Quality Performance Indicators Audit Report

Tumour Area:	Testicular Cancer
Patients Diagnosed:	1st October 2017 – 30th September 2018
Published Date:	28th October 2019
Clinical Commentary:	Dr. Graham Macdonald NCA Testicular Cancer clinical lead

1. Testicular Cancer in Scotland

Latest available cancer registration figures indicate that with 232 cases recorded in Scotland during 2016, testicular cancer is one of the less common types of cancer in men, with incidence rates changing little over the past 10 years[1].

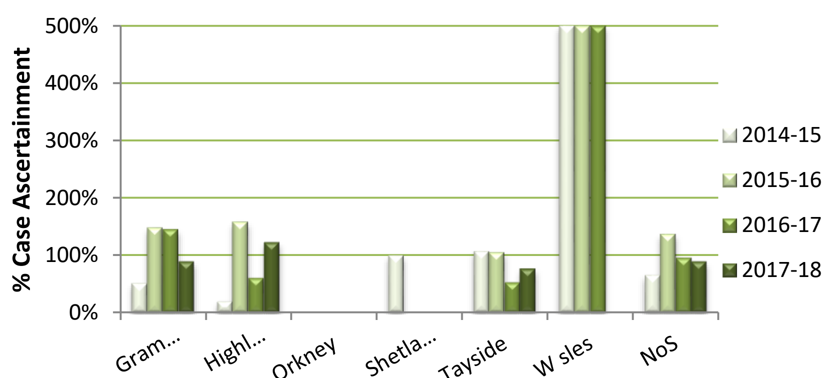
Relative survival from testicular cancer is higher than for any other tumour types in men. Survival from testicular cancer has increased considerably since 1987-1991, due to the substantial advances in treatment of this disease during this time[2]. The table below details the percentage change in 1 and 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 2017 and 30th September 2018 a total of 43 cases of testicular cancer were diagnosed in the North of Scotland and recorded through audit. Case ascertainment for the North of Scotland was 89.2%. As such, QPI calculations based on data captured are considered to be representative of patients diagnosed with testicular cancer during the audit period.



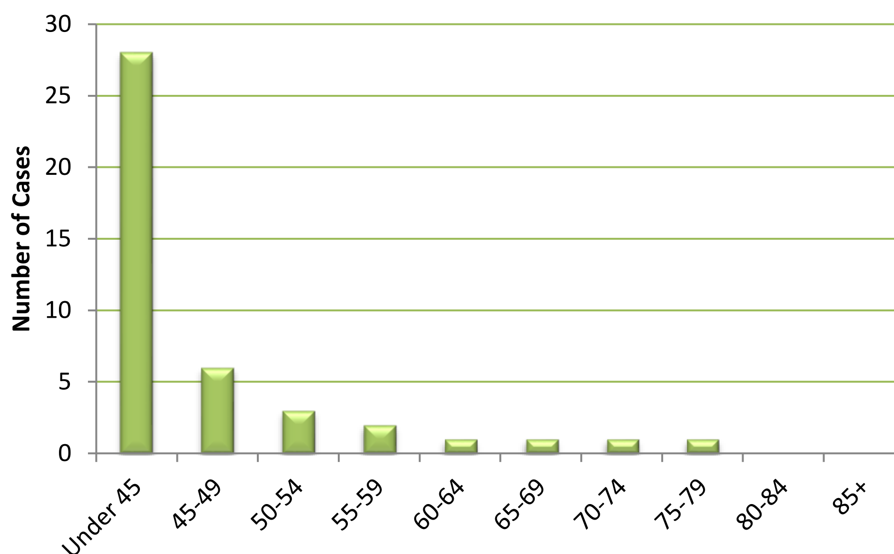
Case ascertainment by NHS Board for patients diagnosed with testicular cancer in 2014-2018.

	Grampian	Highland	Orkney	Shetland	Tayside	W sles	NoS
No. of Patients 2017-18	19	11	0	0	13	0	**43**
% of NoS total	44.2%	25.6%	0%	0%	30.2%	0%	**100%**
Mean ISD Cases 2013-17	21.4	9.0	0.2	0.4	17.0	0.2	**48.2**
% Case ascertainment 2017-18	88.8%	122.2%	0%	0%	76.5%	0%	**89.2%**

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 2017-18, with numbers of patients diagnosed highest in the under 45 age bracket.



Age distribution of patients diagnosed with testicular cancer in NOSCAN 2017-2018.

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 Information Services Division[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 2016-17. Please note that where QPI definitions have been amended, 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 lead on North quality performance including:

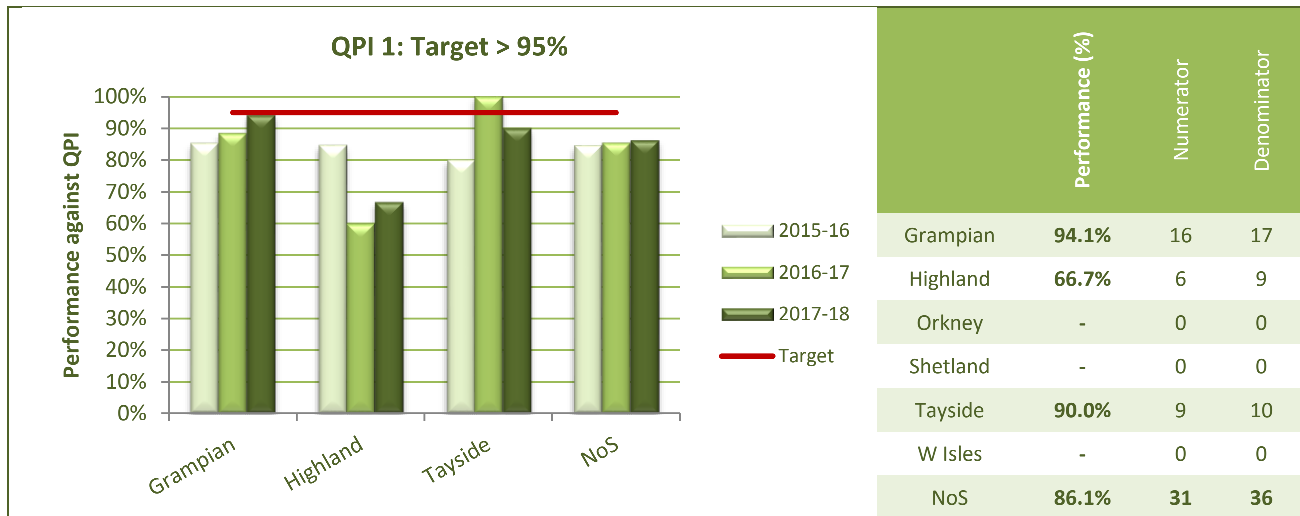
- Ensuring accountability for quality and required standards
- Investigating and taking action on sub-standard performance
- Identifying, sharing and ensuring delivery of best-practice
- Identifying and managing risks to ensure quality of care
- Driving continuous improvement

Our current governance structure provides assurance to the boards that risks associated QPIs are being addressed as an alliance. Clinical risks are discussed at the North Cancer Head and Neck Pathway Board and Regional Cancer Clinical Leadership Group (RCCLG). Risk levels are jointly agreed. The RCCLG are presented with all available evidence and actions so they have all the information to define the risk in a collaborative way.

- **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 RCCLG 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.

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

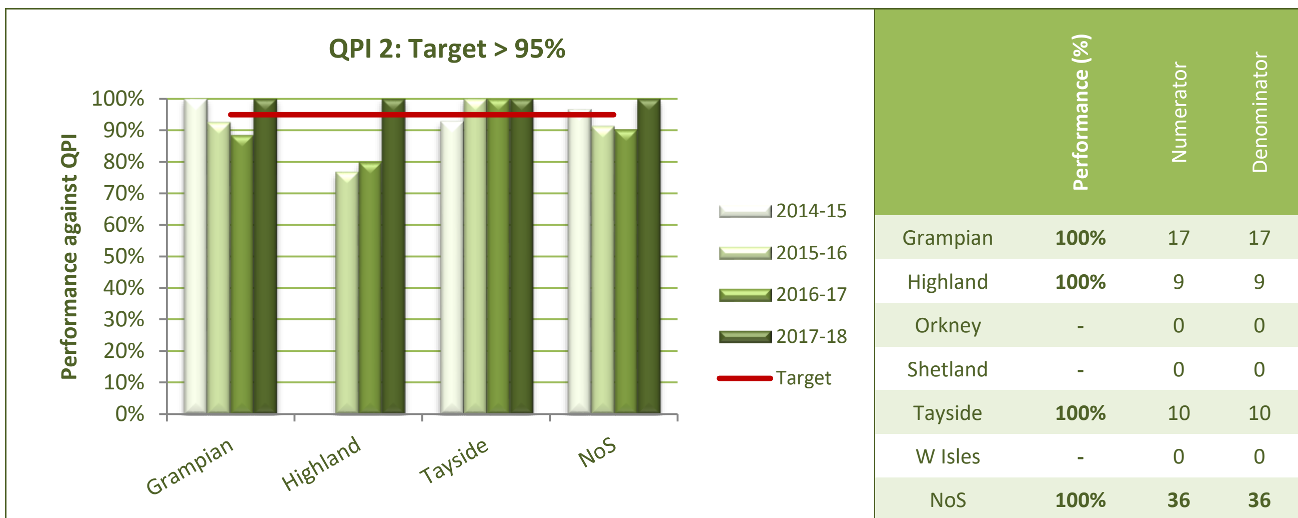
QPI 1	Radiological Staging
Proportion of patients with testicular cancer who undergo CT scanning, ideally contrast enhanced CT, of the chest, abdomen and pelvis within 3 weeks of orchidectomy.	



	Performance (%)	Numerator	Denominator
Grampian	**94.1%**	16	17
Highland	**66.7%**	6	9
Orkney	-	0	0
Shetland	-	0	0
Tayside	**90.0%**	9	10
W Isles	-	0	0
NoS	**86.1%**	**31**	**36**

Clinical Commentary	There is a challenge in parts of the North of Scotland in ensuring a CT scan takes place within three weeks of orchidectomy. Boards reported that patients who did not meet the timescales did receive a CT scan after orchidectomy a few days beyond the timelines required by this QPI.
Actions	1. NCUPB to examine radiology resource as part of review of clinical management guidelines and ensure requirement for CT scan post-op is embedded in this and board patient pathways. 2. NCUPB to share local practice to allow better streamlining of the pathway for patients undergoing orchidectomy (e.g. prebooking imaging pending provisional pathology results after orchidectomy) 3. NCUPB to review clinical management guidelines for testicular cancer and ensure patient pathways are in place at boards to meet the requirements of this QPI.
Risk Status	Mitigate

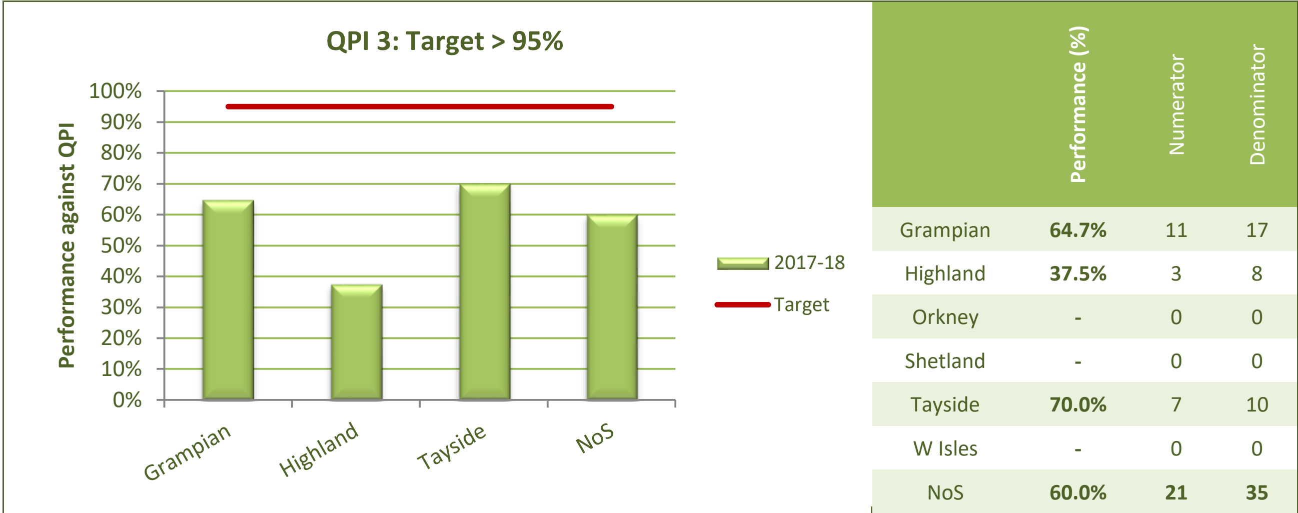
QPI 2	Preoperative Assessment
Proportion of patients with testicular cancer who undergo preoperative assessment of the testicle which, at a minimum, includes: (i) STMs, and (ii) testicular ultrasound.	



	Performance (%)	Numerator	Denominator
Grampian	**100%**	17	17
Highland	**100%**	9	9
Orkney	-	0	0
Shetland	-	0	0
Tayside	**100%**	10	10
W Isles	-	0	0
NoS	**100%**	**36**	**36**

Clinical Commentary	Performance in the North has improved in comparison to previous years with 100% compliance with this QPI target for patients diagnosed in 2017-18.
Actions	No action required
Risk Status	Tolerate

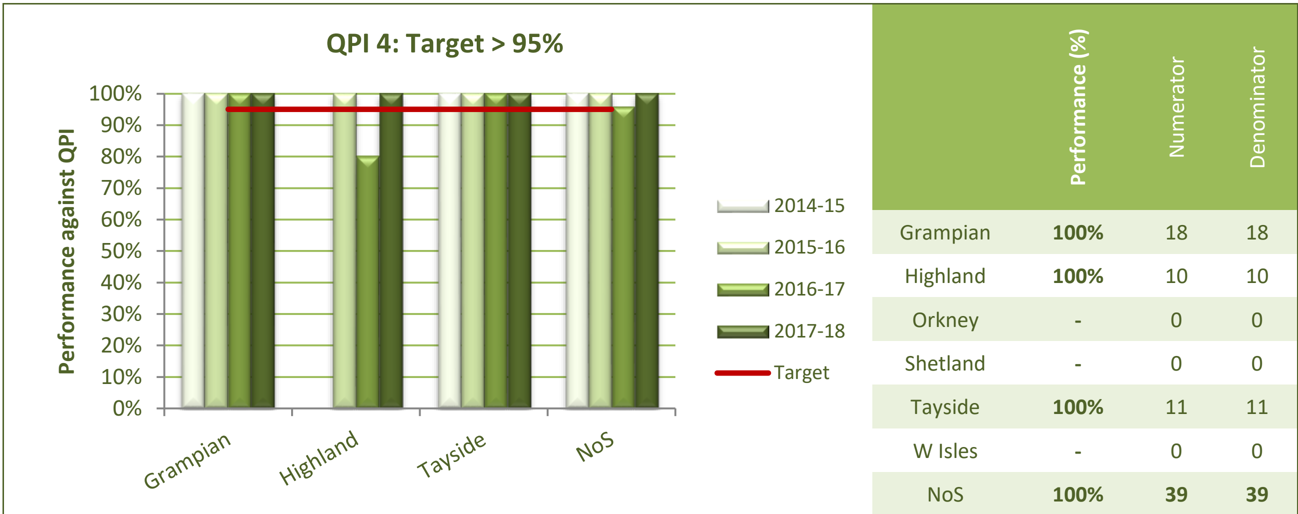
QPI 3	Primary Orchidectomy
Proportion of patients with testicular cancer who undergo primary orchidectomy within 3 weeks of ultrasonographic diagnosis.	



	Performance (%)	Numerator	Denominator
Grampian	**64.7%**	11	17
Highland	**37.5%**	3	8
Orkney	-	0	0
Shetland	-	0	0
Tayside	**70.0%**	7	10
W Isles	-	0	0
NoS	**60.0%**	**21**	**35**

Clinical Commentary	Despite a new timeline for this QPI requiring orchidectomy within 3 weeks of ultrasonographic diagnosis, boards in the North of Scotland continue to struggle to meet this QPI. In submitting responses to this data, boards in the North noted the pressure on theatre capacity and work is required to ensure orchidectomy slots are available for patients to have this surgery within three weeks of ultrasonographic diagnosis. Furthermore, there are other factors which caused failures, notably prior patient commitments clashing with offered operations, travel requirements precluding attendance, and diagnostic and surgical complexity. However it is recognised that a key driver to ensuring compliance with this QPI is that theatre capacity is available to meet these timescales and this is to be examined as part of the North of Scotland Surgery: A Case for Change programme, looking to ensure sustainability of cancer surgery in the North.
Actions	1. NCUPB to produce an action plan on ensuring sustainability of urological cancer surgery services in the North of Scotland, including the requirement for primary orchidectomy within 3 weeks or ultrasonographic diagnosis of testicular cancer.
Risk Status	Mitigate

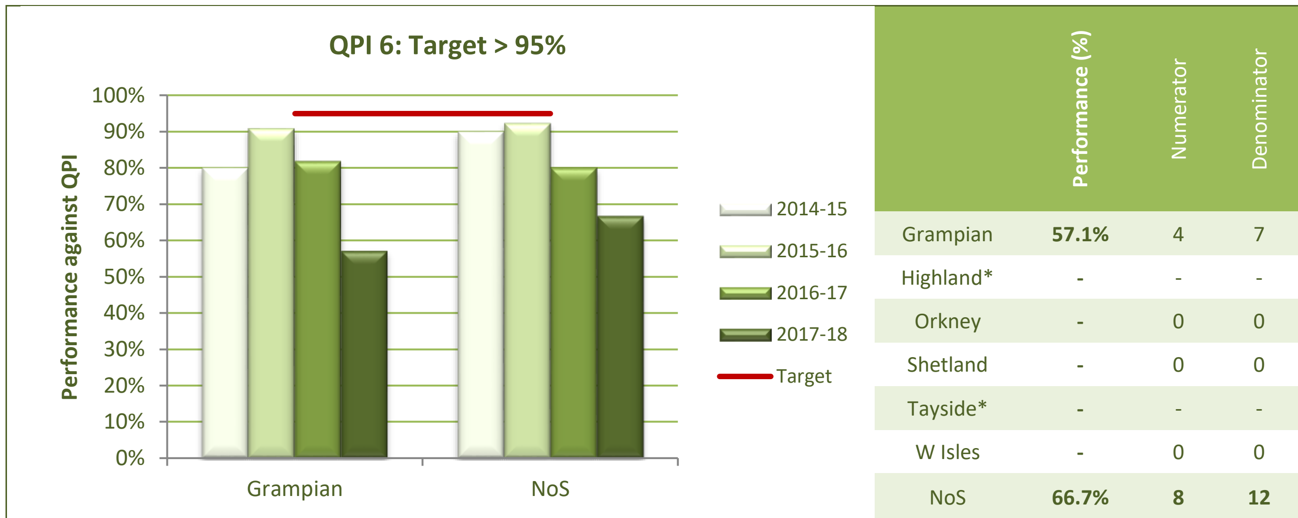
QPI 4	Multi-Disciplinary Team Meeting
Proportion of patients with testicular cancer who are discussed at a MDT meeting to agree a definitive management plan post orchidectomy.	



	Performance (%)	Numerator	Denominator
Grampian	**100%**	18	18
Highland	**100%**	10	10
Orkney	-	0	0
Shetland	-	0	0
Tayside	**100%**	11	11
W Isles	-	0	0
NoS	**100%**	**39**	**39**

Clinical Commentary	Performance in the North of Scotland has improved where all patients diagnosed with testicular cancer in 2017/18 were discussed at a MDT Meeting prior to agree a definitive management plan post orchidectomy.
Actions	No action required
Risk Status	Tolerate

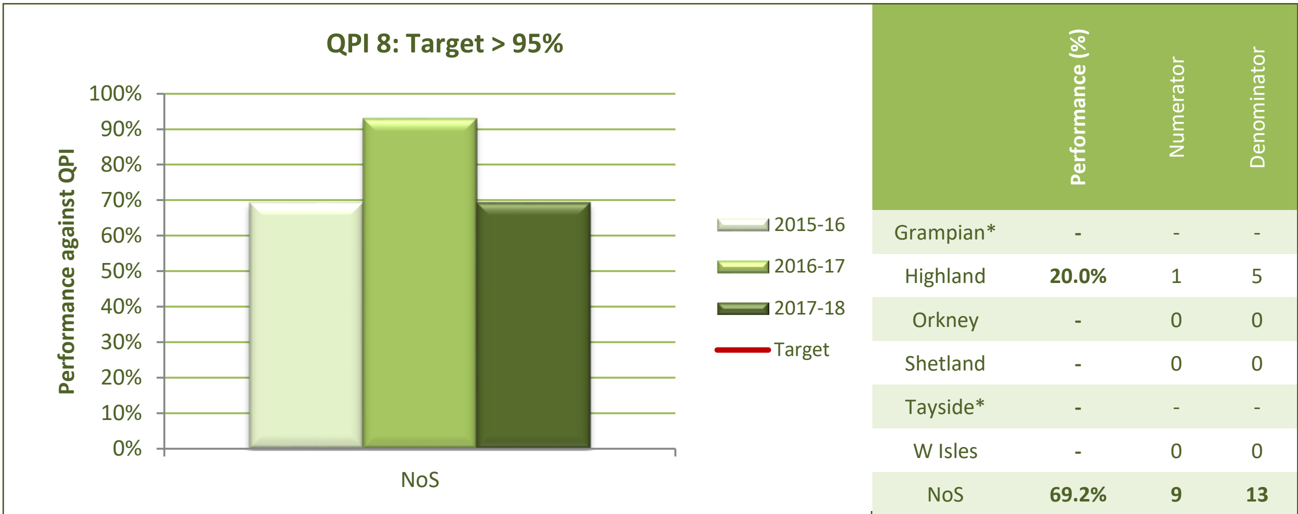
QPI 6	Quality of Adjuvant Treatment
Proportion of patients with stage I seminoma receiving adjuvant single dose carboplatin AUC of 7mg/ml/min (AUC7), based on EDTA clearance, within 8 weeks of orchidectomy.	



	Performance (%)	Numerator	Denominator
Grampian	**57.1%**	4	7
Highland*	-	-	-
Orkney	-	0	0
Shetland	-	0	0
Tayside*	-	-	-
W Isles	-	0	0
NoS	**66.7%**	**8**	**12**

Clinical Commentary	Performance across the North boards continues to decline for this small cohort of patients. It is important to note that in most cases included in these results, delays to the start of adjuvant chemotherapy were intentional and appropriate to allow additional staging investigations after an interval to exclude more advanced disease. Most of the 'failures' were therefore due to timing of chemotherapy rather than due to dose or the use of EDTA as measure of renal function. Work is required to ensure regional pathways are in place to support achievement of this QPI.
Actions	1. NCUPB to review clinical management guideline for Testicular Cancer and ensure that patient pathways are in place in the North of Scotland to allow for adjuvant treatment for stage 1 patients within 8 weeks of orchidectomy.
Risk Status	Mitigate

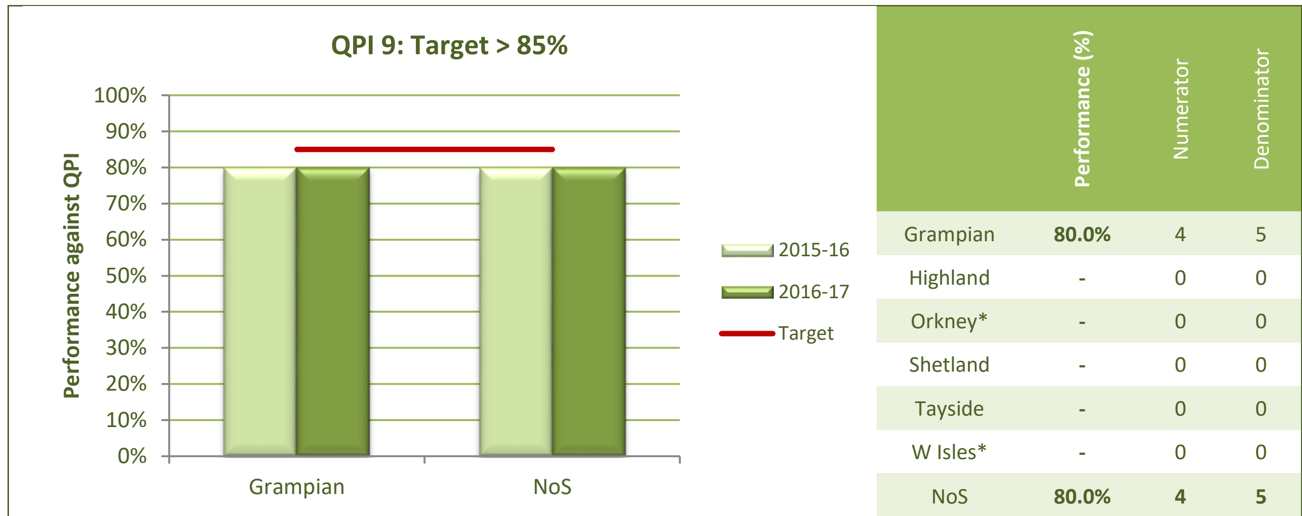
QPI 8	Systemic Therapy
Proportion of patients with metastatic testicular cancer who undergo SACT within 3 weeks of a MDT decision to treat with SACT	



	Performance (%)	Numerator	Denominator
Grampian*	-	-	-
Highland	**20.0%**	1	5
Orkney	-	0	0
Shetland	-	0	0
Tayside*	-	-	-
W Isles	-	0	0
NoS	**69.2%**	**9**	**13**

Clinical Commentary	Delays in the patient pathway in NHS Highland have resulted in the North of Scotland failing this QPI.
Actions	1. NCUPB to support NHS Highland and other North boards in ensuring it has the oncology resources to support achievement of this QPI.
Risk Status	Mitigate

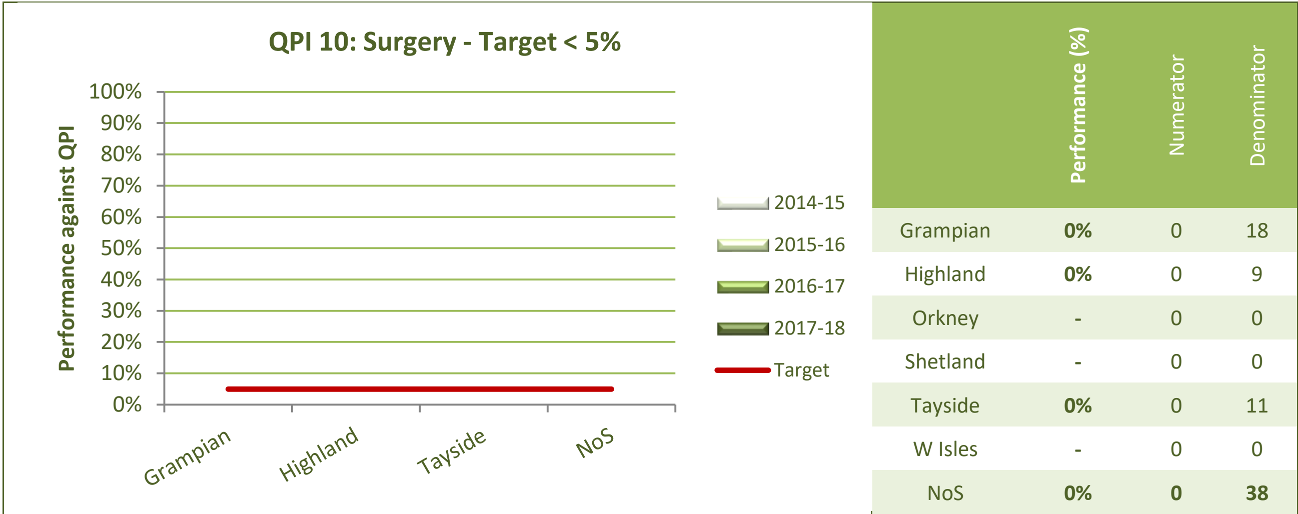
QPI 9	Computed Tomography Scanning for Surveillance Patients
Proportion of patients with stage I testicular NSGCT (or mixed) under surveillance who undergo at least three CT scans of the abdomen +/- chest and pelvis within 14 months of diagnosis - Patients diagnosed 2015-2016	



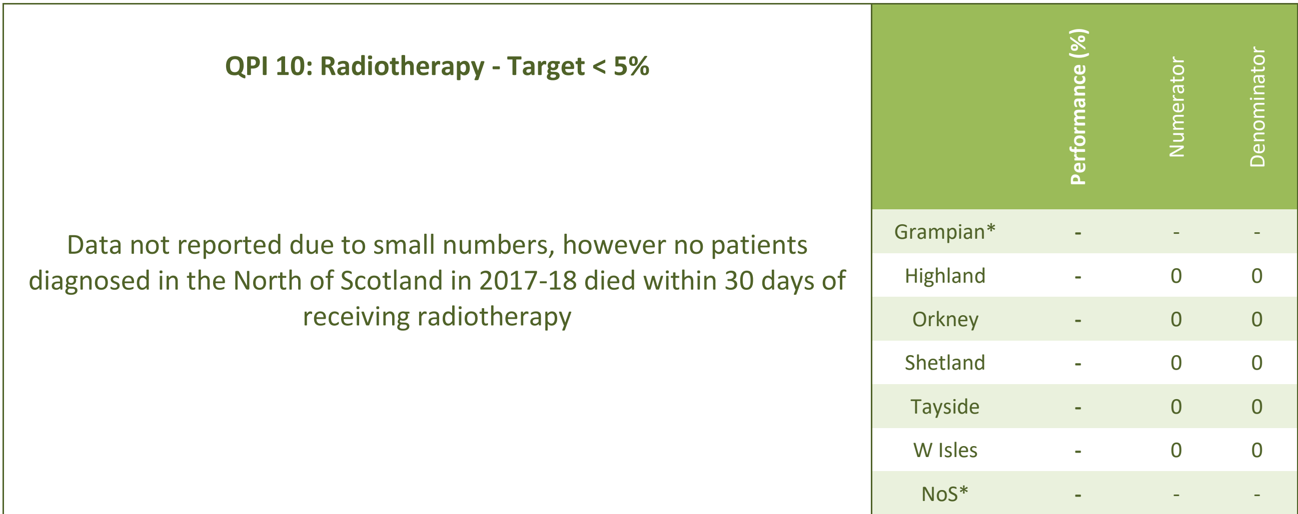
	Performance (%)	Numerator	Denominator
Grampian	**80.0%**	4	5
Highland	-	0	0
Orkney*	-	0	0
Shetland	-	0	0
Tayside	-	0	0
W Isles*	-	0	0
NoS	**80.0%**	**4**	**5**

Clinical Commentary	This QPI is reported two years in arrears. The one patient whose scans fell outwith the acceptable time period had in fact been lost to follow up, and analysis of the QPI data allowed him to be brought back into the surveillance programme
Actions	1. NCUPB to review clinical management guidelines and ensure follow-up for patients on surveillance is embedded in board patient pathways.
Risk Status	Mitigate

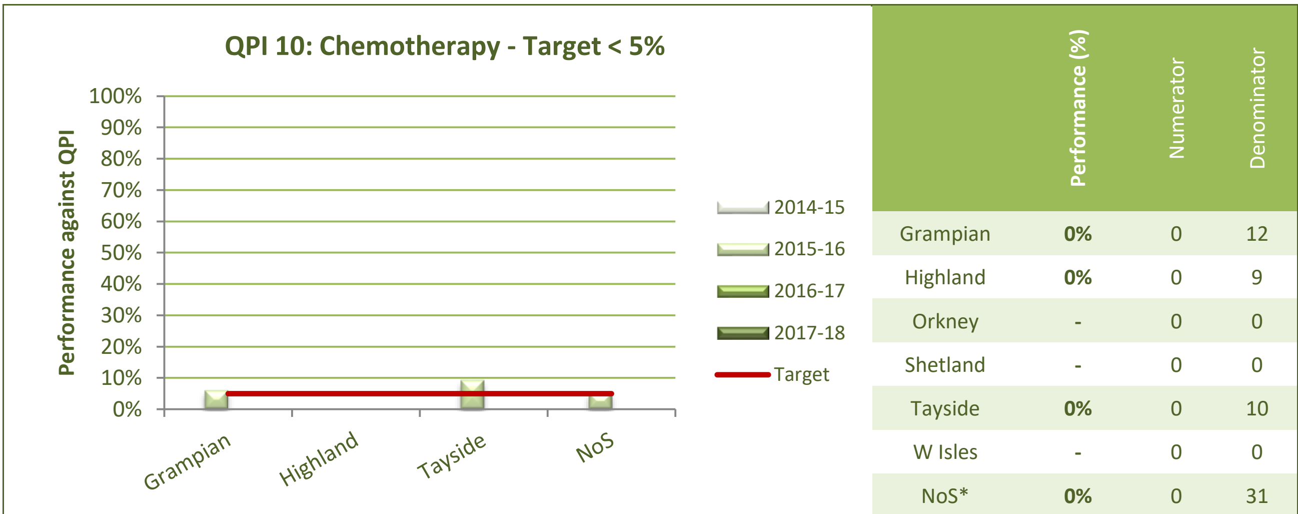
QPI 10	30 Day Mortality
Proportion of patients with testicular cancer who die within 30 days of treatment for testicular cancer.	



	Performance (%)	Numerator	Denominator
Grampian	**0%**	0	18
Highland	**0%**	0	9
Orkney	-	0	0
Shetland	-	0	0
Tayside	**0%**	0	11
W Isles	-	0	0
NoS	**0%**	**0**	**38**



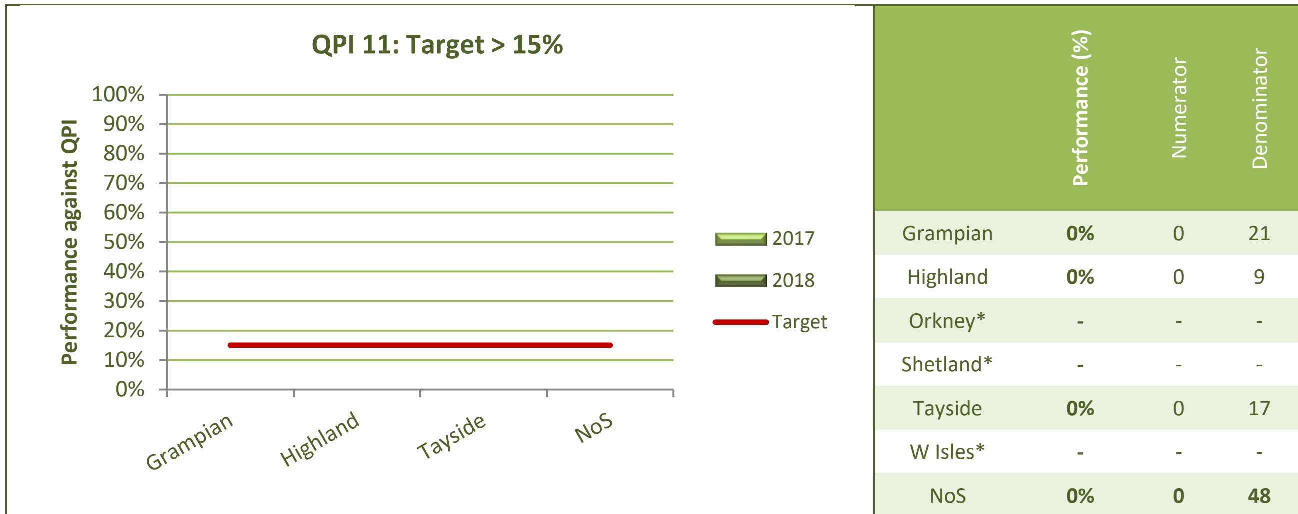
	Performance (%)	Numerator	Denominator
Grampian*	-	-	-
Highland	-	0	0
Orkney	-	0	0
Shetland	-	0	0
Tayside	-	0	0
W Isles	-	0	0
NoS*	-	-	-



	Performance (%)	Numerator	Denominator
Grampian	**0%**	0	12
Highland	**0%**	0	9
Orkney	-	0	0
Shetland	-	0	0
Tayside	**0%**	0	10
W Isles	-	0	0
NoS*	**0%**	0	31

Clinical Commentary	There were no deaths of patients recorded by cancer audit for testicular cancer for patients diagnosed in 2017/18.
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 / translational research. Data reported for patients enrolled in trials in 2018.	



	Performance (%)	Numerator	Denominator
Grampian	**0%**	0	21
Highland	**0%**	0	9
Orkney*	**-**	-	-
Shetland*	**-**	-	-
Tayside	**0%**	0	17
W Isles*	**-**	-	-
NoS	**0%**	**0**	**48**

Clinical Commentary	Recruitment to clinical trials continues to be a challenge across the North of Scotland in all tumour groups. There are very few available clinical trials for testicular cancer open in the UK and none currently open in the North of Scotland. Patients can be referred to the large UK centres where these trials are open to recruitment.
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. 2. NCA to circulate a list of urological cancer trials available in the North of Scotland.
Risk Status	Tolerate

References

1. Information Services Division. Cancer in Scotland, April 2018. http://www.isdscotland.org/Health-Topics/Cancer/Publications/2018-04-24/Cancer_in_Scotland_summary_m.pdf

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

3. Scottish Cancer Taskforce, 2016. Testicular Cancer Clinical Performance Indicators, Version 2.0. Health Improvement Scotland. http://www.healthcareimprovementscotland.org/his/idoc.ashx?docid=c392bf65-de31-4c38-a1c1-b642a45c907c&version=-1

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

5. https://www.nrhcc.scot/uploads/tinymce/NCA/NCA%20Governance/NCA-GOV-QPI-Process-Explained.pdf