West of Scotland Cancer Network

Haemato-oncology
Managed Clinical Network

Audit Report

Lymphoma
Quality Performance Indicators

Clinical Audit Data:
01 October 2020 to 30 September 2021

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CONTENTS

Lymphoma QPI Overview

Patients diagnosed Oct 2020 - Sep 2021

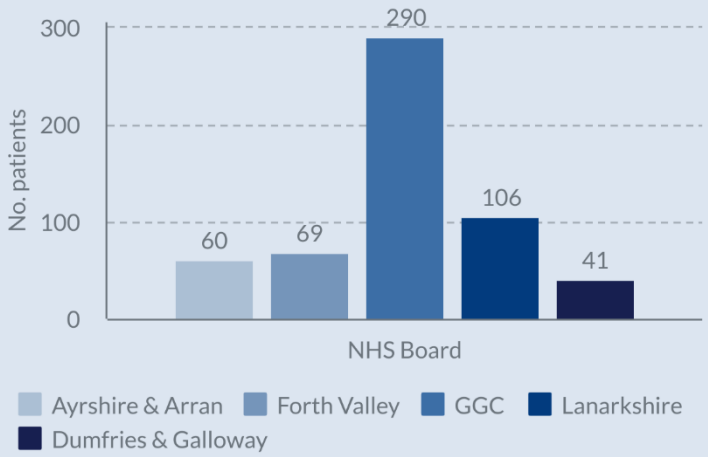
Number of patients	566

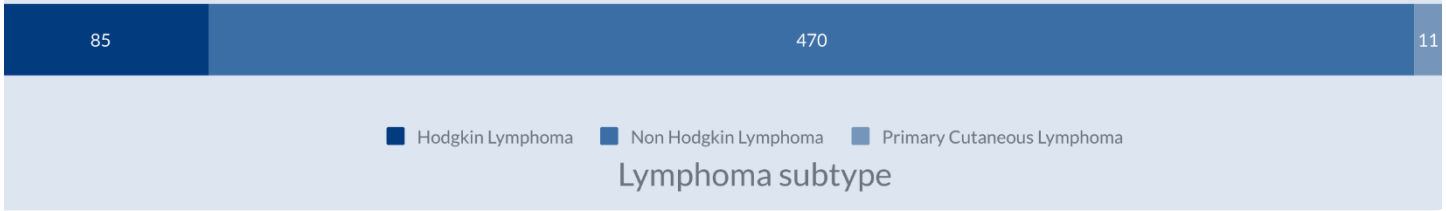
Median Age of Patients:	
Hodgkin Lymphoma	47
Non Hodgkin Lymphoma	70

Patient gender:

	Male	Female
Hodgkin Lymphoma	60%	40%
Non Hodgkin Lymphoma	53%	47%

Where are patients diagnosed





Lymphoma subtype

Performance (%)

	Target	Performance 2020-21	Change from 2019-20
QPI 1: Radiological Diagnosis and Staging	90%	91%	↓
QPI 2: Treatment Response	90%	78%	n.a.
QPI 3: PET CT Staging	95%	89%	↓
QPI 4(i): Cytogenetic Testing	90%	97%	↓
QPI 4(ii): Cytogenetic Testing	90%	92%	n.a.
QPI 5: Lymphoma MDT	90%	91%	n.a.
QPI 11: Hepatitis and HIV Status	95%	88%	n.a.
QPI 12(i): Treatment Response in Hodgkin Lymphoma	80%	71%	n.a.
QPI 12(ii): Treatment Response in Hodgkin Lymphoma	80%	60%	n.a.
QPI 14: Clinical Trials and Research Study Access	15%	5%	↑

Key Achievements:

- Improvement in recording of clinical stage which will facilitate survival analysis & reporting.
- Appropriate cytogenetic testing of patients including MYC and BCL2/BCL6 testing.
- Timely discussion of patients at lymphoma MDT.

Areas for Improvement:

- Ensuring timely CT / PET CT imaging and reporting both at the time of staging and response assessment.
- Ensuring that all patients have both hepatitis B core antibody and surface antigen testing.

Executive Summary

Introduction

This report contains an assessment of the performance of West of Scotland (WoS) lymphoma services using clinical audit data relating to patients diagnosed with lymphoma between 1st October 2020 and 30th September 2021.

In order to ensure the success of the Cancer QPIs in driving quality improvement in cancer care, QPIs will continue to be assessed for clinical effectiveness and relevance. These clinically led reviews involve key clinicians from each of the Regional Cancer Networks. Formal review of the Lymphoma QPIs was undertaken in 2017 and 2020, with the revised QPIs (v4.1) published in June 2021. In this report the full suite of v4 revisions is reported for the first time, consequently for many QPIs data is not comparable with that from previous years.

Results

A summary of the Lymphoma QPI performance for the 2020/21 audit period is presented below, with a more detailed analysis of the results set out in the main report. Data are analysed by location of diagnosis and illustrate NHS Board performance against each target and overall regional performance for each performance indicator.

Summary of Performance

Key	
	Above Target Result
	Below Target Result
-	Results based on less than 5 patients

QPI	Target	Year	Performance by Board							
			WoS	A&A	FV	Lan	NG	SG	Clyde	D&G
QPI 1: Radiological Diagnosis and Staging. Proportion of patients with lymphoma undergoing treatment with curative intent who undergo CT of chest, abdomen and pelvis or PET CT scanning prior to treatment where the report is available within 3 weeks of radiology request.	90%	2020-21	90.8%	74.2%	90.0%	85.5%	97.9%	94.3%	88.6%	100.0%
		2019-20	92.7%	70.5%	100.0%	98.5%	93.9%	95.2%	94.9%	96.2%
		2018-19	91.9%	85.7%	92.3%	100.0%	91.5%	86.1%	93.0%	86.2%
QPI 2: Treatment Response Proportion of patients with DLBCL who are undergoing chemotherapy treatment with curative intent who undergo CT of chest, abdomen and pelvis or PET CT scan at end of chemotherapy treatment.	90%	2020-21	78.0%	61.1%	92.3%	75.0%	78.0%	85.7%	77.4%	81.8%
		2019-20								
		2018-19								
QPI 3: Positron Emission Tomography (PET CT) Staging Proportion of patients with CHL undergoing treatment with curative intent who undergo PET CT scan prior to first treatment, where the report is available within 3 weeks of radiology request.	95%	2020-21	88.9%	60.0%	75.0%	85.7%	100.0%	100.0%	-	-
		2019-20	95.1%	66.7%	-	92.9%	100.0%	100.0%	100.0%	-
		2018-19	86.8%	90.0%	90.0%	87.5%	100.0%	100.0%	91.7%	28.6%
QPI 4(i): Cytogenetic testing Proportion of patients with Burkitt Lymphoma or DLBCL undergoing chemotherapy with curative intent who have MYC testing.	90%	2020-21	96.8%	100.0%	94.4%	100.0%	94.2%	100.0%	97.0%	91.7%
		2019-20	98.3%	95.5%	100.0%	96.7%	96.6%	100.0%	100.0%	100.0%
		2018-19								
QPI 4(ii): Cytogenetic testing Proportion of patients with DLBCL MYC rearrangement identified on FISH analysis undergoing chemotherapy treatment with curative intent who have BCL2/BCL6 testing within 3 weeks of commencing treatment.	90%	2020-21	92.0%	-	-	83.3%	100.0%	-	100%	-
		2019-20								
		2018-19								

QPI	Target	Year	WoS	A&A	FV	Lan	NG	SG	Clyde	D&G
QPI 5: Lymphoma MDT Proportion of patients with lymphoma who are discussed at MDT meeting within 8 weeks of the pathology report being issued.	90%	2020-21	91.2%	87.9%	97.0%	91.5%	87.3%	94.0%	88.2%	100.0%
		2019-20								
		2018-19								
QPI 11: Hepatitis and HIV Status Proportion of patients with lymphoma undergoing SACT who have hepatitis B [core antibody (anti-HBcAB) and surface antigen (HB-sAG)], hepatitis C and HIV status checked prior to treatment.	95%	2020-21	88.4%	100.0%	95.5%	100.0%	86.2%	71.8%	67.3%	100.0%
		2019-20								
		2018-19								
QPI 12(i): Treatment Response in Hodgkin Lymphoma Proportion of patients with advanced HL who receive ABVD, BEACOPP or BEACOPDac chemotherapy treatment that have their treatment evaluated with PET CT scan after two cycles of chemotherapy.	80%	2020-21	71.1%	66.7%	77.8%	83.3%	75.0%	57.1%	-	-
		2019-20								
		2018-19								
QPI 12(ii): Treatment Response in Hodgkin Lymphoma Proportion of patients with advanced HL who receive ABVD, BEACOPP or BEACOPDac chemotherapy treatment that have their treatment evaluated with PET CT scan after two cycles of chemotherapy and where the report is available within 3 working days.	80%	2020-21	60.0%	-	42.9%	80.0%	66.7%	-	-	-
		2019-20								
		2018-19								
QPI 14: Clinical Trials & Research Study Access Proportion of patients diagnosed with lymphoma who are consented for a clinical trial / research study.	15%	2021	5.2%	6.4%	1.6%	4.6%	6.7%			0.0%
		2020	4.4%	4.0%	3.3%	1.9%	6.4%			0.0%
		2019	7.9%	9.2%	1.7%	3.8%	10.6%			5.6%

Conclusions and Action Required

The results illustrate that some of the QPI targets set have been challenging for NHS Boards to achieve and there remains room for further service improvement particularly around timely radiological imaging and virological testing. It should also be noted that performance is affected by the small numbers of patients on which some measures are based.

It is encouraging that case ascertainment is of a high standard enabling robust assessment of performance against QPIs. There was excellent performance against the new measure looking at cytogenetic testing in patients undergoing chemotherapy with curative intent (QPI 4(i) and (ii)), and the revised QPI looking at discussion of patients at MDT (QPI 5).

Where QPI targets were not met NHS Boards have provided detailed commentary. In the main these indicate valid clinical reasons or that, in some cases, patient choice or co-morbidities have influenced patient management.

NHS Boards are encouraged to continue with this proactive approach of reviewing data and addressing issues as necessary, in order to work towards increasingly advanced performance against targets, and demonstration of overall improvement in quality of the care and service provided to patients.

There are a number of actions required as a consequence of this assessment of performance against the agreed criteria.

Actions required:

- NHS Ayrshire & Arran to report findings of review into the factors contributing to delays in the reporting of CT imaging for lymphoma patients prior to treatment.

- Clyde sector of NHSGGC to continue to follow up delays in radiology to improve timeliness of reporting of CT and PET CT imaging for lymphoma patients.

- MCN to review referral pathways for PET CT imaging from all WoS Boards to assess whether improvements in how patients are referred can result in more timely PET CT imaging and reporting for both staging (QPI 3) and assessment of response to treatment (QPI 12).

- MCN to raise measurability concerns regarding QPI 12(i) at the Formal Review of Lymphoma QPIs scheduled for 2023.

NHS Boards are asked to develop local Action/Improvement Plans in response to the findings presented in the report. **Completed Action Plans should be returned to WoSCAN 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 Territorial Lead Cancer Clinician and Regional Lead Cancer Clinician. Additionally, progress will be reported annually to the Regional Cancer Advisory Group (RCAG) by NHS Board Territorial Lead Cancer Clinicians and MCN Clinical Leads, and nationally on a three-yearly basis to Healthcare Improvement Scotland as part of the governance processes set out in CEL 06 (2012).

1. Introduction

This report presents an assessment of performance of West of Scotland (WoS) Lymphoma Services relating to patients diagnosed in the region between 1st October 2020 and 30th September 2021. These audit data underpin much of the regional development/service improvement work of the Managed Clinical Network (MCN) and regular reporting of activity and performance is a fundamental requirement of an MCN to assure the quality of care delivered across the region.

This is the eighth year of analysis following the initial Healthcare Improvement Scotland (HIS) publication of Lymphoma QPIs in 2013. 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. A programme of formal review of all QPIs was implemented whereby all tumour specific QPIs were reviewed following three years of comparative reporting. Formal review of the Lymphoma QPIs was undertaken in 2017 and 2020, with the revised QPIs (v4.1) published in June 2021. In this report the full suite of v4 revisions is reported for the first time, consequently for many QPIs data is not comparable with that from previous years.

2. Background

The Haemato-oncology MCN was established in 2002 as a means of delivering equitable, high quality clinical care to all haemato-oncology patients across five NHS Boards; Ayrshire & Arran, Dumfries & Galloway, Forth Valley, Greater Glasgow and Clyde (GGC) and Lanarkshire covering a population of 2.65 million. Membership includes 48 consultant haemato-oncologists, 6 transplant consultants, 1 consultant in young adult and adolescent haematology, 2 clinical oncologists and a number of haemato-pathologists, in addition to other professional groups involved in the multi-disciplinary care of patients with blood cancer (haematological cancer).

The Haemato-oncology MCN continues to support and develop the clinical service for approximately 1300 haemato-oncology patients per annum. The effective management of these patients throughout the region continues to rely on co-ordinated delivery of treatment and care that requires close collaboration of professions from a range of specialties. Currently, there are seven local Multi-disciplinary Team (MDTs) meetings held across the WoS which complement the function of the Regional Haemato-oncology MDT.

MDT	Constituent Hospital
Ayrshire	University Hospital Crosshouse, University Hospital Ayr
Clyde	Royal Alexandra Hospital, Inverclyde Royal Hospital, Vale of Leven Hospital
Dumfries & Galloway	Dumfries and Galloway Royal Infirmary
Forth Valley	Forth Valley Royal Hospital
Lanarkshire	University Hospital Hairmyres, University Hospital Wishaw, University Hospital Monklands
North Glasgow	Beatson West of Scotland Cancer Centre, Transplant Team, Glasgow Royal Infirmary, Stobhill Hospital,
South Glasgow	Queen Elizabeth University Hospital, New Victoria Hospital

2.1 National Context

Non-Hodgkin Lymphoma (NHL) accounts for 3% of all cancers and is the seventh most common cancer type, with approximately 1000 cases diagnosed in Scotland each year. The incidence of NHL has remained stable over the past ten years (2010 to 2020)[2]. 1-year age-standardised net survival was 80% for men diagnosed in 2013-17 and 82% for women while 5-year survival was 70% for both men and women[3].

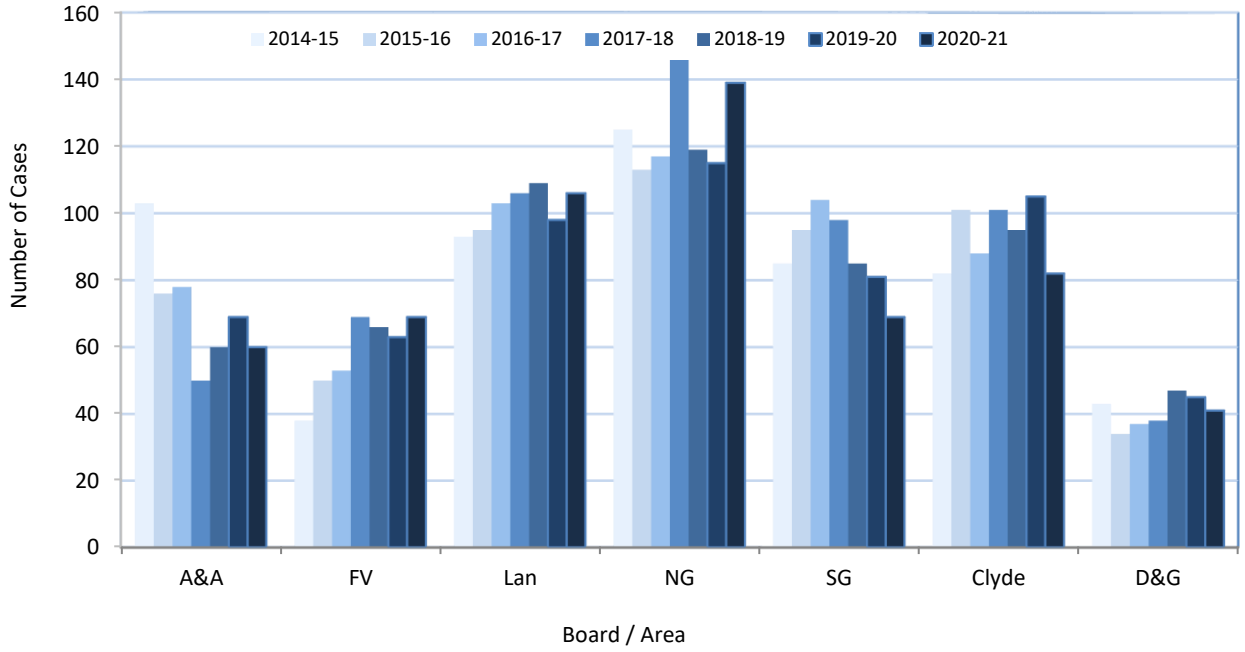
Hodgkin Lymphoma (HL) is less common with approximately 170 new diagnoses in Scotland each year with numbers remaining relatively stable over the past 10 years (2010 to 2020)[2].

2.2 West of Scotland Context

A total of 566 new lymphoma cases were recorded through audit as diagnosed in the WoS between 1st October 2020 and 30th September 2021. The number of patients diagnosed within each Board

is presented in Figure 1. As the largest WoS Board, 51% of all new cases of lymphoma were diagnosed in NHSGGC which is in line with population estimates for this Board.

Figure 1: Number of patients diagnosed with lymphoma by unit of diagnosis, October 2014 to September 2021



	A&A	FV	Lan	NG	SG	Clyde	D&G	WoS
2014-15	103	38	93	125	85	82	43	569
2015-16	76	50	95	113	95	101	34	564
2016-17	78	53	103	117	104	88	37	580
2017-18	50	69	106	150	98	101	38	612
2018-19	60	66	109	119	85	95	47	581
2019-20	69	63	98	115	81	105	45	576
2020-21	60	69	106	139	69	82	41	566

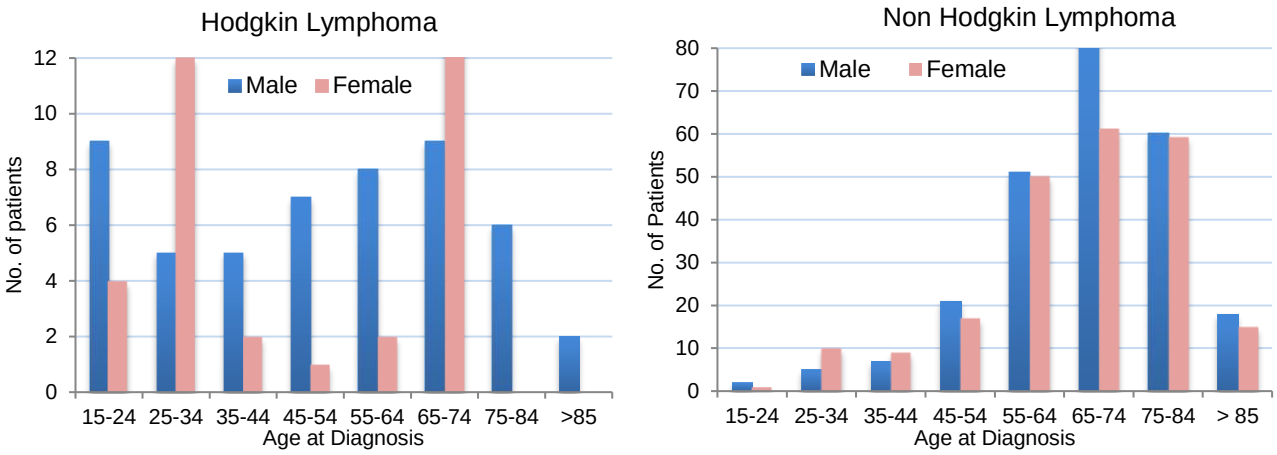
A breakdown by cancer subtype is noted below and illustrates that NHL is the most common type of lymphoma and accounts for 83% of all lymphomas diagnosed in the WoS in this audit period.

- 85 HL (15%)
- 470 NHL (83%)
- 11 Primary Cutaneous Lymphoma (2%)

Lymphoma Age and Gender Distribution

Figure 2 illustrates the distribution of HL and NHL by age and gender. The median age of HL patients was 47 years and the disease was more common in males (60%) than females in 2020-21 (40%). In NHL, the median age of patients at diagnosis was 70 years, with 76% of patients aged 60 years or over. 53% of patients diagnosed with NHL were male and 47% female.

Figure 2: Distribution of Hodgkin lymphoma and non-Hodgkin lymphoma by age and gender in the WoS



Hodgkin Lymphoma

Figure 3 illustrates the pathological subtypes of HL. The distribution of HL by clinical stage is presented in Figure 4, which illustrates that 29% of patients presented with early stage (I, IIA) disease and 66% of patients presented with advanced stage disease (IIB,III,IV).

Figure 3: Hodgkin lymphoma by pathological subtype

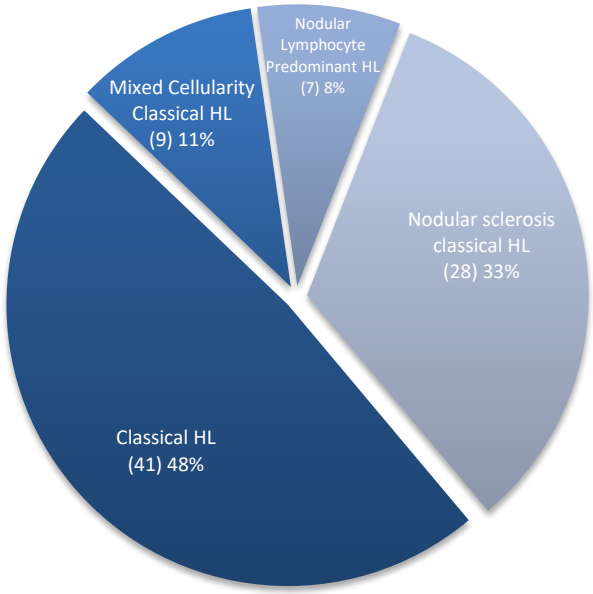
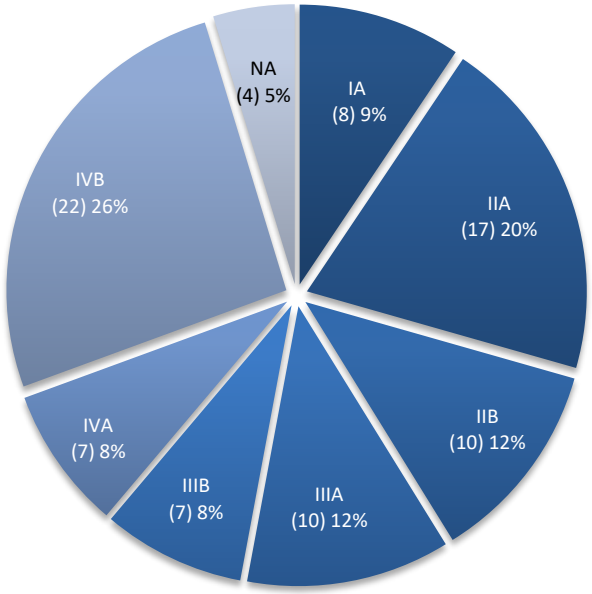


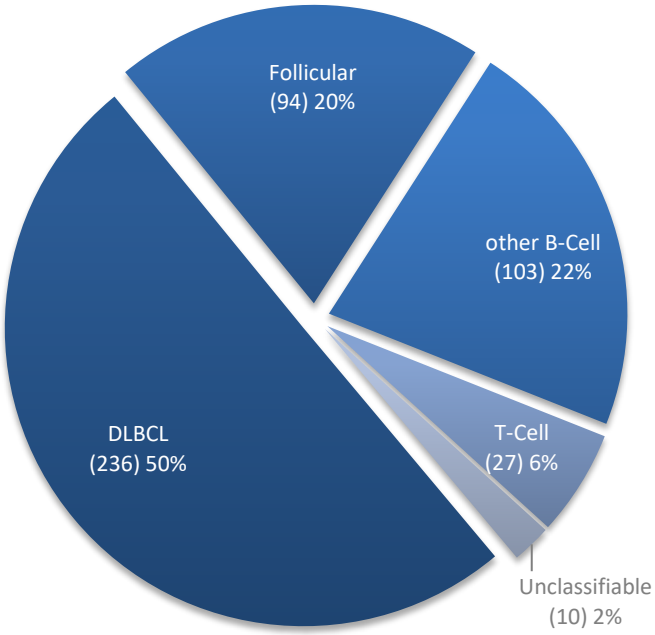
Figure 4: Hodgkin lymphoma by clinical stage



Non-Hodgkin Lymphoma

Of the 470 cases of NHL diagnosed, DLBCL accounted for 50% of the cases, with follicular and other B-Cell lymphoma each accounting for 20% and 22% of the cases, as seen in Figure 5.

Figure 5: Distribution of Non-Hodgkin lymphoma in the WoS



The distribution of DLBCL by clinical stage is presented in Figure 6, which illustrates that 15% of patients presented with stage I disease and 76% of patients presented with stage II – IV disease. Stage was not recorded in 20 of the 236 patients (9%), which is an improvement on previous years (19% in 2019-20; 16% for 2018-19).

Figure 6: DLBCL by clinical stage

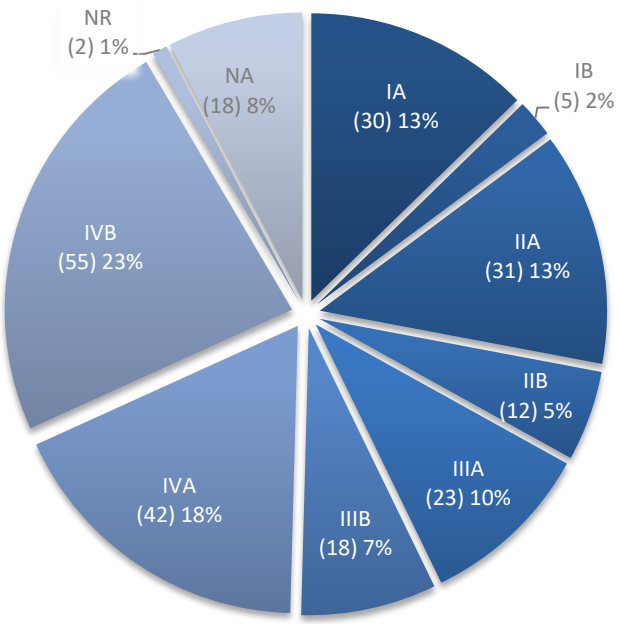


Figure 7: Follicular lymphoma by clinical stage

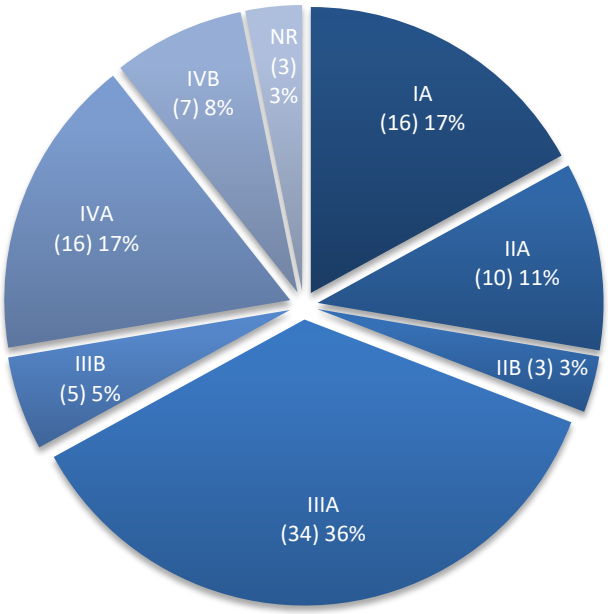


Figure 7 illustrates the distribution of follicular lymphoma by clinical stage at presentation. Localised disease may be suitable for involved field radiotherapy (stage I / some stage II). More advanced disease will be observed or treated with chemotherapy depending on symptoms. 3% of cases did not have clinical stage recorded, again showing an improvement on previous years (14% in 2019-20; 8% for 2018-19); suggesting that previous actions to improve the recording of stage for lymphoma patients have been successful.

Patient Profile

Figures 8 and 9 present the Scottish Index of Multiple Deprivation (SIMD) 20 quintiles for patients diagnosed with lymphoma; with 1 equating to the most deprived postcodes and 5 equating to the

least deprived. Figures 10 and 11 show the WHO Performance Status (PS) of patients diagnosed with lymphoma.

Figure 8: SIMD percentile for Hodgkin Lymphoma patients

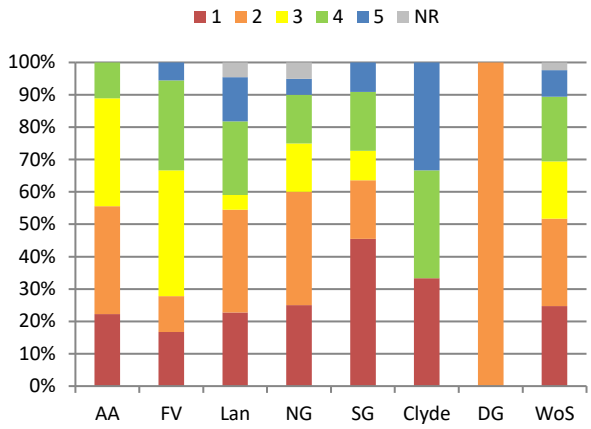


Figure 9: SIMD percentile for Non Hodgkin Lymphoma patients

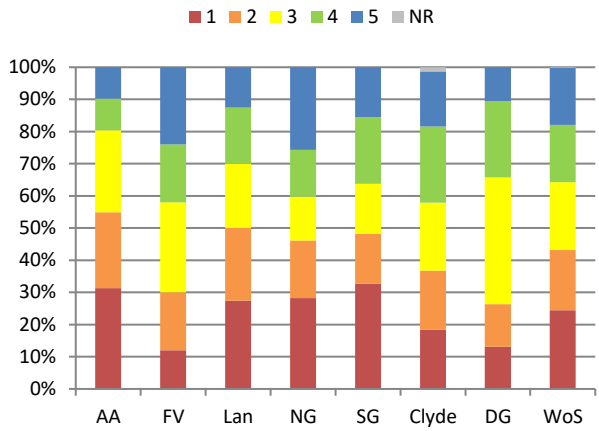


Figure 10: WHO PS for Hodgkin Lymphoma patients

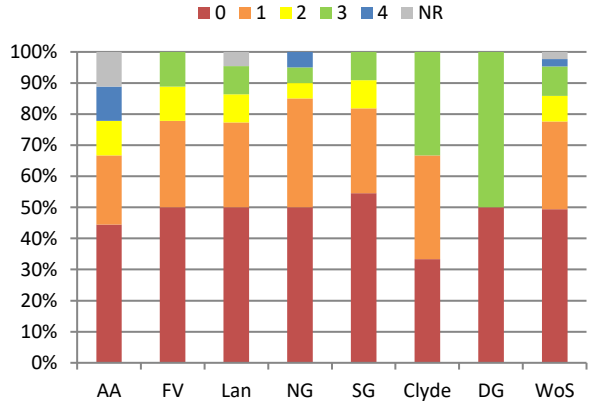
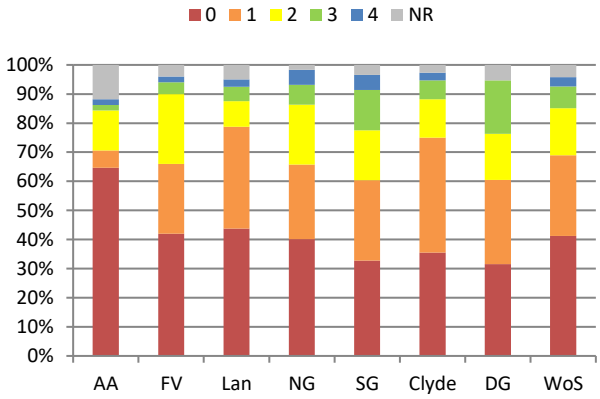


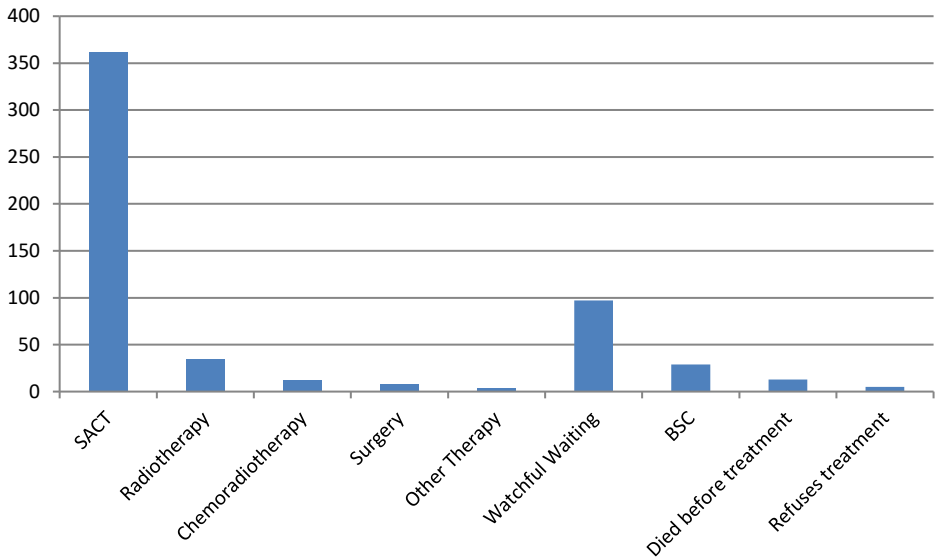
Figure 11: WHO PS for Non Hodgkin Lymphoma patients



Lymphoma Treatment

Figure 12 shows the type of first treatment that lymphoma patients receive across the WoSCAN Boards. The majority of patients received SACT as first treatment.

Figure 12: Type of first treatment for patient diagnosed with lymphoma in WoSCAN.



3. Methodology

Further detail on the audit and analysis methodology and data quality is available in the meta data within appendix 1.

4. Results and Action Required

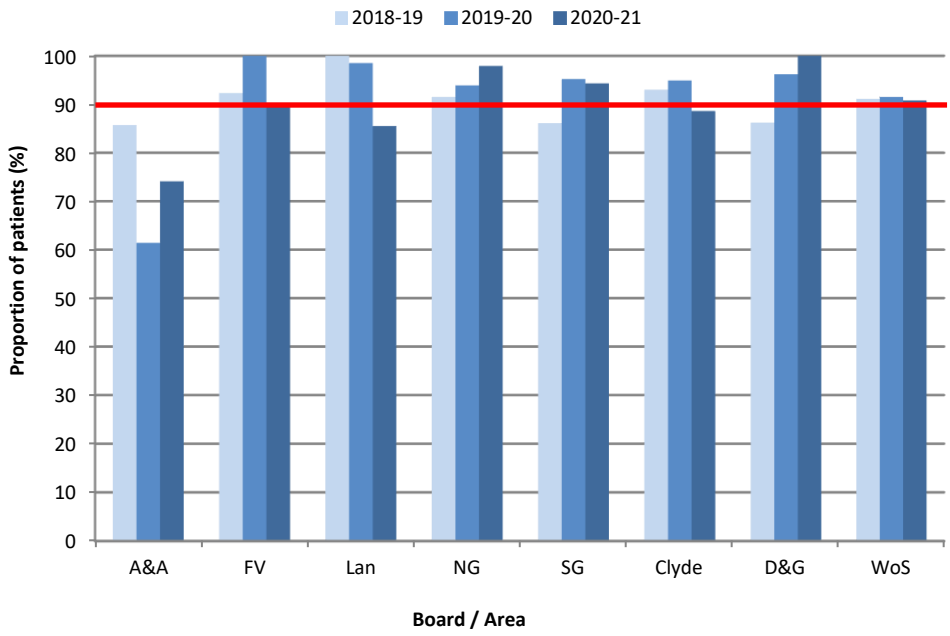
Results for each QPI are shown in detail in the following sections. Data are presented by location of diagnosis and illustrate NHS Board performance against each target and overall regional performance for each performance indicator.

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 (-). Any commentary provided by NHS Boards relating to the impacted indicators will however be included as a record of continuous improvement.

Specific regional and NHS Board actions have been identified to address issues highlighted through the data analysis.

QPI 1: Radiological Staging

Title:	Patients with lymphoma should be evaluated with appropriate imaging to detect the extent of disease, with timely reports available to guide treatment decision making
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 where the report is available within 3 weeks of radiology request.
Denominator:	All patients with lymphoma undergoing treatment with curative intent who undergo CT of chest, abdomen and pelvis or PET CT scanning prior to treatment.
Exclusions:	None
Target:	90%



Board / Area	Performance (%)	Numerator	Denominator
AA	74.2%	23	31
FV	90.0%	27	30
Lan	85.5%	53	62
NG	97.9%	92	94
SG	94.3%	33	35
Clyde	88.6%	39	44
D&G	100%	19	19
WoS	**90.8%**	**286**	**315**

Overall in the WoS, 90.8% of patients had their radiology results reported within 3 weeks of the radiology request, meeting the target for this specification. The target was not met in NHS Ayrshire & Arran, NHS Lanarkshire and within the Clyde sector of NHSGGC. NHS Ayrshire & Arran noted that results were due to COVID-19 related capacity and staffing pressures within the radiology department and also some prioritisation of unscheduled care. While radiology remain under pressure, the Board will undertake a detailed review to assess whether there are any other factors impacting on the timely reporting of imaging for lymphoma patients. Similarly NHS Lanarkshire highlighted that the delays in radiology reporting were due to pressures within the radiology department with shortages of radiologists and a backlog of patients awaiting urgent scans; although it was noted that 5 of the 9 patients not meeting the target in NHS Lanarkshire only missed the target by one day. Within the Clyde sector, delayed scans are being highlighted to cancer trackers and radiology reports proactively followed up to improve the timeliness of reporting.

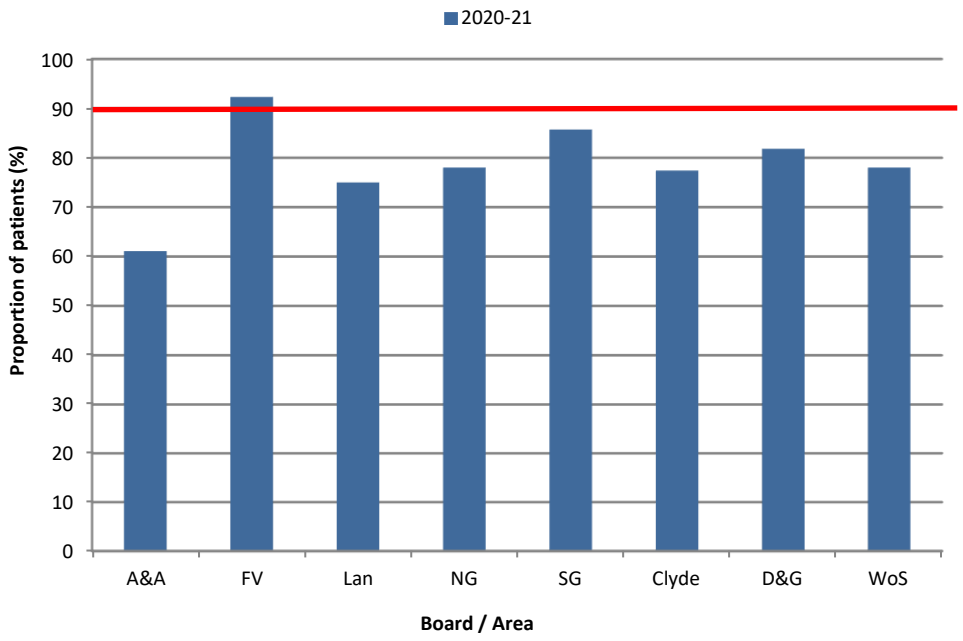
Action Required:

- NHS Ayrshire & Arran to report findings of review into the factors contributing to delays in the reporting of CT imaging for lymphoma patients prior to treatment.
- Clyde sector of NHSGGC to continue to follow up delays in radiology to improve timeliness of reporting of CT imaging for lymphoma patients.

QPI 2: Treatment response

CT scanning is recommended as the most appropriate method of response assessment following chemotherapy for DLBCL as treatment response may not be clinically obvious[1]. The target for this QPI has been set at 90% and the tolerance within the target is designed to account for the fact that some patients will have a good clinical response to chemotherapy and will therefore not require an end of treatment scan. It also accounts for those patients who may not complete chemotherapy due to factors of fitness.

QPI Title:	Patients with DLBCL who are treated with curative intent should have their response to treatment evaluated with appropriate imaging.
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 scan at end of chemotherapy treatment.
Denominator:	All patients with DLBCL who are undergoing chemotherapy treatment with curative intent.
Exclusions:	Patients that died during treatment.
Target:	90%



Board / Area	Performance (%)	Numerator	Denominator
AA	61.1%	11	18
FV	92.3%	12	13
Lan	75.0%	18	24
NG	78.0%	32	41
SG	85.7%	18	21
Clyde	77.4%	24	31
D&G	81.8%	9	11
WoS	**78.0%**	**124**	**159**

Of the 159 patients with DLBCL undergoing chemotherapy treatment with curative intent, 124 had their response to treatment evaluated with CT scan of the chest, abdomen and pelvis or PET CT scan within the timescale required within this QPI. Of the seven units, only NHS Forth Valley met the 90% target resulting in an overall performance of 78.0% across the WoS.

Changes to the way this QPI is measured have been implemented for the first time during 2020-21 and therefore no historic data are available to compare performance. The QPI now requires patients to have imaging within the period 0 to 42 days following chemotherapy or 0 to 91 days following radiotherapy which is more challenging than the previous definition requiring imaging to be prior to 91 days after treatment. Using the v3 QPI definition, performance against this QPI actually improved in 2020-21 compared with previous years (94% compared with 90% in 2019-20 and 88% in 2018-19).

Across all NHS Boards, the majority of patients not meeting this QPI had their treatment response evaluated with appropriate imaging, however the imaging was not always undertaken within the

timescales required by the revised QPI definition. Pressures on radiology departments across the region were identified as the main reason for these delays. NHS Ayrshire & Arran and NHS Lanarkshire highlighted the need for clinicians to ensure that radiology requests are appropriately prioritised. The Clyde sector of NHSGGC will aim to request end of treatment scans at the time of cycle 6 of the patient's treatment, with the follow up date specified on the radiology request while in NHS Lanarkshire patients awaiting end of treatment scans will be flagged to the treating consultant where appropriate.

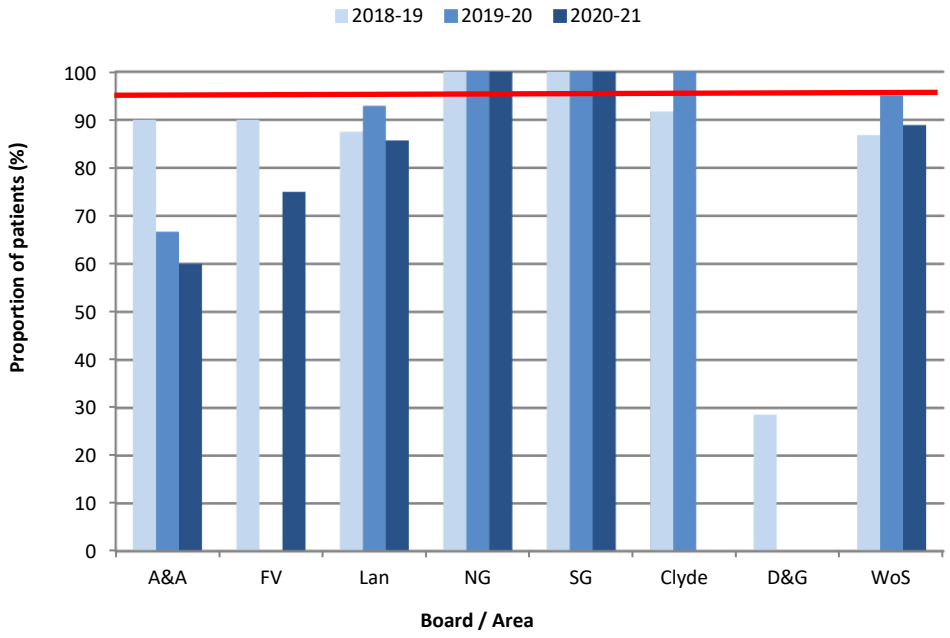
In addition there were some patients that had end of treatment imaging at a different time for clinically appropriate reasons, or did not require imaging as there was no measurable disease on the interim scan.

Pressures on radiology departments across the WoS, and more widely, have been exacerbated by the COVID-19 pandemic and radiology services have found it particularly challenging to prioritise the end of treatment imaging. It is perhaps unsurprising that this amended and more stringent QPI definition has not been met at this time. Performance against this measure will be kept under close review going forward and it is anticipated that improvements will be seen in subsequent years as pressures on radiology services ease following recovery from the COVID-19 pandemic, in addition to the measures being implemented locally.

QPI 3: 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[3]. The target for this QPI is 95% and the tolerance within this target is designed to account for situations where patients are not fit enough to undergo all investigations prior to commencing treatment.

QPI Title:	Patients with CHL should be evaluated with PET CT scanning to detect the extent of disease, with timely reports available to guide treatment decision making.
Numerator:	Patients with CHL undergoing treatment with curative intent who undergo PET CT prior to first treatment where the report is available within 3 weeks of radiology request.
Denominator:	All patients with CHL undergoing treatment with curative intent who undergo PET CT prior to first treatment.
Exclusions:	None
Target:	95%



Board / Area	Performance (%)	Numerator	Denominator
AA	60.0%	3	5
FV	75.0%	9	12
Lan	85.7%	12	14
NG	100%	18	18
SG	100%	10	10
Clyde	-	-	-
D&G	-	-	-
WoS	**88.9%**	**56**	**63**

Of the 63 patients with CHL undergoing PET CT scan prior to first treatment, 56 had the report available within 3 weeks of radiology request resulting in an overall WoS performance of 88.9%; below the 95% QPI target. Of the patients who did not meet the QPI, five were reported within 30 days; the other two patients, both from NHS Forth Valley, did not meet the QPI as the radiology request date was not recorded. It should be noted that all PET-CT scans within the region are undertaken within NHSGGC and, due to small numbers, any comparison of performance between NHS Boards should be made with caution, however there does appear to be a difference in performance between NHSGGC (where the WoS PET CT centre is located) and the other Boards, with NHSGGC patients more likely to have timely PET CT reporting. This may be the result of different pathways for referring patients for PET CT imaging between NHS Boards. In addition the installation of a replacement PET CT scanner resulted in reduced PET CT scan capacity for a period in early 2021 which may have impacted on performance against this QPI.

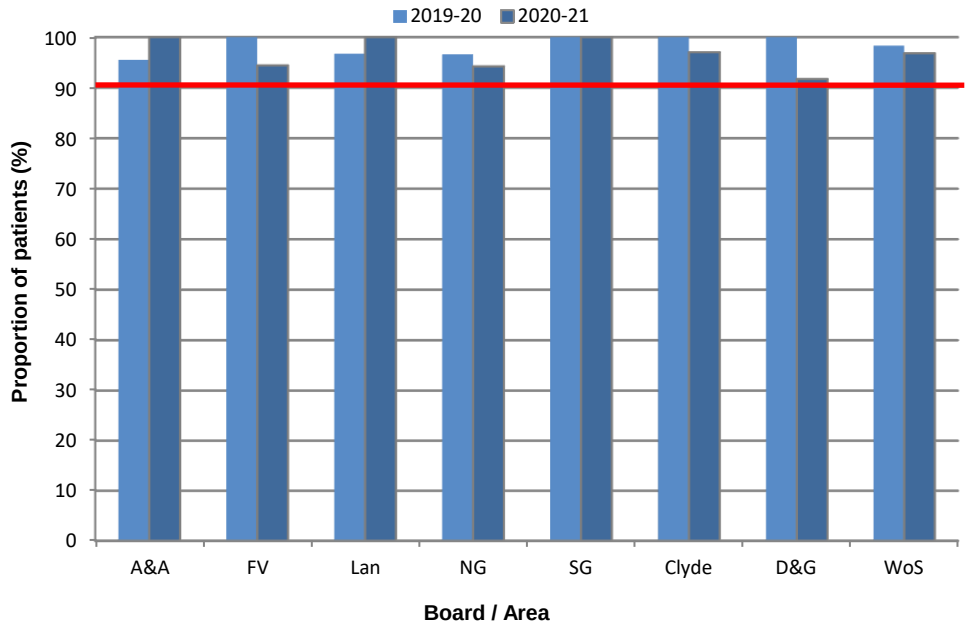
Action Required:

- MCN to review referral pathways for PET CT imaging from all WoS Boards to assess whether improvements in how patients are referred can result in more timely PET CT imaging and reporting for both staging (QPI 3) and assessment of response to treatment (QPI 12).

QPI 4: Cytogenetic Testing

Classical cytogenetic or Fluorescence in Situ Hybridization (FISH) analysis is essential for the diagnosis of Burkitt lymphoma. Rearrangements of MYC 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[1].

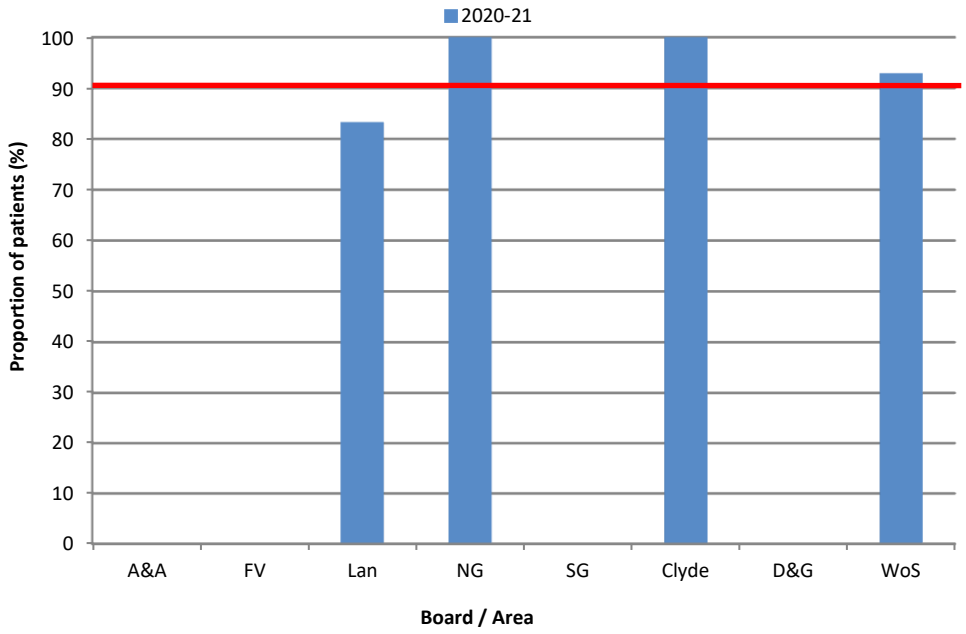
QPI Title:	Patients with Burkitt lymphoma and DLBCL should have MYC testing (and BCL2/BCL6 testing where appropriate) (i)
Numerator:	Number of patients with Burkitt Lymphoma or DLBCL undergoing chemotherapy treatment with curative intent who have MYC testing.
Denominator:	All patients with Burkitt lymphoma or DLBCL undergoing chemotherapy treatment with curative intent.
Exclusions:	No exclusions
Target:	90%



Board / Area	Performance (%)	Numerator	Denominator
AA	100%	18	18
FV	94.4%	17	18
Lan	100%	31	31
NG	94.2%	49	52
SG	100%	22	22
Clyde	97.0%	32	33
D&G	91.7%	11	12
WoS	**96.8%**	**180**	**186**

96.8% of patients diagnosed with Burkitt lymphoma or DLBCL in WoS and undergoing chemotherapy treatment with curative intent had MYC testing; with all NHS Boards meeting the 90% target.

QPI Title:	Patients with Burkitt lymphoma and DLBCL should have MYC testing (and BCL2/BCL6 testing where appropriate) (ii)
Numerator:	Number of patients with DLBCL MYC rearrangement identified on FISH analysis undergoing chemotherapy treatment with curative intent who have BCL2/BCL6 testing with results reported within 3 weeks of commencing treatment.
Denominator:	All patients with DLBCL MYC rearrangement identified on FISH analysis undergoing chemotherapy treatment with curative intent.
Exclusions:	No exclusions
Target:	90%



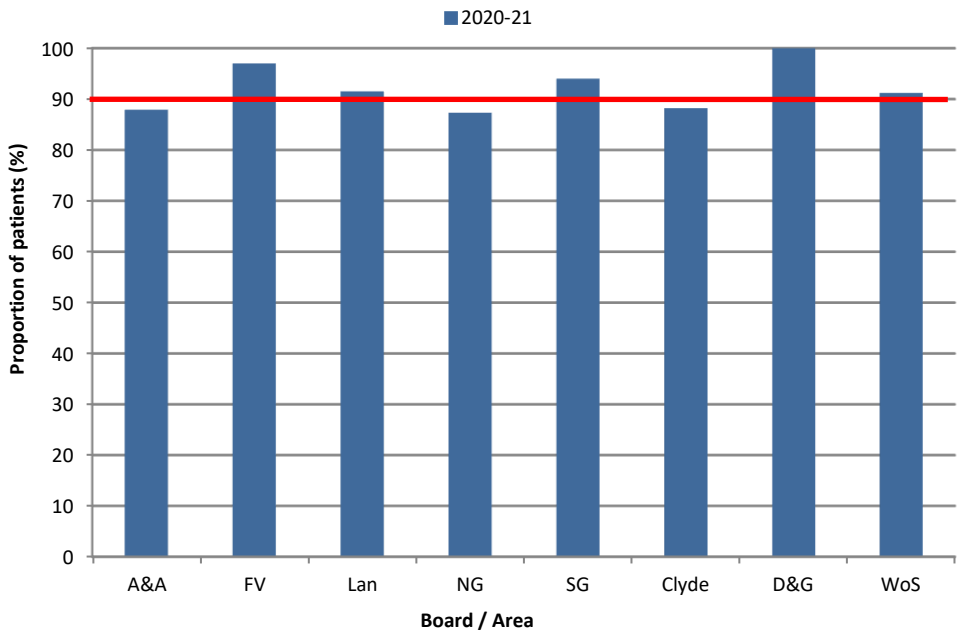
Board / Area	Performance (%)	Numerator	Denominator
AA	-	-	-
FV	*	0	0
Lan	83.3%	5	6
NG	100%	6	6
SG	-	-	-
Clyde	100%	4	4
D&G	-	-	-
WoS	**92.0%**	**23**	**25**

This is the first year of reporting of this new specification and therefore there is no historic data with which to compare the 2020-21 performance. 92.0% of DLBCL patients with a MYC rearrangement identified on FISH analysis that had chemotherapy with curative intent had BCL2/BCL6 testing with results reported within 3 weeks of commencing treatment, meeting the target of 90%. Within NHS Lanarkshire, for one patient the local pathology report stated that a specimen had been sent to NHSGGC for further analysis but no specimen was received in NHSGGC, possibly due to human error.

QPI 5: Lymphoma MDT

Effective MDT working is considered integral to provision of high quality cancer care, facilitating a cohesive treatment-planning function and ensuring treatment and care provision is individualised to patient needs. National guidance states that all patients should have a treatment plan discussed at a MDT meeting[1].

QPI Title:	Patients with lymphoma should be discussed by a MDT following diagnosis.
Numerator:	Number of patients with lymphoma discussed at the MDT within 8 weeks of the pathology report being issued.
Denominator:	All patients with lymphoma.
Exclusions:	Patients who died before first treatment. Patients with primary cutaneous lymphoma.
Target:	90%



Board / Area	Performance (%)	Numerator	Denominator
AA	87.9%	51	58
FV	97.0%	65	67
Lan	91.5%	86	94
NG	87.3%	117	134
SG	94.0%	63	67
Clyde	88.2%	67	76
D&G	100%	39	39
WoS	**91.2%**	**488**	**535**

This QPI has been amended to measure from the time when the pathology report was issued rather than when the biopsy was taken; this is the first year that the revised definition has been reported and as such there are no comparable data from previous years.

The 90% target for MDT discussion was achieved in the WoS with 91.2% of patients being discussed at the MDT within 8 weeks of the pathology report being issued. However, three of the seven units did not meet the target.

	% Patients discussed at MDT (no time constraint)			% Patient undergoing active first treatment discussed within 8 weeks of pathology reporting			% Patient undergoing watchful waiting or best supportive care as first treatment discussed within 8 weeks of pathology reporting		
Board / Area	**Performance (%)**	**Numerator**	**Denominator**	**Performance (%)**	**Numerator**	**Denominator**	**Performance (%)**	**Numerator**	**Denominator**
AA	**98.3%**	57	58	**97.7%**	42	43	**60.0%**	9	15
FV	**98.5%**	66	67	**98.0%**	50	51	**93.8%**	15	16
Lan	**96.8%**	91	94	**92.1%**	70	76	**88.9%**	16	18
NG	**97.8%**	131	134	**93.6%**	103	110	**58.3%**	14	24
SG	**97.0%**	65	67	**100%**	42	42	**84.0%**	21	25
Clyde	**93.4%**	71	76	**94.8%**	55	58	**66.7%**	12	18
D&G	**100%**	39	39	**100%**	30	30	**100%**	9	9
WoS	**97.2%**	**520**	**535**	**95.6%**	**392**	**410**	**76.8%**	**96**	**125**

Additional information is provided above which shows the proportion of patients being discussed at MDT, irrespective of timing, and also comparing performance against this QPI for patients receiving active treatment to those on best supportive care and watchful waiting. Although the vast majority of patients were discussed at MDT (97.2%), this was not always within the 8 week timeframe. Small numbers of patients did not meet the QPI as they did not have a pathology date recorded (4 patients) or were not discussed at MDT (14 patients). The majority of the patients not meeting the QPI were receiving supportive care or watchful waiting and therefore the timeframe for MDT discussion was clinically appropriate. The QPI target was comfortably met for patients having active treatment for all NHS Boards.

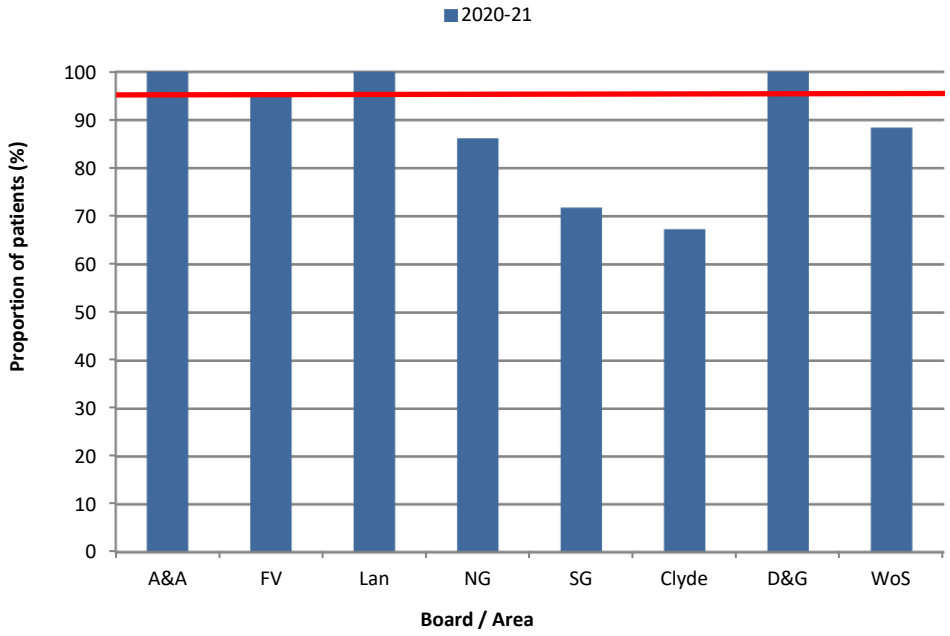
Patients not being discussed at the MDT within 8 weeks of the pathology report being issued were reviewed. NHS Ayrshire & Arran, NHSGGC and NHS Lanarkshire noting that a number of these patients were diagnosed outwith the haematology services, causing delays in the patient pathway.

Since the time of reporting, NHS Lanarkshire has implemented a process to flag all new cases diagnosed with lymphoma to the cancer tracker to ensure they are discussed at the local MDT within 8 weeks of being diagnosed while North Glasgow has a new system in place where the MDT co-ordinator sends reminders to clinicians whose patients have not been discussed at MDT. Similarly in the Clyde sector of NHSGGC, the MDT co-ordinator will send a weekly list of patients with new diagnosis of lymphoma not yet discussed at MDT at 4 and 6 weeks from pathology reporting to ensure all are discussed within 8 weeks. These actions are expected to result in improved performance in future years.

QPI 11: Hepatitis and HIV Status

Clinical assessment and virological testing for Human Immunodeficiency Virus (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[1].

QPI Title:	Virological testing for HIV, hepatitis B and C should be undertaken for patients undergoing SACT.
Numerator:	Number of patients with lymphoma undergoing SACT who have hepatitis B [core antibody (anti-HBcAB) and surface antigen (HB-sAG)], C and HIV status checked prior to treatment.
Denominator:	All patients with lymphoma undergoing SACT.
Exclusions:	No exclusions.
Target:	95%



Board / Area	Performance (%)	Numerator	Denominator
AA	100%	39	39
FV	95.5%	42	44
Lan	100%	69	69
NG	86.2%	81	94
SG	71.8%	28	39
Clyde	67.3%	33	49
D&G	100%	29	29
WoS	**88.4%**	**321**	**363**

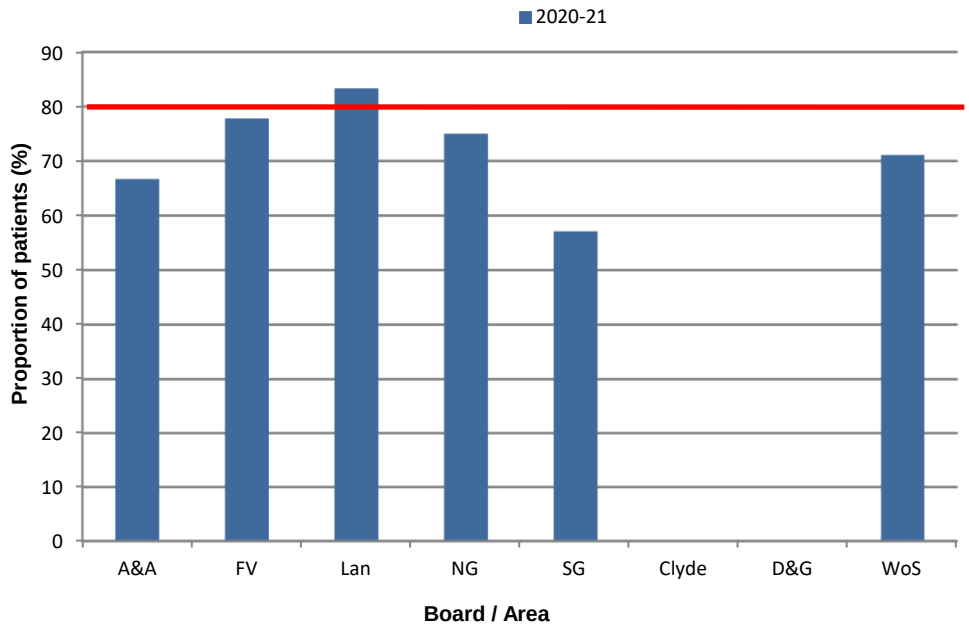
In the WoS, 88.4% of patients with lymphoma undergoing SACT had hepatitis B, C and HIV checked prior to treatment; four of the seven units achieved the 95% target. This QPI has been amended and now specifies that testing for both hepatitis B core antibody (anti-HBcAB) and surface antigen (HB-sAG) is required, resulting in a decrease in performance across all three NHSGGC sectors compared with previous years.

Within NHSGGC, all but one patient not meeting the QPI had surface antigen testing for hepatitis B but not core antibody testing. The new requirement for both surface antigen and core antibody testing was highlighted part of the way through the reporting period; as a result the change in testing requirements has been highlighted to clinical staff via the MDTs and NHSGGC now use a haematological malignancy diagnosis order set for all new lymphoma diagnoses; which includes both surface antigen and core antibody testing for hepatitis B. These actions are anticipated to result in improved performance against this measure in future years.

QPI 12: Treatment Response in Hodgkin Lymphoma

PET CT demonstrates a higher level of accuracy compared with contrast CT scan and is therefore the most appropriate method of response assessment following chemotherapy in lymphoma patients. Interim PET CT is recommended for patients with advanced Hodgkin Lymphoma undergoing treatment with ABVD chemotherapy or escalated BEACOPP/BEACOPDac chemotherapy. It is important that the PET CT is reported in a timely manner to ensure there is no treatment delay and therapy is changed appropriately if response is suboptimal[1].

QPI Title:	Patients with advanced Hodgkin Lymphoma who receive treatment with ABVD, BEACOPP or BEACOPDac chemotherapy should have early assessment of response by appropriate imaging.
Specification (i)	
Numerator:	Number of patients with advanced Hodgkin Lymphoma (stage 2B and above) who receive ABVD, BEACOPP or BEACOPDac chemotherapy treatment that undergo PET CT scan after 2 cycles of chemotherapy.
Denominator:	All patients with advanced Hodgkin Lymphoma (stage 2B and above) who receive ABVD, BEACOPP or BEACOPDac chemotherapy treatment.
Exclusions:	Patients who die during treatment.
Target:	80%



Board / Area	Performance (%)	Numerator	Denominator
AA	66.7%	4	6
FV	77.8%	7	9
Lan	83.3%	5	6
NG	75.0%	6	8
SG	57.1%	4	7
Clyde	-	-	-
D&G	-	-	-
WoS	**71.1%**	**27**	**38**

71.1% of patients with advanced Hodgkin Lymphoma who receive ABVD, BEACOPP or BEACOPDac chemotherapy treatment had a PET CT scan after 2 cycles of chemotherapy, below the target of 80%; to meet this QPI patients are required to have an interim PET CT scan within the week prior to commencing their 3rd cycle of chemotherapy. Due to changes in the definition of this QPI it is not possible to compare performance in 2020-21 with that from previous years. Comparison of performance between NHS Boards is difficult due to the relatively small numbers of patients included within this QPI measure. Review of patients not meeting this QPI indicates that all but one patient did have an interim PET CT scan, this one patient wished to stop treatment after the second cycle of chemotherapy. Of the other patients, 2 had an interim scan after their third cycle of chemotherapy had commenced (for clinical reasons and patient related reasons). The other eight patients commenced their 3rd cycle of chemotherapy more than 7 days after imaging for a variety of

reasons such as patient delays in receiving chemotherapy (including patients not attending chemotherapy appointments) and delays in reporting of PET CT resulting in delays in chemotherapy. In addition, the installation of a replacement PET CT scanner resulted in reduced PET CT scan capacity for a period in early 2021 which may have impacted on performance against this QPI.

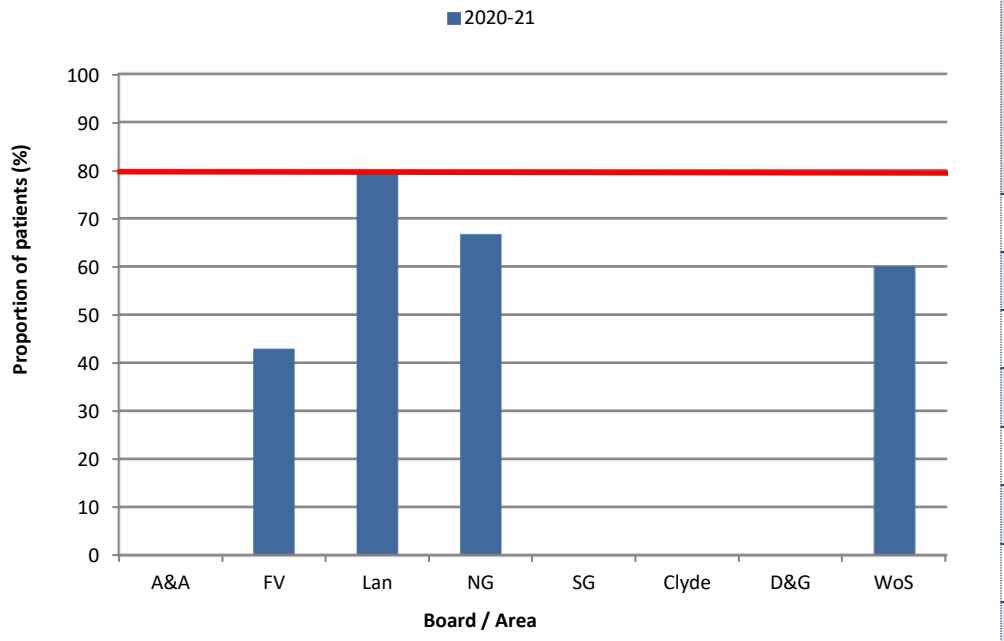
In summary, there is a range of justifiable clinical and patient related issues that have resulted in some patients not having their PET CT imaging within the week prior to their third cycle of chemotherapy; this may have been exacerbated in some cases by delays in reporting of PET CT scans. However, WoSCAN has concerns that the revised definition of this QPI is now unintentionally measuring timely PET CT reporting (as chemotherapy is delayed until the PET result is available). This makes results for the QPI difficult to interpret and WoSCAN suggests that the QPI definition is reviewed.

Action Required:

- MCN to review referral pathways for PET CT imaging from all WoS Boards to assess whether improvements in how patients are referred can result in more timely PET CT imaging and reporting for both staging (QPI 3) and assessment of response to treatment (QPI 12).

- MCN to raise measurability concerns regarding QPI 12(i) at the Formal Review of Lymphoma QPIs scheduled for 2023.

QPI Title:	Patients with advanced Hodgkin Lymphoma who receive treatment with ABVD, BEACOPP or BEACOPDac chemotherapy should have early assessment of response by appropriate imaging.
Specification (ii)	
Numerator:	Number of patients with advanced Hodgkin Lymphoma (stage 2B and above) who receive ABVD, BEACOPP or BEACOPDac chemotherapy treatment that undergo PET CT scan after 2 cycles of chemotherapy where the report is available within 3 working days.
Denominator:	All patients with advanced Hodgkin Lymphoma (stage 2B and above) who receive ABVD, BEACOPP or BEACOPDac chemotherapy treatment that undergo PET CT scan after 2 cycles of chemotherapy.
Exclusions:	No exclusions.
Target:	80%

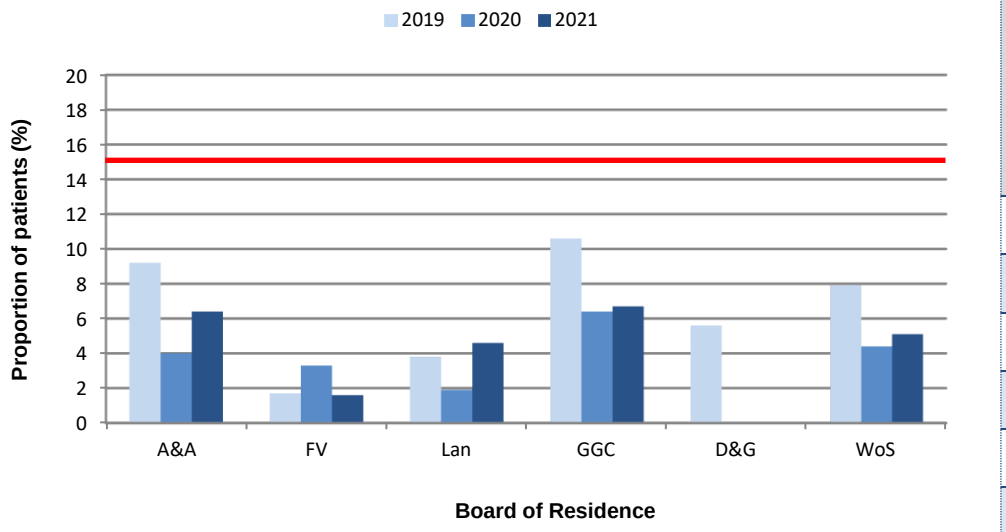


Board / Area	Performance (%)	Numerator	Denominator
AA	-	-	-
FV	42.9%	3	7
Lan	80.0%	4	5
NG	66.7%	4	6
SG	-	-	-
Clyde	*	0	0
D&G	*	0	0
WoS	**60.0%**	**15**	**25**

Of the 25 patients with advanced Hodgkin Lymphoma who receive ABVD, BEACOPP or BEACOPDac chemotherapy treatment that had a PET CT scan after 2 cycles of chemotherapy, 60% had their PET CT scan reported within 3 working days; below the target of 80%. Of the 10 patients that did not meet the QPI, 5 had their PET CT reported within a week of having their scan and all had it reported within 12 days. Due to changes in the definition of this QPI, it is not possible to compare performance in 2020-21 with that from previous years. Please note that all PET CT imaging within WoSCAN is undertaken and reported within NHSGGC. As with QPIs 1, 2 and 3, results reflect the pressures on radiology services at this time. Performance against this measure will be kept under close review going forward and it is anticipated that improvements will be seen in subsequent years as pressures on radiology services ease following recovery from the COVID-19 pandemic.

QPI 14: Clinical Trial and Research Study Access

QPI Title:	All patients should be considered for participation in available clinical trials / research studies wherever eligible.
Numerator:	Number of patients diagnosed with lymphoma consented for a clinical trial / research study.
Denominator:	All patients with diagnosed with lymphoma.
Exclusions:	No exclusions.
Target:	15%



Board / Area	Performance (%)	Numerator	Denominator
AA	6.4%	5	78
FV	1.6%	1	63
Lan	4.6%	5	109
GGC	6.7%	19	285
D&G	0%	0	39
WoS	**5.2%**	**30**	**574**

This QPI reports all patients living in the WoS with a diagnosis of lymphoma who were consented for a clinical trial or research study in 2021 and is not restricted to patients diagnosed within the audit period. The denominator used in the measurement of this QPI is the 5 year average of Public Health Scotland incidence data for all lymphomas in WoS (2016 -2020). In 2021, 5.2% of patients were consented for clinical trials, well below the QPI target of 15% but an improvement on performance in 2020.

There are a number of clinical trials (interventional and non-interventional) open in the WoS for lymphoma, however performance against this QPI has fallen in recent years. It should be noted that lymphoma is a very heterogeneous disease and most of the clinical trials are subtype specific.

Performance against this QPI was significantly affected by the COVID-19 pandemic in 2020 and the resultant impact on clinical trial availability and resource in 2021. Individual trial sponsors advised that recruitment should be suspended due to the COVID-19 pandemic and all trial activity was stopped on the 13th March 2020. As the year progressed, Principal Investigators of the trials worked with the senior trials management group to undertake a risk assessment for each individual trial and get updated approval before being able to re-open to recruitment. Some suspended clinical trials were re-opened in Q3 2020. While clinical trial availability and recruitment increased throughout 2021, the above factors contributed to the reduced recruitment rates when compared to pre-pandemic levels. It should be noted that several new lymphoma clinical trials opened in 2021 (including a large phase 3, 1st line study) and as such recruitment is anticipated to improve throughout 2022.

The Haemato-oncology MCN Clinical Trials Subgroup continues to strengthen and support clinical trial activity across the region. Disease-specific clinical trials maps of open clinical trials in WoS are updated regularly and the group engages in regional discussion to review patient recruitment,

highlight gaps in the trials portfolio and identify areas of priority and major forthcoming trials to facilitate early set-up of studies.

List of clinical trials and the number of patients with lymphoma consented/entered into each clinical trial in 2021. (N.B. Figures below are restricted to patients resident within WoS).

Project Title	No. Patients Consented	No. Patients Recruited
3185/0004 Follicular Lymphoma Nordic Nanovector AS	0	0
ANIMATE	2	2
ASTX660 in Subjects with Advanced Solid Tumors and Lymphomas	1	0
AVENuE	2	2
Cardiac CARE	4	4
ENRICH Ibrutinib for untreated mantle cell lymphoma	2	2
MaPLe: Molecular profiling for lymphoma	1	1
MO40598 POLARGO Study of Polatuzumab Vedotin in Diffuse Large B-cell Lymphoma	1	1
MoTD	2	0
NCRN - 3245 - Betalutin radioimmunotherapy for treatment of relapsed CD37+ NHL	0	0
PETReA	7	7
Phase I/II study - AUTO4 in patients with T cell non-Hodgkin Lymphoma	2	2
Phase I/IIa study to evaluate CCS1477 in haem. malignancies v1.0	1	1
Phase 2 Study of Intermittent Dosing Schedules of Duvelisib in iNHL	2	2
PORT	2	1
TRuST	0	0
STELLAR	1	1
Study of Cobomarsen (MRG-106) vs Active Comparator in Mycosis Fungoides	0	0
Treatment with CD19/CD22 CAR redirected T cells for DLBCL-ALEXANDER	**0**	**0**
Total	**30**	**26**

5. Next Steps

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 summary of actions for each NHS Board has been included within the Action Plan templates in Appendix 3.

Acknowledgement

This report has been prepared using clinical audit data provided by the following NHS Boards in the WoSCAN area:

NHS Ayrshire & Arran
NHS Forth Valley
NHS Greater Glasgow and Clyde
NHS Lanarkshire
NHS Dumfries & Galloway

We would like to thank all members and active participants in the cancer network for their continued support of the MCN, and the many hospitals that are committed to making the audit succeed. We also acknowledge the efforts of the clinical effectiveness staff, nurses, and other service users for their work in ensuring the data are available to enable analysis to take place each year. Without their considerable efforts this level of progress would not be possible.

Abbreviations

CAP	Chest, Abdominal, Pelvis
CHL	Classical Hodgkin Lymphoma
CNS	Central Nervous System
CSO	Chief Scientist Office
CT	Computed Tomography
DLBCL	Diffuse Large B Cell Lymphoma
eCASE	Electronic Cancer Audit Support Environment
HIS	Healthcare Improvement Scotland
HIV	Human Immunodeficiency Virus
HL	Hodgkin Lymphoma
ISD	Information Services Division
MCN	Managed Clinical Network
MDT	Multidisciplinary Team
NCQSG	National Cancer Quality Steering Group
NCRI	National Cancer Research Institute
NHL	Non Hodgkin Lymphoma
NHSGGC	NHS Greater Glasgow and Clyde
NOS	Not Otherwise Specified
PET	Positron Emission Tomography
QPI	Quality Performance Indicator
RCAG	Regional Cancer Advisory Group
SCRN	Scottish Cancer Research Network
WoS	West of Scotland
WoSCAN	West of Scotland Cancer Network

References

1. Lymphoma Quality Performance Indicators v4.1, June 2021. http://www.healthcareimprovementscotland.org/our_work/cancer_care_improvement/cancer_qpis/quality_performance_indicators.aspx

2. Data files - Cancer incidence in Scotland - to December 2020 - Cancer incidence in Scotland - Publications - Public Health Scotland

3. Cancer Survival Statistics – People diagnosed with cancer between 2013 and 2017. Public Health Scotland, January 2021. https://www.publichealthscotland.scot/publications/cancer-survival-statistics/cancer-survival-statistics-people-diagnosed-with-cancer-between-2013-and-2017/

Appendix 1: Meta Data

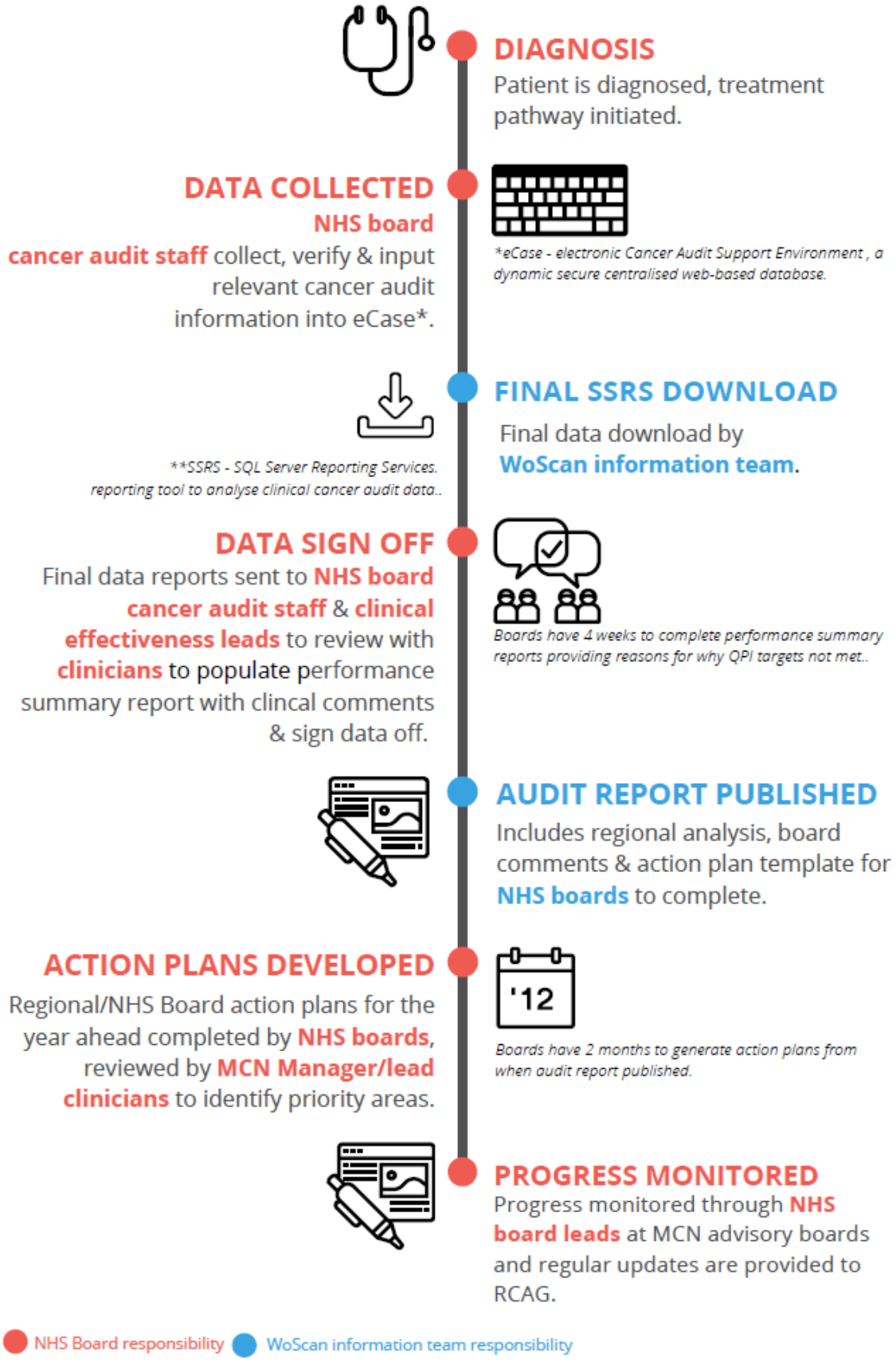
<table>
<tr><td>Report Title</td><td>Cancer Audit Report: Lymphoma Quality Performance Indicators</td></tr>
<tr><td>Time Period</td><td>Patients diagnosed between 01 October 2020 to 30 September 2021</td></tr>
<tr><td>Data Source</td><td>Electronic Cancer Audit Support Environment (eCASE). A secure centralised web-based database which holds cancer audit information in Scotland.</td></tr>
<tr><td>Data extraction date</td><td>2200 hrs on 25 May 2022</td></tr>
<tr><td>Methodology</td><td>Analysis was performed centrally for the region by the WoSCAN Information Team. The timescales agreed took into account the patient pathway to ensure that a complete treatment record was available for the majority of patients.

Initial results were provided to Boards to check for inaccuracies, inconsistencies or obvious gaps and a subsequent download taken upon which final analysis was carried out.

The final data analysis was disseminated for NHS Board verification in line with the regional audit governance process to ensure that the data was an accurate representation of service in each area. Please see info graphic in appendix 2 for a more detailed look at the reporting process.</td></tr>
<tr><td>Data Quality</td><td>Audit data completeness can be assessed by estimating the proportion of expected patients that have been identified through audit compared to the number reported by the National Cancer registry (provided by ISD, National Services Division), this is known as case ascertainment. Figures should only be used as a guide as it is not possible to compare the same exact cohort from each data source. Note that a 5 year average is taken for cancer registry cases to take account of annual fluctuations in incidence within NHS Boards.

<table>
<tr><th>Health Board of diagnosis</th><th>2020-21 Audit Data</th><th>Cases from Cancer registry (2016-2020)</th><th>Case Ascertainment</th></tr>
<tr><td>Ayrshire & Arran</td><td>60</td><td>78</td><td>76.9%</td></tr>
<tr><td>Forth Valley</td><td>69</td><td>63</td><td>109.5%</td></tr>
<tr><td>GGC</td><td>290</td><td>285</td><td>101.8%</td></tr>
<tr><td>Lanarkshire</td><td>106</td><td>109</td><td>97.2%</td></tr>
<tr><td>Dumfries & Galloway</td><td>41</td><td>39</td><td>105.1%</td></tr>
<tr><td>WoS Total</td><td>566</td><td>574</td><td>98.6%</td></tr>
</table>
</td></tr>
</table>

Appendix 2: WoSCAN QPI Reporting Process



Appendix 3: NHS Board Action Plans

A summary of actions for each NHS Board has been included within the Action Plan templates in Appendix 3. Completed Action Plans should be returned to WoSCAN within two months of publication of this report.

Lymphoma Action / Improvement Plan

Health Board:	NHS Ayrshire & Arran
Action Plan Lead:	
Date:	

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

No	**Action Required**	**Health Board Action Taken**	**Timescales**		**Lead**	**Progress/Action Status**	**Status (see key)**
			Start	**End**			
	Action	*Detail specific actions that will be taken by the NHS Board.*	*Insert date*	*Insert date*	*Insert name of responsible lead for each specific action.*	*Provide detail of action in progress, change in practices, problems encountered or reasons why no action taken.*	*Insert No. from key above*
1	NHS Ayrshire & Arran to report findings of review into the factors contributing to delays in the reporting of CT imaging for lymphoma patients prior to treatment.						

Lymphoma Action / Improvement Plan

Health Board:	NHSGGC
Action Plan Lead:	
Date:	

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

No	**Action Required**	**Health Board Action Taken**	**Timescales**		**Lead**	**Progress/Action Status**	**Status (see key)**
			Start	**End**			
	Action	*Detail specific actions that will be taken by the NHS Board.*	*Insert date*	*Insert date*	*Insert name of responsible lead for each specific action.*	*Provide detail of action in progress, change in practices, problems encountered or reasons why no action taken.*	*Insert No. from key above*
1	Clyde sector of NHSGGC to continue to follow up delays in radiology to improve timeliness of reporting of CT and PET CT imaging for lymphoma patients.						

Lymphoma Action / Improvement Plan

Health Board:	Haematology MCN
Action Plan Lead:	
Date:	

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

No	**Action Required**	**Health Board Action Taken**	**Timescales**		**Lead**	**Progress/Action Status**	**Status (see key)**
			Start	**End**			
	Action	*Detail specific actions that will be taken by the NHS Board.*	*Insert date*	*Insert date*	*Insert name of responsible lead for each specific action.*	*Provide detail of action in progress, change in practices, problems encountered or reasons why no action taken.*	*Insert No. from key above*
3 & 12	MCN to review referral pathways for PET CT imaging from all WoS Boards to assess whether improvements in how patients are referred can result in more timely PET CT imaging and reporting for both staging (QPI 3) and assessment of response to treatment (QPI 12).						
12i	MCN to raise measurability concerns regarding QPI 12(i) at the Formal Review of Lymphoma QPIs scheduled for 2023.						