

West of Scotland Cancer Network

**Urological Cancer
Managed Clinical Network**



Audit Report

Testicular Cancer Quality Performance Indicators

Clinical Audit Data: 01 October 2022 to 30 September 2023

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Testicular Cancer Data Overview

Patients diagnosed between October 2022 - September 2023

Number of WoS cases diagnosed:

89

Number of new cases in Scotland (2021)*:

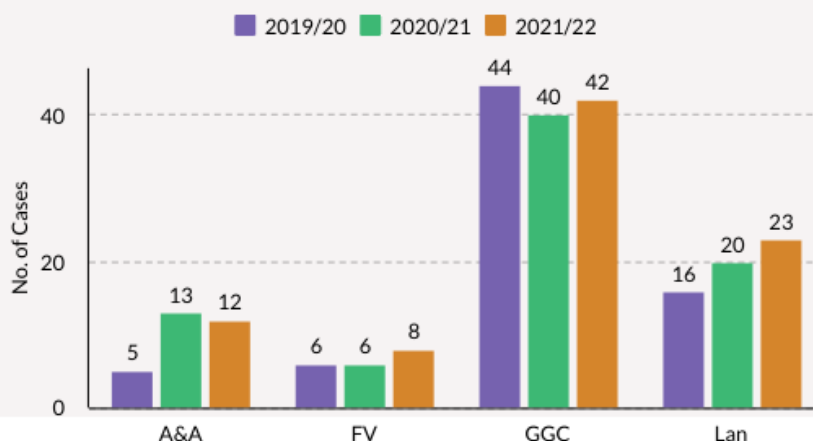
166

*Source: PHS

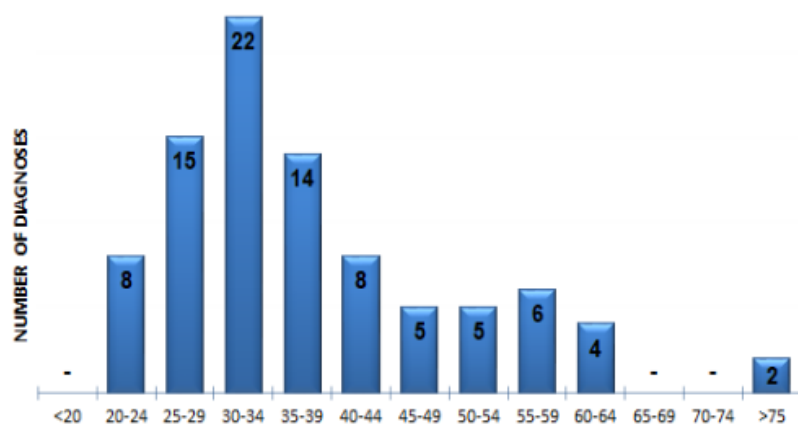
Case ascertainment:

100%

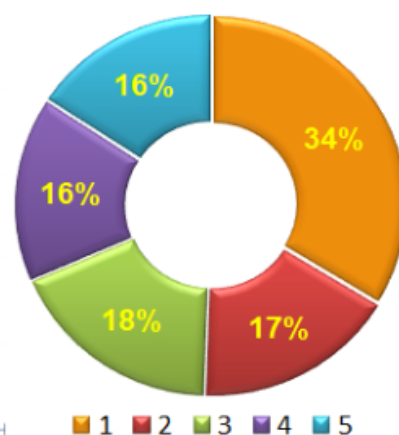
Number of patients by Board



5 year Age distribution

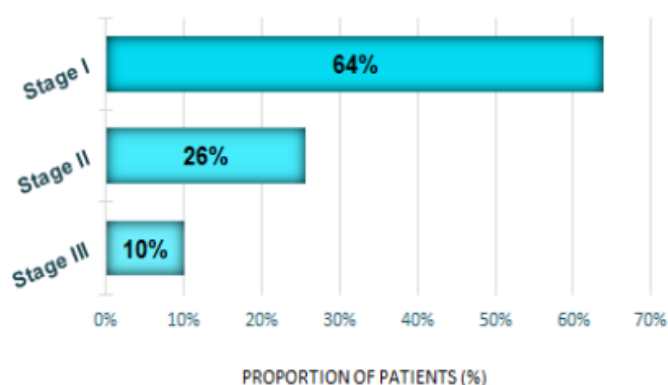


SIMD

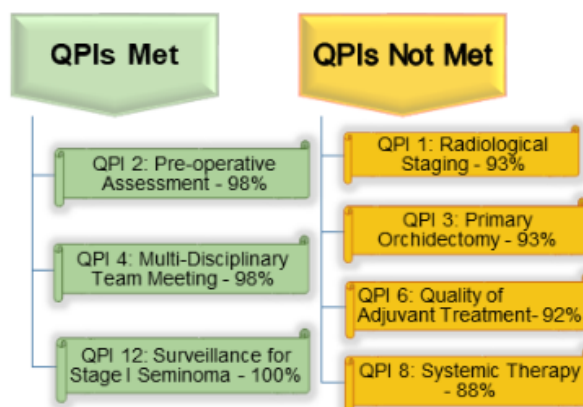


*1=most deprived, 5=least deprived

Stage



QPI Overview



Executive Summary

This report contains an assessment of the performance of West of Scotland (WoS) urological cancer services using clinical audit data relating to patients diagnosed with testicular cancer in the twelve months between 01 October 2022 and 30 September 2023.

Cancer audit has underpinned much of the regional development and service improvement work of the MCN and the regular reporting of activity and performance have been fundamental in assuring the quality of care delivered across the region. Additionally the measurement of performance against QPIs has helped to drive continuous improvement and ensure equity of care for patients across Scotland.

In the ninth year of Testicular Cancer QPI analysis, Boards demonstrated variable but generally good performance, showcasing the high standard of care provided for testicular cancer patients across the West of Scotland. Over the past three years, there has been progress in the number of patients undergoing primary orchidectomy, radiological staging, and systemic therapy. Encouragingly, regional targets for pre-operative assessment (98%), MDT discussion (98%), and surveillance for stage I seminoma (100%) were met, indicating effective provision of high-quality care and treatment for testicular cancer patients by the Boards.

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 may have influenced patient management. QPI 4: MDT discussion and QPI 12: Surveillance for Stage I Seminoma were met by all Boards and therefore detailed graphs have not been included for these QPIs in the main report.

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

Actions required:

QPI 1: Radiological Staging

- NHS Forth Valley and NHS Lanarkshire to review processes for booking CT scans to ensure that CT requests are made at the point of booking the orchidectomy.

QPI 8: Systemic Therapy

- All peripheral Boards to refer the testicular patients directly to NHSGGC MDT.

A summary of actions has been included within the Action Plan Report accompanying this report and templates have been provided to Boards.

Completed Action Plans should be returned to WoSCAN in a timely manner to allow the plans to be reviewed at the Regional Cancer Oversight Group.

Testicular Cancer QPI Performance Summary Report

Testicular MCN					
Year	AA	FV	GGC	LAN	WoSCAN
2022 - 23	5	12	54	18	89
2021 - 22	12	8	42	23	85
2020 - 21	13	6	40	20	79

Colour Key	
	Above QPI target
	Below QPI target

A dash (-) denotes restricted data where the denominator is less than 5. An asterisk (*) denotes data where the denominator is zero.

Quality Performance Indicator (QPI)	Performance by NHS Board of diagnosis						
	QPI target	Year	AA	FV	GGC	LAN	WoSCAN
QPI 1: Radiological Staging - Patients with testicular cancer should be evaluated with appropriate imaging to detect the extent of disease and guide treatment decision making.	95%	2022 - 23	100% (5/5)	75% (9/12)	98% (48/49)	88% (15/17)	93% (77/83)
		2021 - 22	92%	88%	90%	100%	92%
		2020 - 21	75.0%	80.0%	94.6%	85.0%	87.8%
QPI 2: Pre-operative Assessment - Patients with testicular cancer should have pre-operative assessment of the testicle and Serum Tumour Markers (STMs).	95%	2022 - 23	100% (5/5)	92% (11/12)	98% (48/49)	100% (17/17)	98% (81/83)
		2021 - 22	100%	100%	100%	100%	100%
		2020 - 21	100.0%	60.0%	100.0%	100.0%	97.3%

Quality Performance Indicator (QPI)	Performance by NHS Board of diagnosis						
	QPI target	Year	AA	FV	GGC	LAN	WoSCAN
**QPI 3: Primary Orchiectomy - Patients with testicular cancer should have primary orchiectomy within 3 weeks of ultrasonographic diagnosis.	95%	2022 - 23	100% (5/5)	75% (9/12)	96% (49/51)	94% (16/17)	93% (79/85)
		2021 - 22	100%	80%	81%	95%	87%
		2020 - 21	66.7%	40.0%	76.3%	95.0%	77.3%
QPI 4: Multi-Disciplinary Team Meeting - Patients with testicular cancer should be discussed by a Multi Disciplinary Team (MDT) to agree a definitive management plan post orchiectomy with staging and pathology.	95%	2022 - 23	100% (5/5)	100% (12/12)	96% (51/53)	100% (18/18)	98% (86/88)
		2021 - 22	92%	100%	98%	96%	96%
		2020 - 21	92.3%	100.0%	100.0%	100.0%	98.7%
QPI 6: Quality of Adjuvant Treatment - Patients with stage I seminoma receiving adjuvant single dose carboplatin should have an AUC of 7mg/ml/min based on isotopic estimation of creatinine clearance.	95%	2022 - 23	-	% (*)	90% (18/20)	100% (5/5)	92% (24/26)
		2021 - 22					
		2020 - 21					
QPI 8: Systemic Therapy - Patients with metastatic testicular cancer who are undergoing systemic therapy should receive Systemic Anti-Cancer Therapy (SACT) within 3 weeks of a MDT decision to treat with SACT.	95%	2022 - 23	-	100% (5/5)	81% (13/16)	100% (9/9)	88% (28/32)
		2021 - 22	-	*	58%	83%	71%
		2020 - 21	100.0%	50.0%	90.0%	75.0%	82.4%
QPI 12: Surveillance for Stage I Seminoma - Patients with stage I seminoma under surveillance should undergo Magnetic Resonance Imaging (MRI) scanning of the abdomen (+/-pelvis) within 8 months of initial staging CT scan.	85%	2022 - 23	% (*)	-	100% (6/6)	% (*)	100% (9/9)
		2021 - 22					
		2020 - 21					

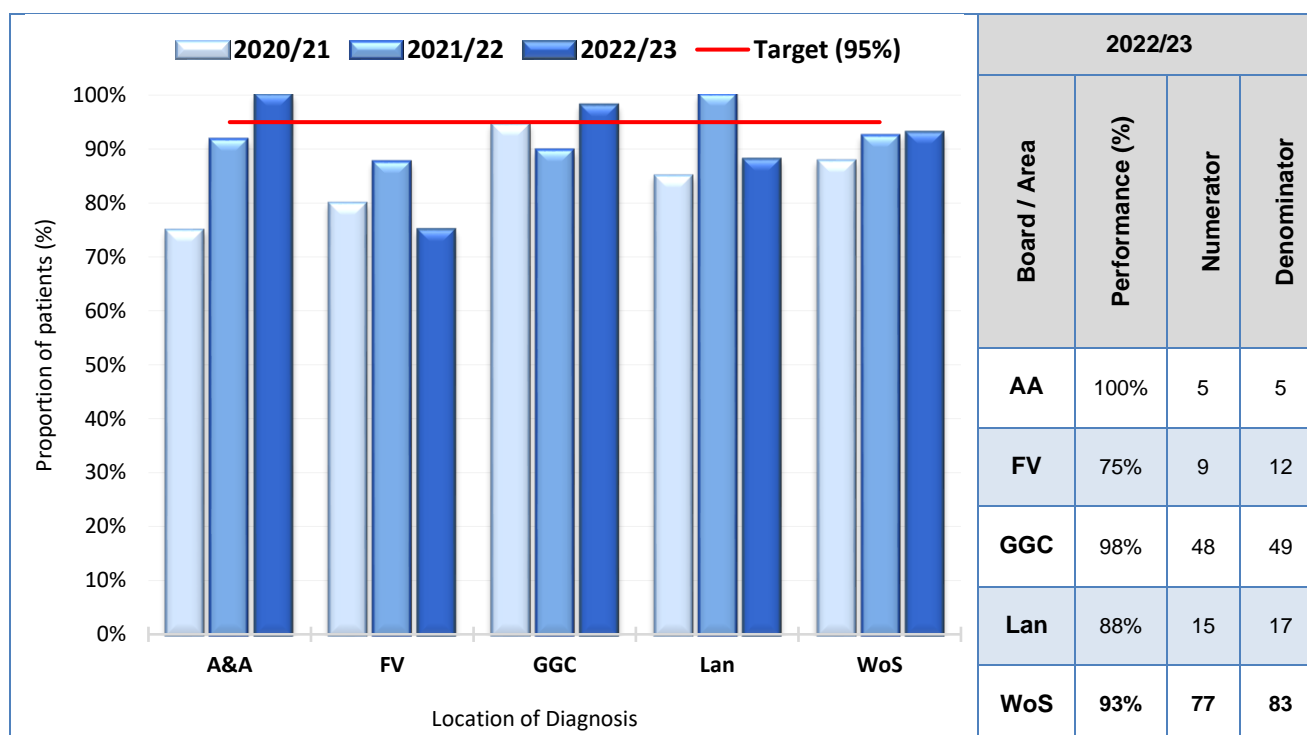
****QPI analysed by Location of Surgery**

***Denominator is 0**

QPI 1: Radiological Staging

QPI 1 Title:	Patients with testicular cancer should be evaluated with appropriate imaging to detect the extent of disease and guide treatment decision making.
Numerator:	Number of patients with testicular cancer undergoing CT scanning of the chest, abdomen and pelvis within 3 weeks of orchidectomy.
Denominator:	All patients with testicular cancer undergoing orchidectomy.
Exclusions:	<ul style="list-style-type: none"> • Patients undergoing chemotherapy prior to orchidectomy.
Target:	95%

Fig 1: The proportion of patients with testicular cancer who undergo CT scanning of the chest, abdomen and pelvis within three weeks of orchidectomy.



NHS Forth Valley and NHS Lanarkshire reviewed the failed cases and noted delays in the CT request had contributed to the non-compliance with the QPI timescales. Two patients missed the 3 week time parameter by 4 days however a further 3 patients had a prolonged pathway and therefore CT was not requested until pathology was reported.

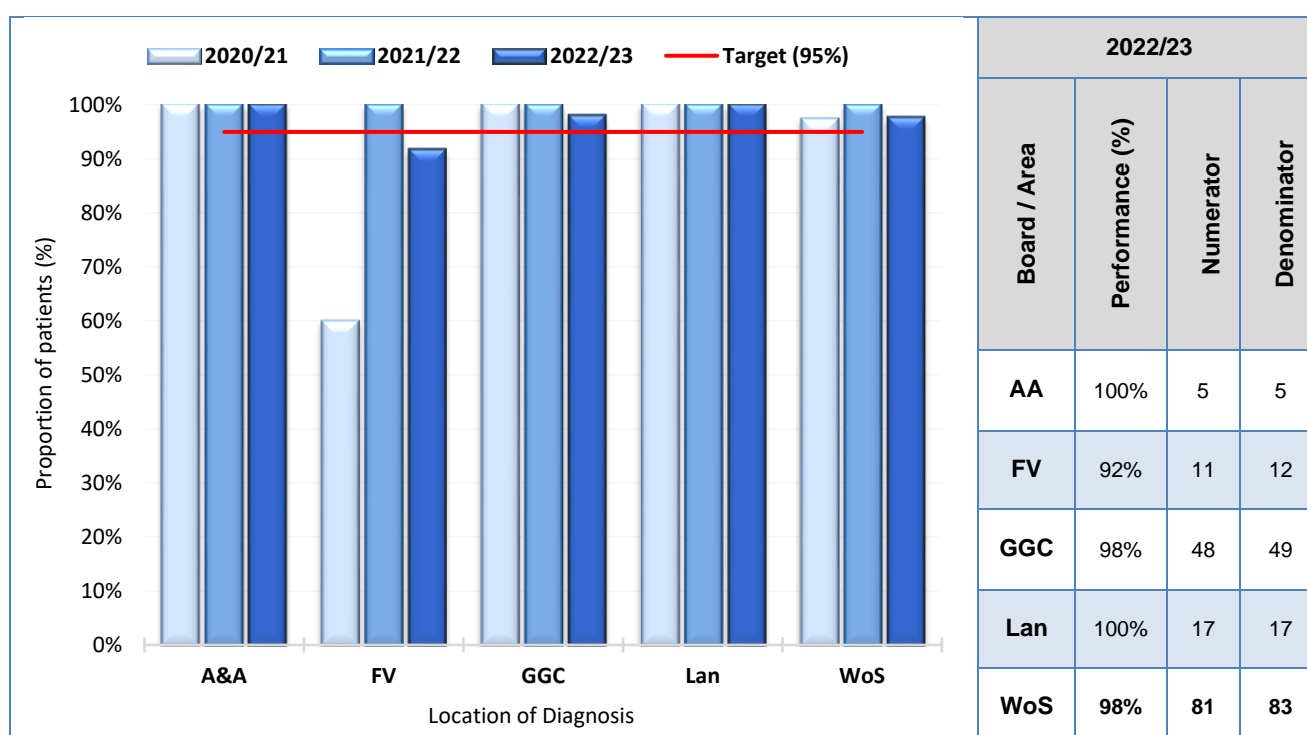
Action required:

- NHS Forth Valley and NHS Lanarkshire to review processes for booking CT scans to ensure that CT requests are made at the point of booking the orchidectomy.

QPI 2: Pre-operative Assessment

QPI 2 Title:	Patients with testicular cancer should have pre-operative assessment of the testicle and Serum Tumour Markers (STMs).
Numerator:	Number of patients with testicular cancer undergoing orchidectomy, who undergo a pre-operative assessment of the testicle which, at a minimum, includes: (i) STMs (ii) testicular ultrasound.
Denominator:	All patients with testicular cancer undergoing orchidectomy.
Exclusions:	<ul style="list-style-type: none"> Patients who decline pre-operative assessment. Patients undergoing chemotherapy prior to orchidectomy.
Target:	95%

Fig 2: The proportion of patients with testicular cancer who undergo pre-operative assessment of the testicle which, at a minimum, includes STMs and testicular ultrasound.



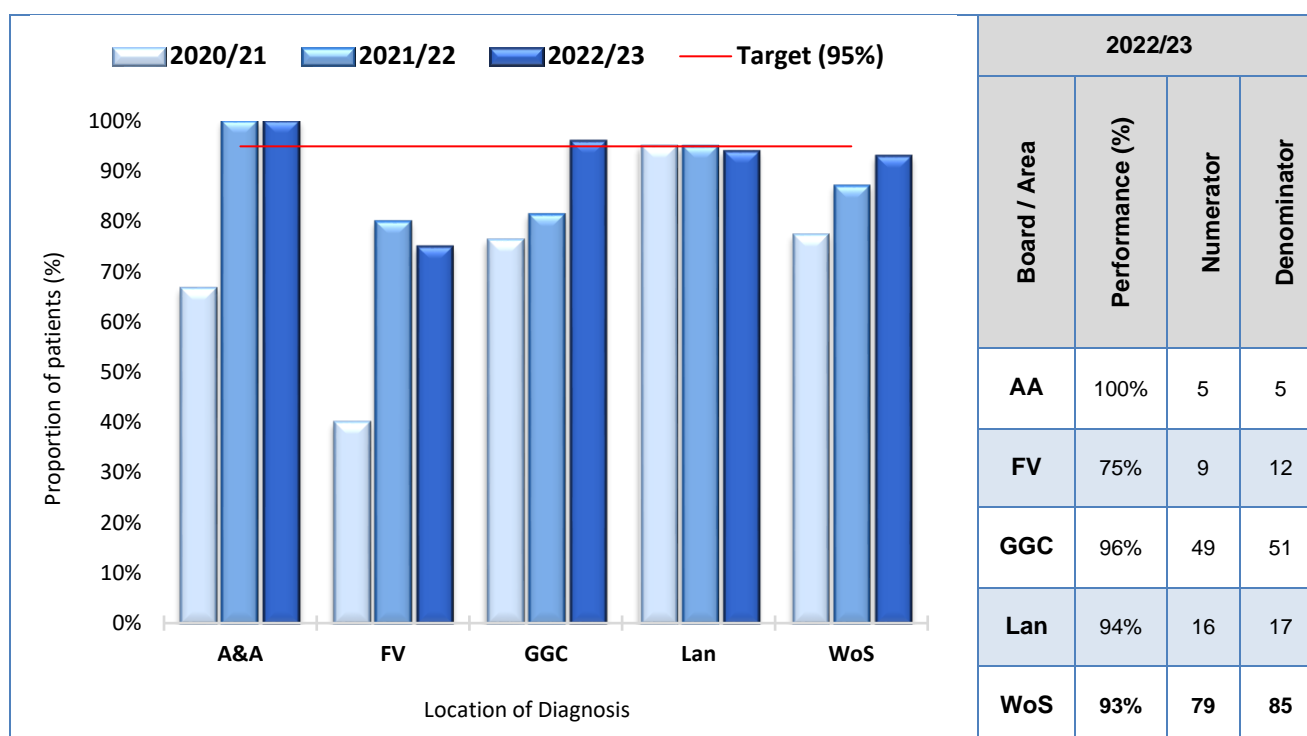
Although NHS Forth Valley fell short of the target with 91.7%, this was attributed to a single patient where an oversight resulted in one tumour marker (Alpha-fetoprotein AFP) not being measured. The overall pre-operative assessment for testicular cancer patients in the West of Scotland was 98%, surpassing the 95% target.

NHS Forth Valley noted that a reminder of the correct tumour markers required has been reiterated to relevant staff.

QPI 3: Primary Orchidectomy

QPI 3 Title:	Patients with testicular cancer should have primary orchidectomy within 3 weeks of ultrasonographic diagnosis.
Numerator:	Number of patients with testicular cancer undergoing orchidectomy within 3 weeks of ultrasonographic diagnosis.
Denominator:	All patients with testicular cancer undergoing orchidectomy.
Exclusions:	<ul style="list-style-type: none"> Patients undergoing chemotherapy prior to orchidectomy.
Target:	95%

Fig 3: The proportion of patients with testicular cancer who undergo primary orchidectomy within 3 weeks of ultrasonographic diagnosis



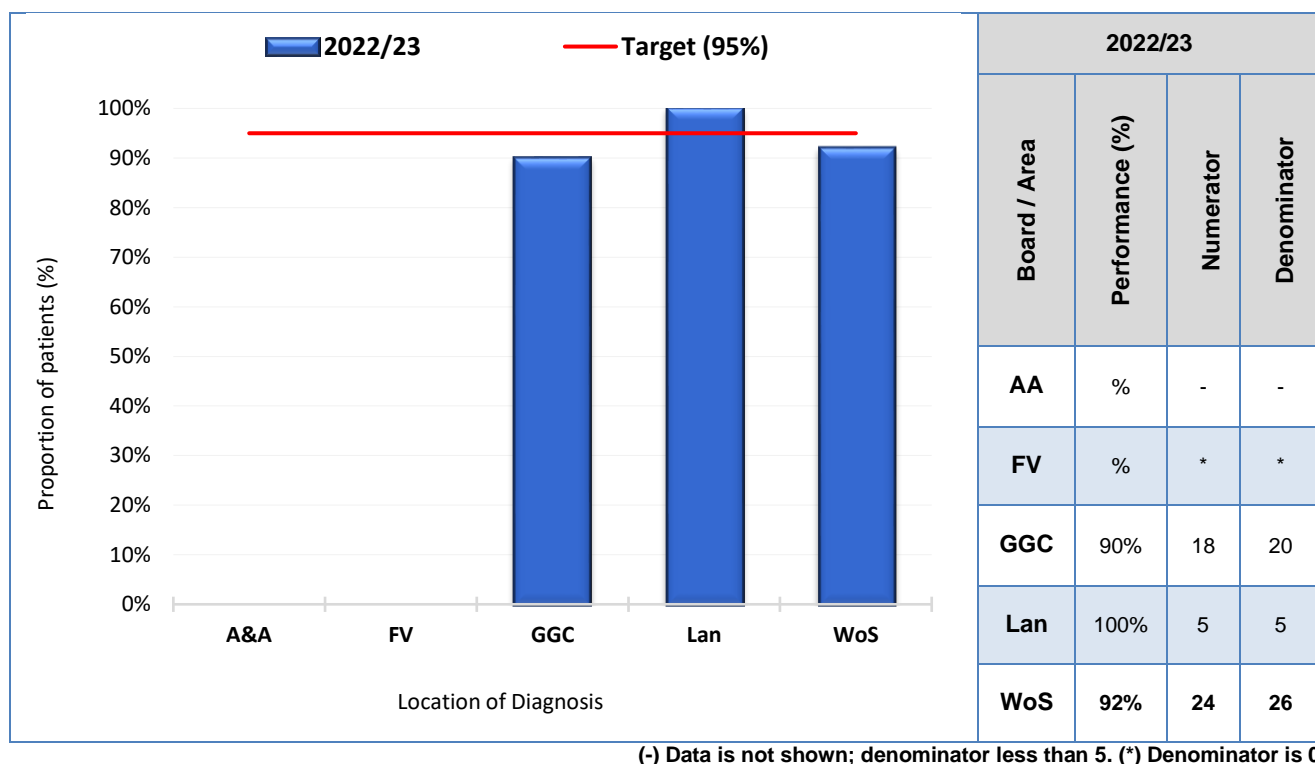
It should be noted that the number of patients included within the denominator is low and can have a considerable effect on overall proportions; therefore comparisons between NHS Boards should be viewed with caution.

NHS Forth Valley and NHS Lanarkshire reviewed the cases not meeting the target. Patient choice to delay surgery impacted on timelines for two patients, one patient missed the 3 week target by 5 days and the remaining case had an unusual pathway as testicular cancer was not initially suspected.

QPI 6: Quality of Adjuvant Treatment

QPI 6 Title:	Patients with stage I seminoma receiving adjuvant single dose carboplatin should have an AUC of 7mg/ml/min based on isotopic estimation of creatinine clearance.
Numerator:	Number of patients with stage I seminoma undergoing adjuvant single dose carboplatin AUC7, based on isotopic estimation of creatinine clearance, within 8 weeks of orchidectomy.
Denominator:	All patients with stage I seminoma undergoing adjuvant single dose carboplatin AUC7.
Exclusions:	• Patients who are treated within a clinical trial.
Target:	95%

Fig 4: The proportion of patients with stage I seminoma receiving adjuvant single dose carboplatin AUC of 7mg/ml/min (AUC7), based on isotopic estimation of creatinine clearance, within 8 weeks of orchidectomy.



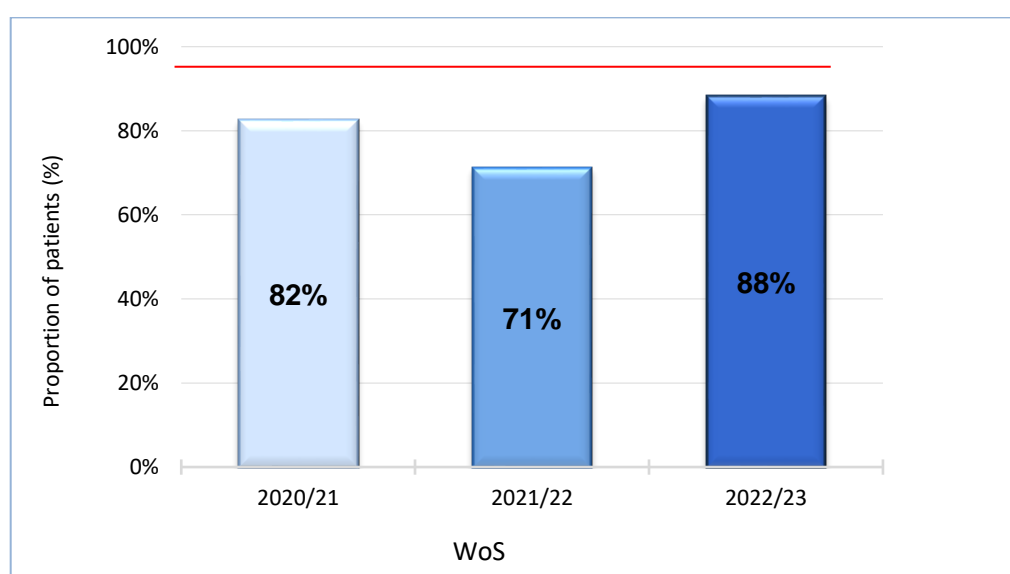
It should be noted that the number of patients included within the denominator is low and can have a considerable effect on overall performance percentages; therefore comparisons between NHS Boards should be viewed with caution. Comparison across years should also be made with caution.

NHS GGC reviewed the cases that did not meet the target and commented that delays in pathology reporting resulted in the timescale being exceeded by 3 days for one case, and patient fitness for EDTA impacted on the remaining case, although chemotherapy was given within the QPI timeframe.

QPI 8: Systemic Therapy

QPI 8 Title:	Patients with metastatic testicular cancer who are undergoing systemic therapy should receive Systemic Anti-Cancer Therapy (SACT) within 3 weeks of a MDT decision to treat with SACT.
Numerator:	Number of patients with metastatic testicular cancer undergoing SACT within 3 weeks of an MDT decision to treat with SACT.
Denominator:	All patients with metastatic testicular cancer undergoing SACT.
Exclusions:	<ul style="list-style-type: none">• Patients whose primary chemotherapy management is as part of a chemotherapy clinical trial.
Target:	95%

Fig 5: The proportion of patients with metastatic testicular cancer who undergo SACT within 3 weeks of an MDT decision to treat with SACT



Due to the small numbers meeting the denominator criteria for QPI 8, individual Board results cannot be presented. West of Scotland performance against this QPI was 88% (28 out of 32 cases). It should be noted that the number of patients included within the denominator is low and can have a considerable effect on overall proportions; therefore comparisons between NHS Boards should be viewed with caution.

NHS Forth Valley and NHS Lanarkshire met the target with 100%.

NHS Ayrshire & Arran noted that they had followed the established process of referring testicular cancer patients to the germ cell oncology team for inclusion in the Glasgow MDT discussions. However, due to changes within the oncology team the case that failed to meet the target was not referred onwards to the Glasgow MDT before starting SACT. Clarification with regards to the new process has now been received.

NHS GGC reviewed cases where patients exceeded target timelines. Three patients exceeded the target by 1-5 days as they were complex cases with multiple comorbidities or had minor cumulative delays.

Action required:

- All peripheral Boards to refer the testicular patients directly to NHSGGC MDT.

Appendix 1: Meta Data

Report Title	Cancer Audit Report: Testicular Cancer Quality Performance Indicators					
Time Period	Patients diagnosed between 01 October 2022 to 30 September 2023					
QPI Version	Testicular Cancer QPIs V4.0 Cancer Quality Performance Indicators (QPIs) (healthcareimprovementscotland.org)					
Data extraction date	2200 hrs on 29th January 2024					
Data Quality		Ayrshire & Arran	Forth Valley	GGC	Lanarkshire	WoS
	Cases from audit	5	12	54	18	89
	Cases from ISD (2018-2022)	9	9	53	18	89
	Case ascertainment	55.6%	133.3%	101.9%	100.0%	100.0%

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