Quality Performance Indicators Audit Report

Tumour Area:	Testicular Cancer
Patients Diagnosed:	1st October 2018 – 30th September 2019
Published Date:	26th November 2020
Clinical Commentary:	Dr. Graham Macdonald NCA Testicular Cancer Clinical Lead

1. Testicular Cancer in Scotland

Latest available cancer registration figures indicate that with 197 cases recorded in Scotland during 2017, testicular cancer is one of the less common types of cancer in men, ranking at 16th place. Incidence has increased by 3.8% from 2007 to 2017[1].

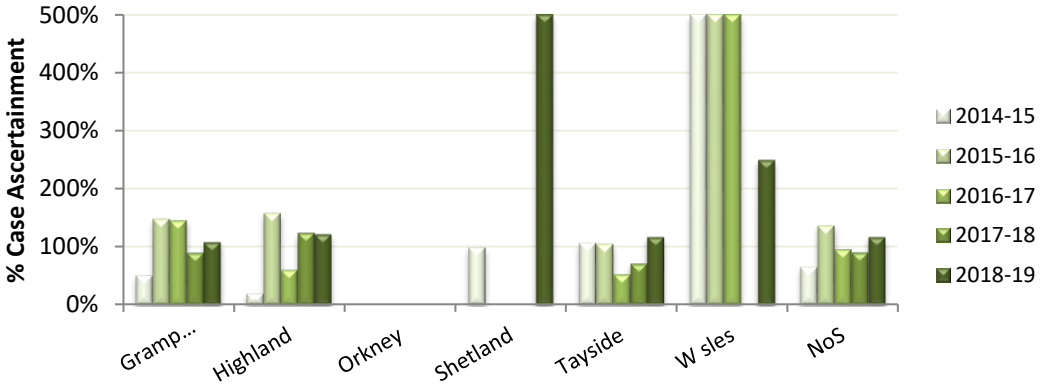
Relative survival from testicular cancer is higher than for any other tumour types in men. Survival from testicular cancer has increased considerably since 1987-1991, due to the substantial advances in treatment of this disease during this time[2]. The table below details the percentage change in 1 and 5 year relative survival for patients diagnosed 1987-1991 to 2007-2011.

Relative age-standardised survival for testicular cancer in Scotland at 1 year and 5 years showing percentage change from 1987-1991 to 2007-2011[2].

Relative survival at 1 year (%)		Relative survival at 5 years (%)	
2007-2011	% change	2007-2011	% change
97.6%	+ 8.3%	93.4%	+ 11.9%

2. Patient Numbers and Case Ascertainment in the North of Scotland

Between 1st October 2018 and 30th September 2019 a total of 60 cases of testicular cancer were diagnosed in the North of Scotland and recorded through audit. Case ascertainment for the North of Scotland was 117.6%. As such, QPI calculations based on data captured are considered to be representative of patients diagnosed with testicular cancer during the audit period.



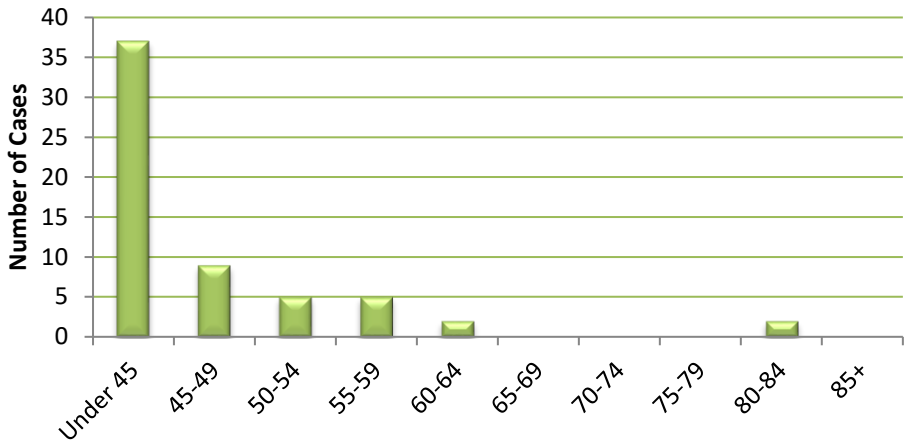
Case ascertainment by NHS Board for patients diagnosed with testicular cancer in 2014-2019.

	Grampian	Highland	Orkney	Shetland	Tayside	W Isles	NoS
No. of Patients 2018-19	26	12	0	2	19	1	**60**
% of NoS total	43.3%	20%	0%	3.3%	31.7%	1.7%	**100%**
Mean ISD Cases 2014-18	24	9.8	0.2	0.4	16.2	0.4	**51**
% Case ascertainment 2018-19	108.3%	122.4%	0%	500%	117.3%	250%	**117.6%**

For patients included within the audit, data collection was near complete.

3. Age Distribution

The figure below shows the age distribution of men diagnosed with testicular cancer in the North of Scotland in 2018-19, with numbers of patients diagnosed highest in the under 45 age bracket.



Age distribution of patients diagnosed with testicular cancer in NoS 2018-2019.

4. Performance against Quality Performance Indicators (QPIs)

Definitions for the QPIs reported in this section are published by Health Improvement Scotland[3], while further information on datasets and measurability used are available from Public Health Scotland[4]. Data for most QPIs are presented by Board of Diagnosis; however QPIs 3 and 10(a) are presented by Hospital of Surgery. Further, QPI 9 is reported in year in arrears therefore results presented here are for patients diagnosed in 2017-18. Please note that where QPI definitions have been amended (i.e. QPI 9), results are not compared with those from previous years.

5. Governance and Risk

Governance is defined as the combination of structures and processes at all levels to ensure quality performance and improvement including:

- Ensuring accountability for quality and required standards
- Investigating and taking action on sub-standard performance
- Identifying, sharing and ensuring delivery of best-practice
- Identifying and managing risks to ensure quality of care
- Driving continuous improvement

The North Cancer Alliance governance structure provides assurance to the six North of Scotland NHS boards that QPI risks are being addressed as an alliance.

An assessment of clinical risk for each QPI is made by the tumour-specific Clinical Director and Pathway Board manager upon the availability of data. This is discussed collaboratively within the tumour-specific Pathway Board, achieving consensus on clinical risk status assigned.

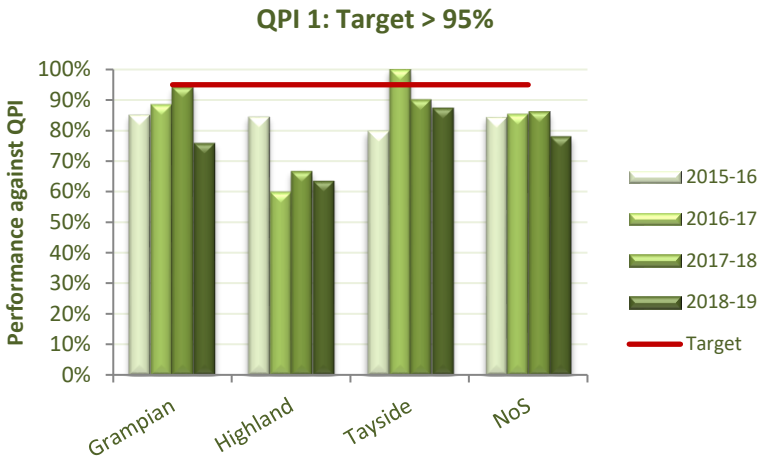
This assessment of clinical risk is then discussed and agreed with the NCA Clinical Director and Regional Cancer Manager who take independent oversight of current QPI performance, mitigation and actions proposed. The NCA Clinical Director or Manager may propose that the risk status requires oversight from the North Cancer Clinical Leadership Group (NCCLG).

NCCLG are presented with all available evidence and actions so they have all the information to define the risk in a collaborative way. NCCLG confirm the risk status of each QPI and ensure QPIs requiring escalation can be directed through the NCA governance structure.

- **Tolerate -** Accept the risk at its current level
- **Mitigate -** Reduce or mitigate the risk, in terms of reducing the likelihood of its occurrence or reducing the severity of impact if it does occur. This can be assessed through the action plans provided or the information provided is appropriate to prevent reoccurrence.
- **Escalate -** Escalate the risk to the appropriate committee and/or take further action as the mitigations were not suitable or there are no actions identified to mitigate the risk. This will be revisited by the NCCLG for further risk discussion.
- **Immediate -** Immediate action is required to prevent the risk reoccurring. This risk will have major impact on patient care delivery and the consequences thereafter. Very few risks should occur in this level.
- **Manage –** The risk is currently being managed through an action plan developed in liaison with the tumour-specific Clinical Director / Pathway Board members. It is likely risks that have previously been escalated will be assigned this risk status until there is evidence of an improvement in QPI compliance.

The full governance document on risk should be referred to in conjunction with this summary, which is available on the NCA website[5].

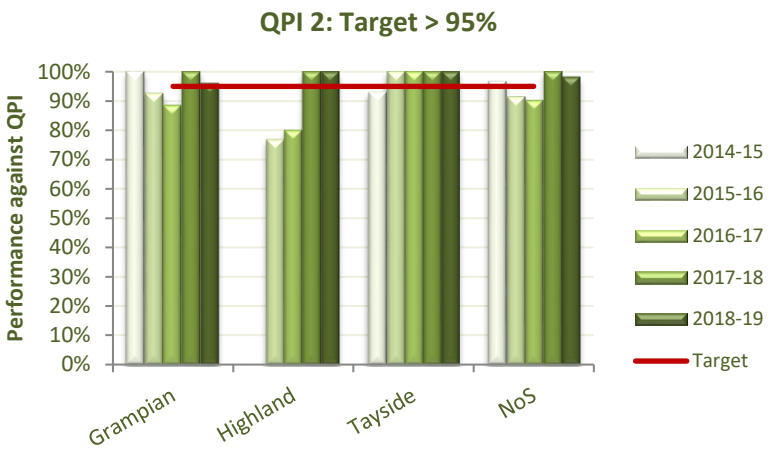
QPI 1	Radiological Staging
Proportion of patients with testicular cancer who undergo CT scanning, ideally contrast enhanced CT, of the chest, abdomen and pelvis within 3 weeks of orchidectomy.	



	Performance (%)	Numerator	Denominator
Grampian	**76.0%**	19	25
Highland	**63.6%**	7	11
Orkney	**-**	0	0
Shetland*	**-**	-	-
Tayside	**87.5%**	14	16
W Isles*	**-**	-	-
NoS	**78.2%**	**43**	**55**

Clinical Commentary	Performance in the North of Scotland has declined in recent years relating to pathway challenges with ensuring patients are progressed for imaging post-orchidectomy within the timescales of this QPI. Each failure against this QPI has been analysed and comment provided by boards as to why patients did not have imaging within 3 weeks of orchidectomy. Four of the patients who did not meet this standard from NHS Highland are managed through another region due to referral pathways. There does not appear to be any systemic failure with adherence to the timescales but greater focus is required to ensure all patients adhere to the standard and imaging is progressed as a priority for these patients post-surgery. Across Scotland adherence to this QPI is 96% SCAN and 84% WOSCAN therefore action is required for improvement.
Actions	1. NCA to escalate to North of Scotland boards to ensure adherence to this QPI and reflection of three-week timescales within board timed pathways.
Risk Status	Escalate

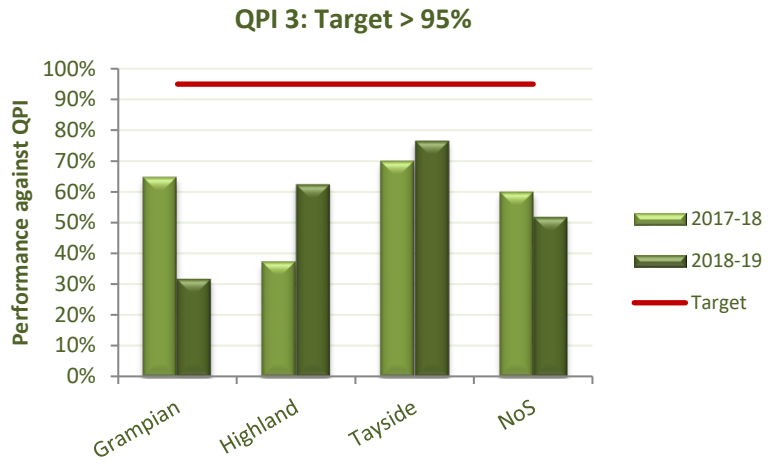
QPI 2	Preoperative Assessment
Proportion of patients with testicular cancer who undergo preoperative assessment of the testicle which, at a minimum, includes: (i) STMs, and (ii) Testicular ultrasound.	



	Performance (%)	Numerator	Denominator
Grampian	**96%**	24	25
Highland	**100%**	11	11
Orkney	-	0	0
Shetland*	-	-	-
Tayside	**100%**	16	16
W Isles*	-	-	-
NoS	**98.2%**	**54**	**55**

Clinical Commentary	The North of Scotland achieved this standard for the second year in a row with only one patient not meeting the standard.
Actions	No action required
Risk Status	Tolerate

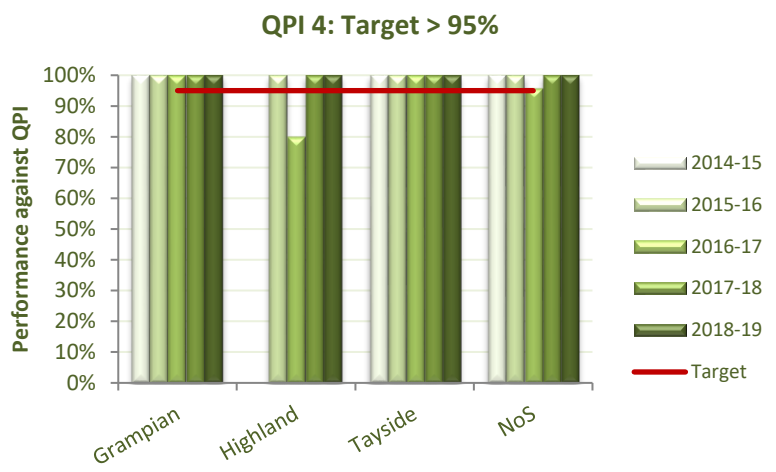
QPI 3	Primary Orchidectomy
Proportion of patients with testicular cancer who undergo primary orchidectomy within 3 weeks of ultrasonographic diagnosis.	



	Performance (%)	Numerator	Denominator
Grampian	**32%**	8	25
Highland	**62.5%**	5	8
Orkney	-	0	0
Shetland*	-	-	-
Tayside	**76.5%**	13	17
W Isles	-	0	0
NoS	**51.9%**	**27**	**52**

Clinical Commentary	Pathways from testicular cancer diagnosis to primary orchidectomy require work within the North of Scotland to achieve this standard. Reasons behind those patients not being treated within the standard have been analysed and the majority that failed received orchidectomy a few days over the three-week target. The reasons for failure differ between the centres. This indicates a requirement to tighten up the pathways to orchidectomy to improve compliance with the three-week timescale. There needs to be particular focus on ultrasound assessment to GP referral and the gap between the decision to treat and surgery dates. A key determinant is the availability of preoperative assessment clinic and theatre time within the system to support. Some boards in the North of Scotland are moving to a one-stop clinic approach for diagnosis and assessment for treatment, and this should improve compliance against this QPI in future years. This requires escalation to address the risk that bottlenecks in the pathway to orchidectomy lead to delayed surgery, in order to ensure future compliance with this QPI measure. For note: WOSCAN 80% SCAN 50%
Actions	1. NCA Urology Pathway Board to look at board pathways to orchidectomy and develop a consensus approach. 2. NHS Tayside to share learning of development of one-stop clinic with other North of Scotland boards. 3. NCA to escalate issue of timescales to primary orchidectomy with individual boards.
Risk Status	Escalate

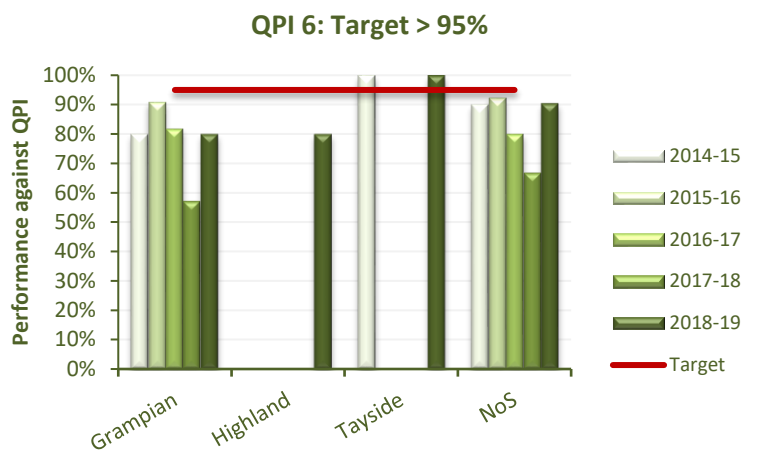
QPI 4	Multi-Disciplinary Team Meeting
Proportion of patients with testicular cancer who are discussed at a MDT meeting to agree a definitive management plan post orchidectomy.	



	Performance (%)	Numerator	Denominator
Grampian	**100%**	26	26
Highland	**100%**	11	11
Orkney	-	0	0
Shetland*	-	-	-
Tayside	**100%**	19	19
W Isles*	-	-	-
NoS	**100%**	**59**	**59**

Clinical Commentary	All patients were discussed at MDT meeting with a definitive management plan post-orchidectomy.
Actions	No action required
Risk Status	Tolerate

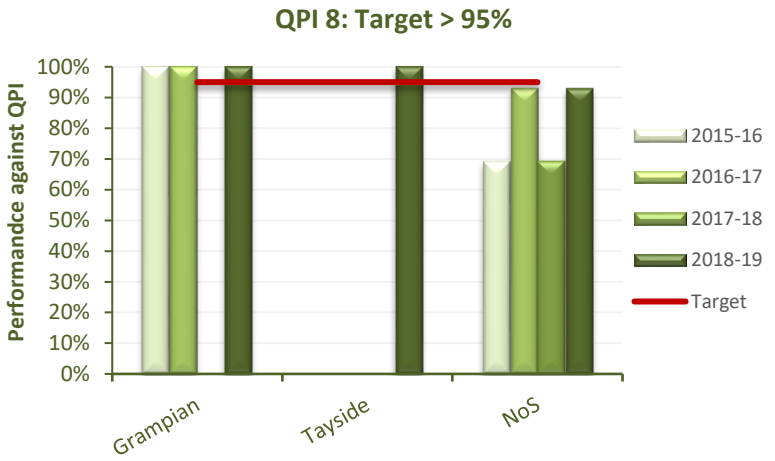
QPI 6	Quality of Adjuvant Treatment
Proportion of patients with stage I seminoma receiving adjuvant single dose carboplatin AUC of 7mg/ml/min (AUC7), based on EDTA clearance, within 8 weeks of orchidectomy.	



	Performance (%)	Numerator	Denominator
Grampian	**80%**	4	5
Highland	**80%**	4	5
Orkney	-	0	0
Shetland	-	0	0
Tayside	**100%**	11	11
W Isles	-	0	0
NoS	**90.5%**	**19**	**21**

Clinical Commentary	There was a significant improvement in performance across the North of Scotland, with only two cases where this standard was not met however this represents a failure against the 95% target. In one of the two cases, the delay to adjuvant treatment was intentional for additional disease staging investigations. One patient who failed the QPI was managed through another region.
Actions	No action required
Risk Status	Mitigate

QPI 8	Systemic Therapy
Proportion of patients with metastatic testicular cancer who undergo SACT within 3 weeks of a MDT decision to treat with SACT	



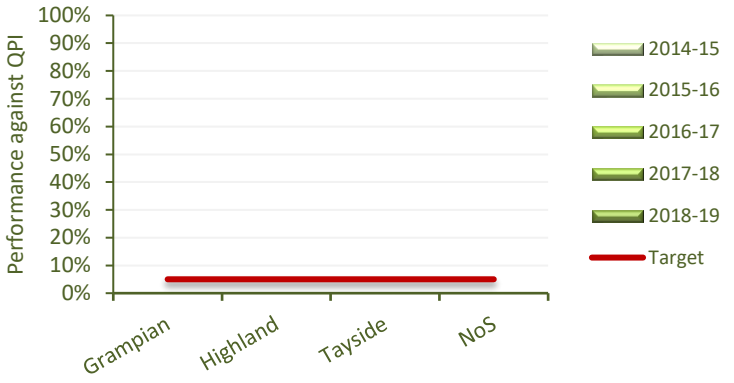
	Performance (%)	Numerator	Denominator
Grampian	**100%**	7	7
Highland*	-	-	-
Orkney	-	0	0
Shetland	-	0	0
Tayside	**100%**	5	5
W Isles	-	0	0
NoS	**92.9%**	**13**	**14**

Clinical Commentary	Only one patient failed to meet this standard and this was due to additional investigations prior to the commencement of adjuvant treatment.
Actions	No action required
Risk Status	Mitigate

QPI 9	Computed Tomography Scanning for Surveillance Patients
Proportion of patients with stage I testicular NSGCT (or mixed) under surveillance who undergo at least three CT or MRI scans of the abdomen (+/- imaging of the chest and pelvis) within 14 months of diagnosis - Patients diagnosed 2017-2018	

Due to the small number of patients included within the criteria of this QPI, data cannot be reported due to patient confidentiality.

QPI 10	30 Day Mortality
Proportion of patients with testicular cancer who die within 30 days of treatment for testicular cancer.	

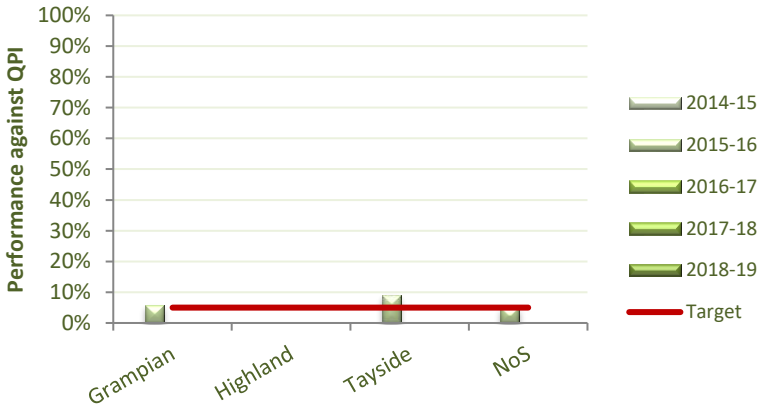


	Performance (%)	Numerator	Denominator
Grampian	0%	0	26
Highland	0%	0	8
Orkney	-	0	0
Shetland*	-	-	-
Tayside	0%	0	20
W Isles	-	0	0
NoS	0%	0	56

QPI 10: Radiotherapy - Target < 5%

Data not reported due to small numbers, however no patients diagnosed in the North of Scotland in 2018-19 died within 30 days of receiving radiotherapy

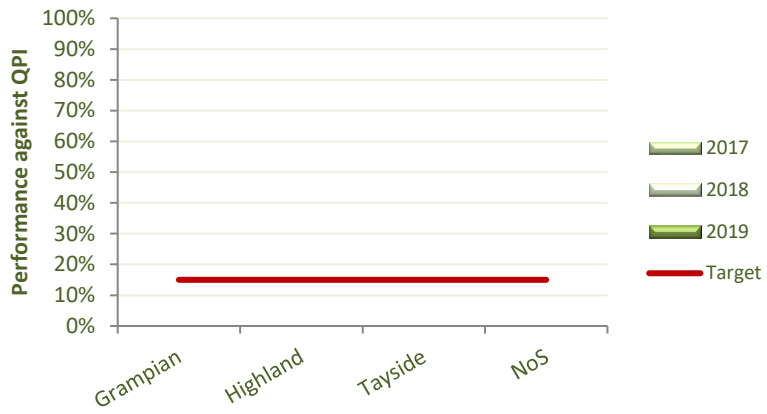
	Performance (%)	Numerator	Denominator
Grampian*	-	-	-
Highland	-	0	0
Orkney	-	0	0
Shetland	-	0	0
Tayside*	-	-	-
W Isles	-	0	0
NoS*	-	-	-



	Performance (%)	Numerator	Denominator
Grampian	0%	0	14
Highland	0%	0	9
Orkney	-	0	0
Shetland*	-	-	-
Tayside	0%	0	17
W Isles	-	0	0
NoS*	0%	0	41

Clinical Commentary	No patients died within 30 days of treatment within the North of Scotland.
Actions	No action required
Risk Status	Tolerate

QPI 11	Clinical trials and Research Study Access
Proportion of patients with testicular cancer who are consented for a clinical trial / research study. Data reported for patients enrolled in trials in 2019.	



	Performance (%)	Numerator	Denominator
Grampian	**0%**	0	24
Highland	**0%**	0	10
Orkney*	-	-	-
Shetland*	-	-	-
Tayside	**0%**	0	16
W Isles*	-	-	-
NoS	**0%**	**0**	**51**

Clinical Commentary	Recruitment to clinical trials remains a challenge across all tumour groups in the North of Scotland.
Actions	1. All clinicians should consider opening relevant clinical trials in their tumour areas. When this is not possible patient referrals to other sites for access to clinical trials should be considered.
Risk Status	Mitigate

References

1. Information Services Division. February 2020. https://www.isdscotland.org/Health-Topics/Cancer/Cancer-Statistics/Male-Genital-Organs/

2. NHS National Services Scotland. Cancer Survival in Scotland, 1987-2011. 2015. https://www.isdscotland.org/Health-Topics/Cancer/Publications/2015-03-03/2015-03-03-CancerSurvival-Report.pdf?

3. Scottish Cancer Taskforce, 2018. Testicular Cancer Clinical Quality Performance Indicators, Version 3.0. Health Improvement Scotland. http://www.healthcareimprovementscotland.org/our_work/cancer_care_improvement/cancer_qpis/quality_performance_indicators.aspx

4. http://www.isdscotland.org/Health-Topics/Cancer/Cancer-Audit/

5. North Cancer Alliance: QPI Process Explained (August 2020) https://www.nhsscotlandnorth.scot/uploads/tinymce/NCA/NCA%20Governance/NCA_GOV_QPI2_Process_Explained_Final%20(June%202020).pdf