96	126				67.5	71.8
Highland	90.3	56	62				84.8	88.9
Orkney	-	-	-				-	-
Shetland	-	-	-				-	-
Tayside	98.6	72	73			1	96.4	100.0
Western Isles	*	*	*				-	*
NOSCAN	**85.4**	229	268			**1**	80.9	85.3
Borders	87.5	28	32				83.9	78.1
Fife	66.7	44	66				87.7	84.0
Lothian	79.2	133	168				82.1	78.2
SCAN	**77.1**	205	266				83.8	79.7
Ayrshire & Arran	75.8	50	66	1			88.9	63.3
Dumfries & Galloway	90.6	29	32				66.7	75.7
Forth Valley	79.2	38	48				97.8	89.5
Greater Glasgow & Clyde	72.1	202	280	9	3	1	63.9	73.5
Lanarkshire	77.5	69	89				64.3	80.4
WoSCAN	**75.3**	388	515	**10**	**3**	**1**	69.5	74.3
Scotland	**78.4**	822	1049	**10**	**3**	**2**	76.1	78.6

Source: Cancer audit
- Data not shown due to small numbers
* No data matching QPI criteria

Many NHS Boards commented on the difficulties of achieving the 6 week timescale in this QPI. In particular, it was noted that resource issues in NHS Ayrshire & Arran and NHS Grampian contributed to this.

NHS Fife also commented on the difficulties of achieving the 6 week timescale which, in some cases, was due to delayed referrals from other specialties. The MDM referral process has been changed so the expectation is that performance will improve in the next reporting period. Similar issues were highlighted in NHS Lothian which has led to a review of their MDM process and pathway.

The formal review group addressed these concerns and proposed to amend the criteria to measure patients with lymphoma who are discussed at an MDT meeting within 8 weeks of diagnosis and increase the target to 90%. This will be in place for future reporting of this QPI.

QPI 6: 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.

Patients with symptomatic advanced stage follicular lymphoma and DLBCL should receive rituximab in combination with chemotherapy as this increases response to chemotherapy and provides a progression free and overall survival benefit.

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

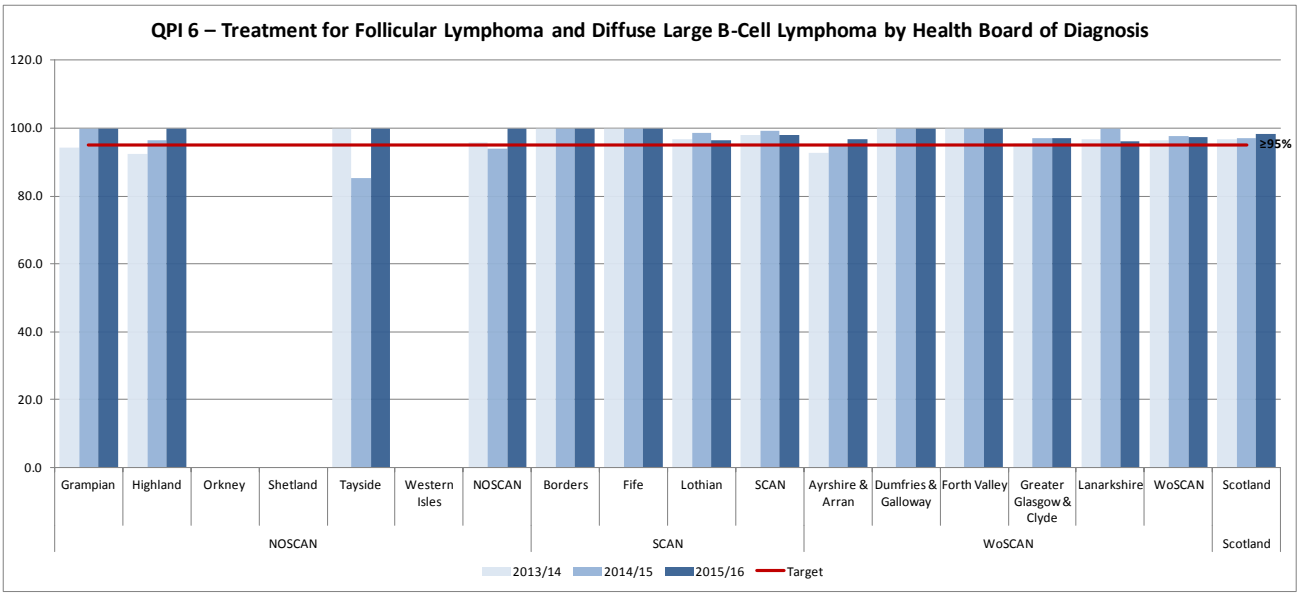
Denominator: All patients with follicular lymphoma and DLBCL who receive chemotherapy.

Exclusions:

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

Target: 95%

In 2015/16, all NHS Boards met the target for this QPI and, nationally, the target was met in each of the 3 years.



NHS Board/Region	2015/16 % Performance	Numerator	Denominator	NR for Numerator	NR for Exclusion	NR for Denominator	Past % Performance 2013/14	2014/15
Grampian	100.0	63	63				94.2	100.0
Highland	100.0	32	32				92.3	96.4
Orkney	-	-	-				*	*
Shetland	-	-	-				-	*
Tayside	100.0	34	34		4	1	100.0	85.4
Western Isles	*	*	*				*	*
NOSCAN	**100.0**	131	131		**4**	**1**	95.8	94.0
Borders	100.0	9	9				100.0	100.0
Fife	100.0	35	35				100.0	100.0
Lothian	96.6	56	58				96.9	98.5
SCAN	**98.0**	100	102				98.1	99.2
Ayrshire & Arran	96.9	31	32				92.9	95.1
Dumfries & Galloway	100.0	14	14				100.0	100.0
Forth Valley	100.0	16	16				100.0	100.0
Greater Glasgow & Clyde	97.2	104	107		2		95.4	97.1
Lanarkshire	96.0	24	25				96.9	100.0
WoSCAN	**97.4**	189	194		**2**		96.4	97.8
Scotland	**98.4**	420	427		**6**	**1**	96.6	97.1

Source: Cancer audit
- Data not shown due to small numbers
* No data matching QPI criteria

At the formal review, it was agreed to remove the reference to rituximab and replace with ‘anti-B cell monoclonal antibody therapy’. This will be in place from reporting of year 4 onwards.

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).

Evidence suggests there may be important clinical and biologic differences between this group (grade 3b) and follicular lymphoma patients with lower grades.

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.
- Patients who died before chemotherapy treatment.

Target: 95%

There were only 35 patients with grade 3b follicular lymphoma diagnosed in Scotland during the 3 year reporting period. Of these, 5 patients did not receive R-CHOP chemotherapy and, therefore, the target was not met at 86%. However, due to the extremely low numbers in this QPI, meaningful comparisons at national level and across NHS Boards are not recommended.

Whilst it is recognised that this QPI is clinically relevant and useful, the small numbers prevent meaningful comparisons and discussion. Therefore, it has been agreed at the formal review to archive this QPI for future reporting.

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.

Local radiotherapy, in conjunction with chemotherapy, reduces the chance of local relapse and improves overall survival for patients with stage 1a DLBCL.

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.
- Patients who died before chemotherapy or radiotherapy treatment.

Targets:

90%

As with QPI7, this indicator is impacted by extremely small numbers and, therefore, caution is advised when reviewing these figures. Of the 57 patients diagnosed in Scotland with nodal non-bulky stage 1a DLBCL during the 3 year reporting period, 23 patients (40%) received the combination modality treatment which falls short of the 90% target.

Due to the small numbers it has been agreed at the formal review to archive this QPI for future reporting.

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

Combined modality treatment consisting of chemotherapy followed by radiotherapy has been shown to result in superior outcomes for patients compared with radiotherapy alone.

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.
- Patients who died before chemotherapy or radiotherapy treatment.

Target: 80%

This indicator is also impacted by extremely small numbers and, therefore, caution is advised when reviewing these figures. Of the 86 patients diagnosed in Scotland with stage 1a or 2a CHL during the 3 year reporting period, 49% (42 patients) received the combination modality treatment which falls short of the 80% target.

Due to the small numbers it has been agreed at the formal review to archive this QPI for future reporting.

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

A specialist MDT for patients with primary cutaneous lymphoma facilitates clinico-pathological correlation, which is very important in this group of conditions where treatment is multi-faceted. Furthermore it allows for consolidation of expertise in this rare condition which will help develop robust diagnosis and management.

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%

This indicator is also impacted by extremely small numbers and, therefore, caution is advised when reviewing these figures. Over the 3 years combined, the 95% target was missed at a national level (86%) albeit with relatively small numbers in this cohort (95 patients over 3 years). At network level across the 3 years, only SCAN (100%) achieved target with WoSCAN at 93% and NOSCAN at 40%.

Despite the small numbers, however, this QPI is to remain unchanged for future reporting. Patients with primary cutaneous lymphoma are currently discussed via different forums across the regions. It was acknowledged at formal review that a national MDT would be an effective solution and therefore the QPI should be used as a driver to promote discussion via Network Leads at a national level.

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

Clinical assessment and virological testing for HIV, hepatitis B and C should be undertaken for all patients as part of the diagnostic process and in all patients considered at risk of virus reactivation.

All patients who are found to be hepatitis B should receive the appropriate anti-viral prophylaxis and those found to be HIV positive should receive appropriate anti-retroviral treatment before commencing treatment.

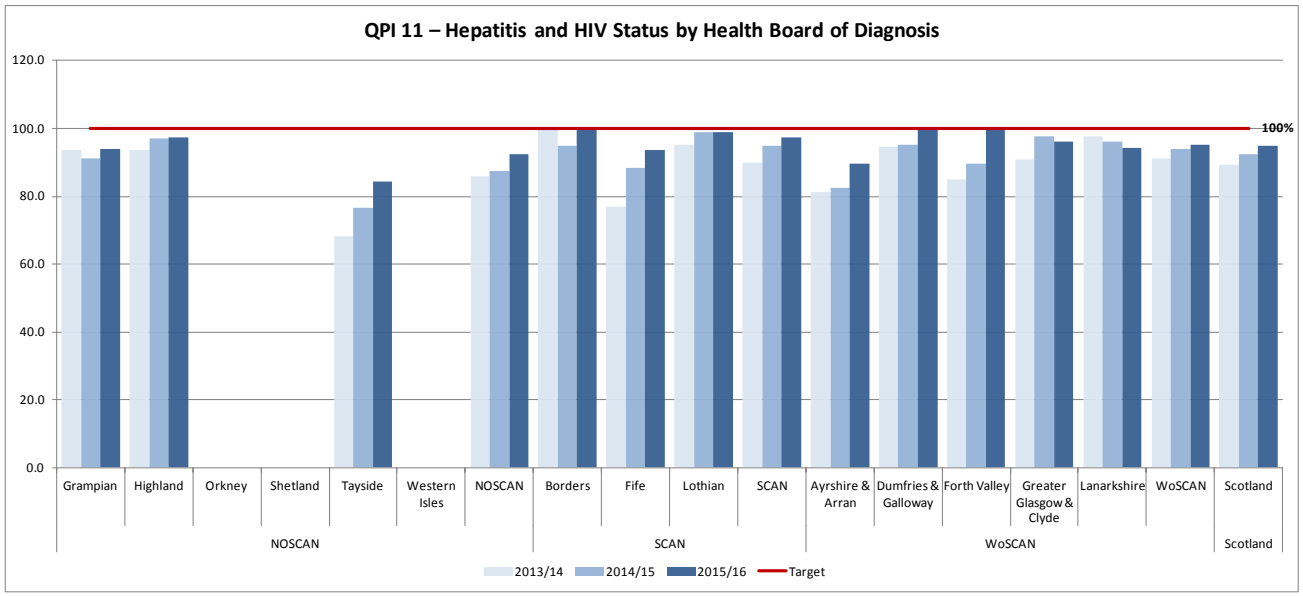
Numerator: Number of patients with lymphoma undergoing rituximab based treatment who have hepatitis B, C and HIV status checked prior to treatment.

Denominator: All patients with lymphoma undergoing rituximab based treatment.

Exclusions:
- No exclusions

Targets:
100%

There was a steady improvement in this indicator over the 3 years in Scotland with 95% of patients in this cohort who had hepatitis B, C and HIV checked prior to treatment; up from 89% in 2013/14. However, due to the challenging 100% target the target was not met at a national level. At NHS Board level, many Boards also show an improvement across the 3 years with NHS Borders, NHS Dumfries and Galloway and NHS Forth Valley all achieving 100% in 2015/16.



NHS Board/Region	2015/16						Past % Performance	
	% Performance	Numerator	Denominator	NR for Numerator	NR for Exclusion	NR for Denominator	2013/14	2014/15
Grampian	94.1	80	85				93.5	91.1
Highland	97.5	39	40				93.8	97.1
Orkney	-	-	-				-	*
Shetland	-	-	-				-	*
Tayside	84.4	38	45				68.2	76.8
Western Isles	*	*	*				*	*
NOSCAN	**92.5**	161	174				85.8	87.6
Borders	100.0	18	18				100.0	95.0
Fife	93.6	44	47				77.1	88.5
Lothian	98.9	87	88				95.3	98.8
SCAN	**97.4**	149	153				89.9	94.9
Ayrshire & Arran	89.7	35	39	1			81.3	82.6
Dumfries & Galloway	100.0	17	17				94.7	95.2
Forth Valley	100.0	17	17				85.0	89.7
Greater Glasgow & Clyde	96.0	121	126				90.8	97.8
Lanarkshire	94.2	49	52				97.6	96.2
WoSCAN	**95.2**	239	251	**1**			91.2	94.1
Scotland	**95.0**	549	578	**1**			89.3	92.5

Source: Cancer audit
- Data not shown due to small numbers
* No data matching QPI criteria

In NHS Fife and NHS Lothian, all cases not meeting the target were reviewed but no further action identified.

At the formal review, it was proposed to lower the target from 100% to 95%. It was also agreed to remove the reference to rituximab and replace with ‘all patients undergoing SACT’. This will be in place from reporting of year 4 onwards.

Clinical Trials

Access to Clinical Trials is a common issue for all cancer types; therefore, a generic QPI was developed to measure performance across the country. Further details on the development and definition of this QPI can be found here. Specifically for lymphoma, the QPI is defined as follows and Appendix A3 contains a list of lymphoma trials into which patients have been recruited in Scotland during the reporting period ending March 2016. Information is shown by each Scottish Cancer Research Network (SCRN).

Clinical Trials Access: Proportion of patients with lymphoma who are enrolled in an interventional clinical trial or translational research.

All patients should be considered for participation in available clinical trials, wherever eligible.

Numerator: Number of patients with lymphoma enrolled in an interventional clinical trial or translational research.

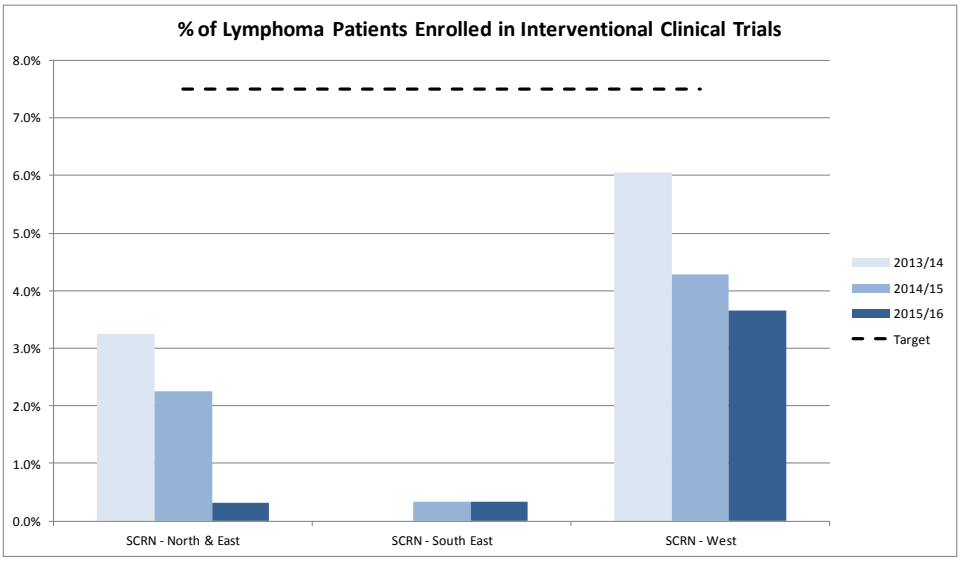
Denominator: All patients with lymphoma.

Exclusions: No exclusions.

Target: Interventional clinical trials – 7.5%
Translational research – 15%

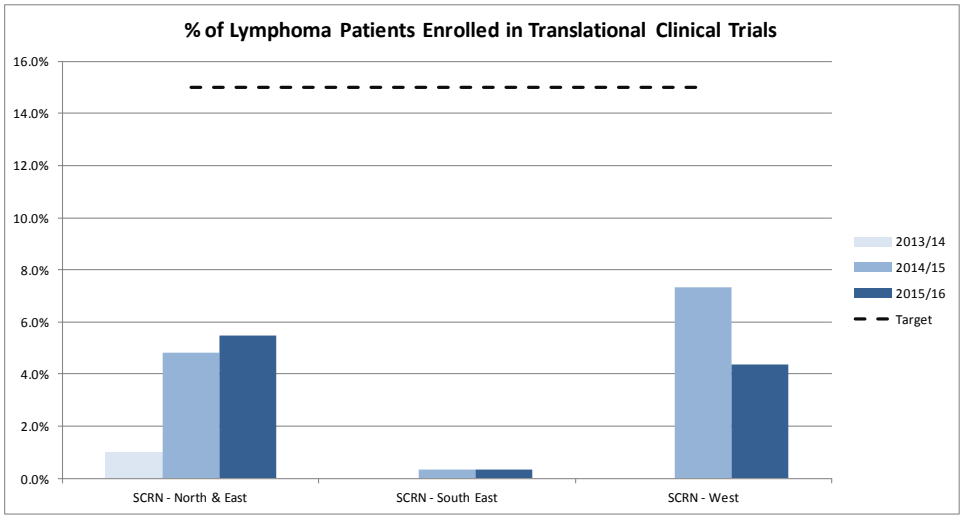
The aspiration is to enrol a minimum of **7.5%** of patients into Interventional Clinical Trials and **15%** into Translational research.

Interventional Trials



		2013/14			2014/15			2015/16		
Network	Target	No of patients enrolled	Av cancer registrations	%Enrolled	No of patients enrolled	Av cancer registrations	%Enrolled	No of patients enrolled	Av cancer registrations	%Enrolled
SCRN - North & East	7.5%	10	308.0	3.2%	7	311.0	2.3%	1	310.0	0.3%
SCRN - South East	7.5%	0	304.0	0.0%	1	299.0	0.3%	1	299.0	0.3%
SCRN - West	7.5%	35	578.0	6.1%	25	585.0	4.3%	21	575.0	3.7%

Translational Trials



		2013/14			2014/15			2015/16		
Network	Target	No of patients enrolled	Av cancer registrations	%Enrolled	No of patients enrolled	Av cancer registrations	%Enrolled	No of patients enrolled	Av cancer registrations	%Enrolled
SCRN - North & East	15%	3	308.0	1.0%	15	311.0	4.8%	17	310.0	5.5%
SCRN - South East	15%	0	304.0	0.0%	1	299.0	0.3%	1	299.0	0.3%
SCRN - West	15%	0	578.0	0.0%	43	585.0	7.4%	0	575.0	0.0%

The QPI targets for clinical trials are 7.5% for interventional trials and 15% for translational trials. It should be noted that these targets are ambitious, particularly with the move towards more targeted trials. Clinicians have noted that there is still a lack of major NCRI (National Cancer Research Institute) first line trials available for the commonest lymphoma subtypes which will impact on performance against this QPI.

All cancer patients in Scotland are considered for potential participation in the open trials currently available. However, as with other cancer specific studies, consequent to the demise of larger general trials and the advent of genetically selective trials that only target small populations of patients, many of the cancer trials that are currently open to recruitment in Scotland have very select eligibility criteria. Consequently they will only be available to a small percentage of the total number of people who were diagnosed with cancer. The number of patients screened for clinical trials is often higher than the number recruited as not all patients will pass the screening stage, however the screening phase can involve a considerable amount of time and resource.

Due to the increasing complexity of trials and time burden needed to run them effectively, and a lack of clinical and research support to run such further trials, it is not currently possible to open a greater number (and thereby to have a greater scope) of available trials in Scotland. Constraints imposed by the commercial trial sponsors also limit the number of trials it is possible to open in smaller cancer centres such as those in the NOSCAN region. However a large number of feasibility requests for trials are continually being reviewed by all consultants and if an expression of interest is submitted, the chances that the site will be selected for running the trial are high.

List of abbreviations

QPI	-	Quality Performance Indicator
ISD	-	Information Services Division
NOSCAN	-	North of Scotland cancer network
WoSCAN	-	West of Scotland cancer network
SCAN	-	South East Scotland cancer network
MDT	-	Multidisciplinary team
SCRN	-	Scottish Cancer Research Network
SIMD	-	Scottish Index of Multiple Deprivation
SMR01	-	Scottish Morbidity Record (Inpatient and Daycase Activity)
CT	-	Computed Tomography scan
MRI	-	Magnetic Resonance Imaging scan

List of Tables

Table No.	Name	Time period	File & size
Data Tables	Lymphoma QPI Data Tables	Oct 2013 – Sept 2016	Excel [115kb]

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Further Information

Further information on Cancer Quality Performance Indicators can be found on the Cancer QPI section of the ISD website.

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Appendix

A1 – Background Information

The purpose of the cancer quality work programme and the roles and responsibilities of each organisation are outlined in Chief Executives Letter (CEL 06). This document also provides details of the data collection, quality assurance and governance processes that are critical to the reporting of QPIs.

A2 – Lymphoma QPIs

The table below shows the list of Lymphoma QPIs applicable to this publication. Please note that revisions to these QPIs may have been made since the initial data collection – refer to the Healthcare Improvement Scotland website for the latest version of these QPIs.

QPI	Numerator	Denominator	Exclusions	Target
QPI 1(i): Radiological Staging	Number of patients with lymphoma undergoing treatment with curative intent who undergo CT of chest, abdomen and pelvis or PET CT scanning prior to treatment.	All patients with lymphoma undergoing treatment with curative intent.	Patients who refuse investigation. Patients with primary cutaneous lymphoma	90%
QPI 1(ii): Radiological Staging (within 2 weeks of radiology request)	Number of patients with lymphoma undergoing treatment with curative intent who undergo CT of chest, abdomen and pelvis or PET CT scanning prior to treatment and within 2 weeks of radiology request.	All patients with lymphoma undergoing treatment with curative intent.	Patients who refuse investigation. Patients with primary cutaneous lymphoma	90%
QPI 2: Treatment Response	Number of patients with DLBCL who are undergoing chemotherapy treatment with curative intent who undergo CT of chest, abdomen and pelvis or PET CT at end of chemotherapy treatment	All patients with DLBCL who are undergoing chemotherapy treatment with curative intent.	Patients who died during treatment	90%
QPI 3(i) - Positron Emission Tomography (PET CT) Staging	Number of patients with CHL undergoing treatment with curative intent who undergo PET CT prior to treatment.	All patients with CHL undergoing treatment with curative intent.	Patients who refuse investigation	95%
QPI 3(ii) - Positron Emission Tomography (PET CT) Staging (within 2 weeks of radiology request)	Number of patients with CHL undergoing treatment with curative intent who undergo PET CT prior to treatment and within 2 weeks of radiology request.	All patients with CHL undergoing treatment with curative intent.	Patients who refuse investigation	95%
QPI 4: Cytogenetic Testing	Number of patients with Burkitt Lymphoma and DLBCL undergoing treatment with curative intent who have MYC testing prior to treatment.	All patients with Burkitt Lymphoma and DLBCL undergoing treatment with curative intent.	No exclusions	60%

QPI 5: Lymphoma MDT	Number of patients with lymphoma discussed at the MDT within 6 weeks of diagnosis.	All patients with lymphoma.	Patients who died before first treatment. Patients with primary cutaneous lymphoma.	85%
QPI 6: Treatment for Follicular Lymphoma and Diffuse Large B-Cell Lymphoma	Number of patients with follicular lymphoma and DLBCL who receive chemotherapy in combination with rituximab.	All patients with follicular lymphoma and DLBCL who receive chemotherapy.	Patients who refuse chemotherapy. Patients enrolled in clinical trials.	95%
QPI 7: Treatment of Grade 3b Follicular Lymphoma	Number of patients with grade 3b follicular lymphoma who receive R-CHOP chemotherapy.	All patients with grade 3b follicular lymphoma.	Patients who refuse chemotherapy. Patients enrolled in clinical trials. Patients who died before chemotherapy treatment.	95%
QPI 8: Treatment for Stage 1a Diffuse Large B Cell Lymphoma	Number of patients with nodal, non-bulky stage 1a DLBCL who receive local radiotherapy, in combination with limited chemotherapy (3 cycles).	All patients with nodal, non-bulky stage 1a DLBCL.	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. Patients who died before chemotherapy or radiotherapy treatment.	90%
QPI 9: Treatment for Classical Hodgkin Lymphoma	Number of patients with stage 1a or 2a CHL who receive combined modality treatment (chemotherapy and radiotherapy).	All patients with stage 1a or 2a CHL.	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. Patients who died before	80%

			chemotherapy or radiotherapy treatment.	
QPI 10: Primary Cutaneous Lymphoma	Number of patients with primary cutaneous lymphoma who are discussed at a specialist MDT meeting.	All patients with primary cutaneous lymphoma.	No exclusions	95%
QPI 11: Hepatitis and HIV Status	Number of patients with lymphoma undergoing rituximab based treatment who have hepatitis B, C and HIV status checked prior to treatment.	All patients with lymphoma undergoing rituximab based treatment.	No exclusions	100%

A3 – Lymphoma Clinical Trials

The list of clinical trials in use for lymphoma patients in Scotland across the Scottish Cancer Research Networks is shown below. Further details on these clinical trials are available from the relevant SCRN.

Study Type	Study Title	SCRN - North & East	SCRN - South East	SCRN - West
Interventional	CANC - 3341 - E7438 in solid tumors or B cell Lymphomas			✓
	CHEMO-T			✓
	ENRICH Ibrutinib for untreated mantle cell lymphoma			✓
	IELSG 37			✓
	INCA			✓
	NCRN - 3245 - Betalutin radioimmunotherapy for treatment of relapsed CD37+ NHL			✓
	NCRN508 ECHELON-2 - brentuximab vedotin and CHP (A+CHP) VS CHOP in T-cell lymphomas			✓
	PACIFICO			✓
	Inter-B-NHL Ritux 2010 - Version 1.0			✓
	EuroNet PHL-LP1 Hodgkin's	✓		
	Two Step Study		✓	
Translational	BACH			✓
	Molecular profiling for lymphoma (MaPLE)	✓		✓

A4 – Publication Metadata (including revisions details)

Metadata Indicator	Description
Publication title	Lymphoma Quality Performance Indicators
Description	This report shows the performance of NHS Boards against twelve Lymphoma QPIs for the period October 2013 to September 2016. Relevant commentary from NHS Boards is also included to provide local context to the data.
Theme	Health and Social Care
Topic	Cancer services
Format	PDF Document
Data source(s)	Cancer audit, Cancer registry
Date that data are acquired	June 2017
Release date	November 7th 2017
Frequency	Every 3 years
Timeframe of data and timeliness	Data covering patients diagnosed between October 2013 and September 2016.
Continuity of data	First publication
Revisions statement	It is expected that QPI definitions and measurability documents will evolve and therefore future publications may contain revisions to previously published information.
Revisions relevant to this publication	Changes implemented after baseline review include addition of MDT indicator and 90 day mortality data.
Concepts and definitions	QPI definitions and measurability criteria are available from the Cancer Audit section of the ISD website.
Relevance and key uses of the statistics	The reporting of performance against these national QPIs is underpinned by a national governance framework that aims to use these data to improve cancer services in Scotland.
Accuracy	Information on the accuracy of some of the national datasets used within this publication is available on the ISD website. ISD only receives aggregate data from each NHS Board to populate these indicators (with the exception of SMR based indicators and case ascertainment). Derivations of the figures and data accuracy are matters for individual NHS Boards.
Completeness	For the reporting period, information based on the SMR01 data completeness can be found here. 100% of QPI aggregate data was returned.
Comparability	The national dataset and data definitions in conjunction with the final quality performance indicators and the accompanying measurability document were agreed in public engagement to ensure data collection is comparable across the country.
Accessibility	It is the policy of ISD Scotland to make its web sites and products accessible according to published guidelines.
Coherence and clarity	Statistics for each QPI are presented consistently in chart

	and table format at NHS Board level, with national figures and performance targets included for comparison and clarity.
Value type and unit of measurement	The units of measure include numbers and percentages.
Disclosure	The ISD protocol on Statistical Disclosure Protocol is followed.
Official Statistics designation	Official Statistics
UK Statistics Authority Assessment	Not currently put forward for assessment
Last published	First release
Next published	November 2020
Date of first publication	7th November 2017
Help email	johnconnor@nhs.net
Date form completed	11th August 2017

A5 – Early Access details (including Pre-Release Access)

Pre-Release Access
Under terms of the "Pre-Release Access to Official Statistics (Scotland) Order 2008", ISD are obliged to publish information on those receiving Pre-Release Access ("Pre-Release Access" refers to statistics in their final form prior to publication). The standard maximum Pre-Release Access is five working days. Shown below are details of those receiving standard Pre-Release Access and, separately, those receiving extended Pre-Release Access.

Standard Pre-Release Access:

Scottish Government Health Department
NHS Board Chief Executives
NHS Board Communication leads

Early Access for Management Information
These statistics will also have been made available to those who needed access to 'management information', i.e. as part of the delivery of health and care:

Members of the National Cancer Quality Operational Group
Members of the National Cancer Quality Steering Group

Early Access for Quality Assurance
These statistics will also have been made available to those who needed access to help quality assure the publication:

Members of the National Cancer Quality Operational Group
Members of the National Cancer Quality Steering Group
Regional and NHS Board Lymphoma Clinical Leads
Network Lead Clinicians

A6 – ISD and Official Statistics

About ISD

Scotland has some of the best health service data in the world combining high quality, consistency, national coverage and the ability to link data to allow patient based analysis and follow up. Information Services Division (ISD) is a business operating unit of NHS National Services Scotland and has been in existence for over 40 years. We are an essential support service to NHSScotland and the Scottish Government and others, responsive to the needs of NHSScotland as the delivery of health and social care evolves.

Purpose: To deliver effective national and specialist intelligence services to improve the health and wellbeing of people in Scotland.

Mission: Better Information, Better Decisions, Better Health

Vision: To be a valued partner in improving health and wellbeing in Scotland by providing a world class intelligence service.

Official Statistics

Information Services Division (ISD) is the principal and authoritative source of statistics on health and care services in Scotland. ISD is designated by legislation as a producer of 'Official Statistics'. Our official statistics publications are produced to a high professional standard and comply with the Code of Practice for Official Statistics. The Code of Practice is produced and monitored by the UK Statistics Authority which is independent of Government. Under the Code of Practice, the format, content and timing of statistics publications are the responsibility of professional staff working within ISD.
ISD's statistical publications are currently classified as one of the following:

- National Statistics (i.e. assessed by the UK Statistics Authority as complying with the Code of Practice)
- National Statistics (i.e. legacy, still to be assessed by the UK Statistics Authority)
- Official Statistics (i.e. still to be assessed by the UK Statistics Authority)
- other (not Official Statistics)

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