Quality Performance Indicators Audit Report

Tumour Area:	Head and Neck Cancer
Patients Diagnosed:	1st April 2017 – 31st March 2018
Published Date:	26th March 2019
Clinical Commentary:	Dr. Rafael Moleron North Cancer Head & Neck Clinical Director

1. Head and Neck Cancer in Scotland

Head and neck cancer is the sixth most common cancer type in Scotland with 1,240 patients diagnosed with the disease in Scotland in 2016 and incidences increasing by 5.2% in the last 10 years[1]. Incidences of head and neck cancer are predicted to continue to increase over the coming years[2].

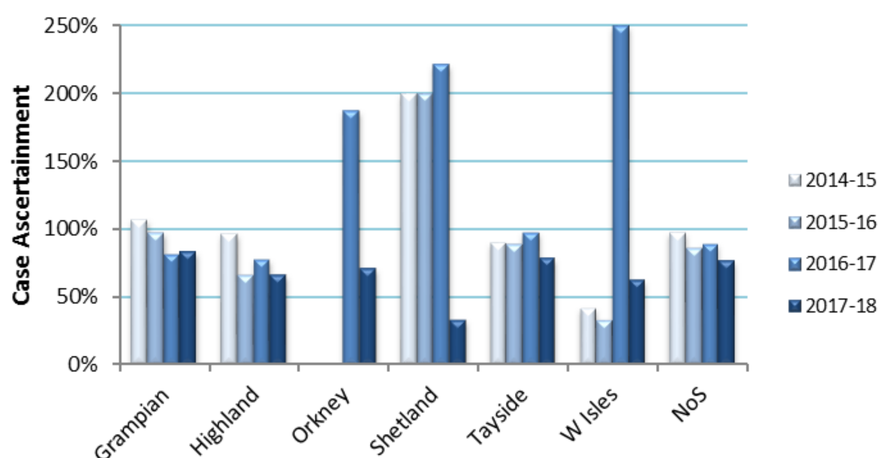
Relative survival from head and neck cancer is also increasing[3]. The table below details the percentage change in 1 and 5 year relative survival for patients diagnosed 1987-1991 to 2007-2011.

Relative age-standardised survival for head and neck cancer in Scotland at 1 year and 5 years showing percentage change from 1987-1991 to 2007-2011[3].

Sex	Relative survival at 1 year (%)		Relative survival at 5 years (%)	
	2007-2011	% change	2007-2011	% change
Male	77.0%	+ 3.2%	53.5%	+ 5.4%
Female	74.3%	+ 1.9%	55.0%	+ 2.3%

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

Between 1st April 2017 and 31st March 2018 a total of 244 cases of head and neck cancer were diagnosed in the North of Scotland and recorded through audit. Overall case ascertainment was fairly low at 77.2%. The head and neck cancer patient pathway is more complex than for many tumour groups, requiring input from many different services. This has resulted in data being required from a wide variety of sources and has presented a particular challenge. This is most notable around QPI 4, smoking cessation, where information on whether or when patients were referred to smoking cessation services is reported not being recorded for over 41% of patients. Similar, but less pronounced recording issues can be seen for nutritional screening and oral screening while the absence of information on operation intent has also affected the results of some QPIs. However overall, QPI calculations based on data captured are considered to be representative of patients diagnosed with head and neck cancer during the audit period.

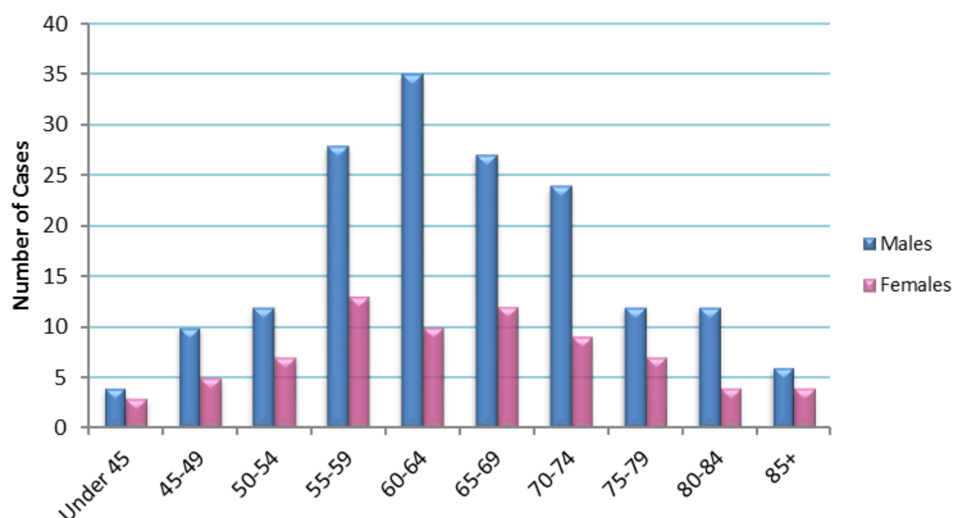


Case ascertainment by NHS Board for patients diagnosed with head and neck cancer in 2014-2018.

	Grampian	Highland	Orkney	Shetland	Tayside	W Isles	NoS
No. of Patients 2017-18	101	50	1	1	88	3	**244**
% of NoS total	41.4%	20.5%	0.4%	0.4%	36.1%	1.2%	**100%**
Mean ISD Cases 2012-16	120	75	1	3	112	5	**316**
% Case ascertainment 2017-18	84.0%	66.7%	71.4%	33.3%	78.7%	62.5%	**77.2%**

3. Age Distribution

The figure below shows the age distribution of patients diagnosed with head and neck cancer in the North of Scotland in 2017-18, with numbers highest in the 60-64 years age bracket.



Age distribution of patients diagnosed with head and neck cancer in North of Scotland 2017-18.

4. Performance against Quality Performance Indicators (QPIs)

Definitions for the QPIs reported in this section are published by Health Improvement Scotland[4], while further information on datasets and measurability used are available from Information Services Division[5]. Data for most QPIs are presented by Board of diagnosis; however QPI 8, relating to surgical margins, and QPI 11, surgical mortality, are presented by NHS Board of Surgery. Further the QPI on clinical trials and research access is reported by patients NHS Board of residence. 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:

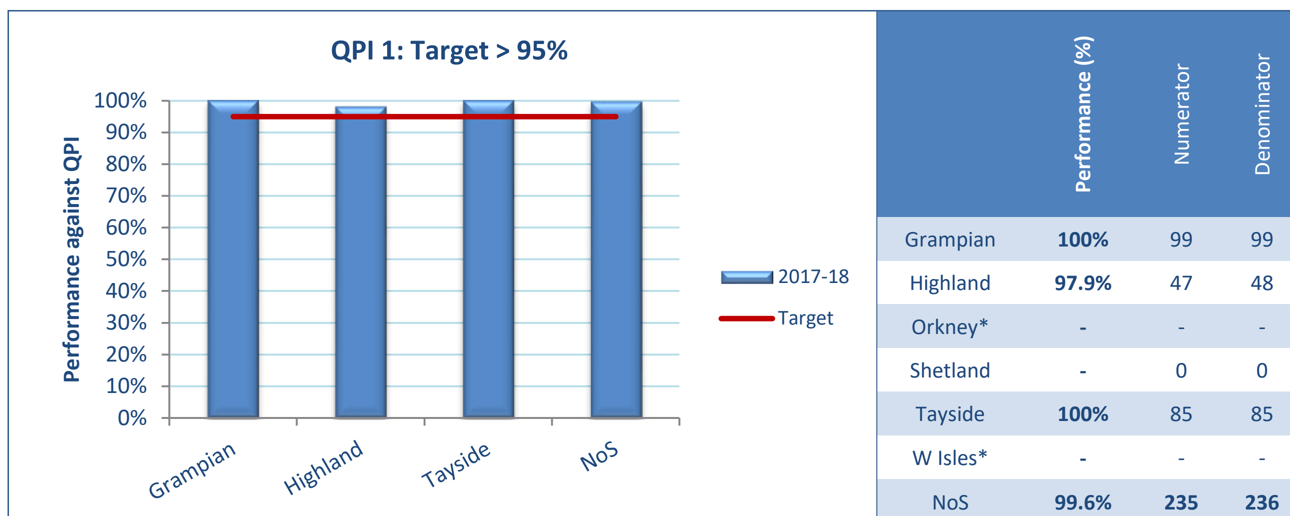
- Ensuring accountability for quality and required standards
- Investigating and taking action on sub-standard performance
- Identifying, sharing and ensuring delivery of best-practice
- Identifying and managing risks to ensure quality of care
- Driving continuous improvement

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[6].

QPI 1	Pathological Diagnosis of Head and Neck Cancer
Proportion of patients with head and neck cancer who have a cytological or histological diagnosis before treatment.	



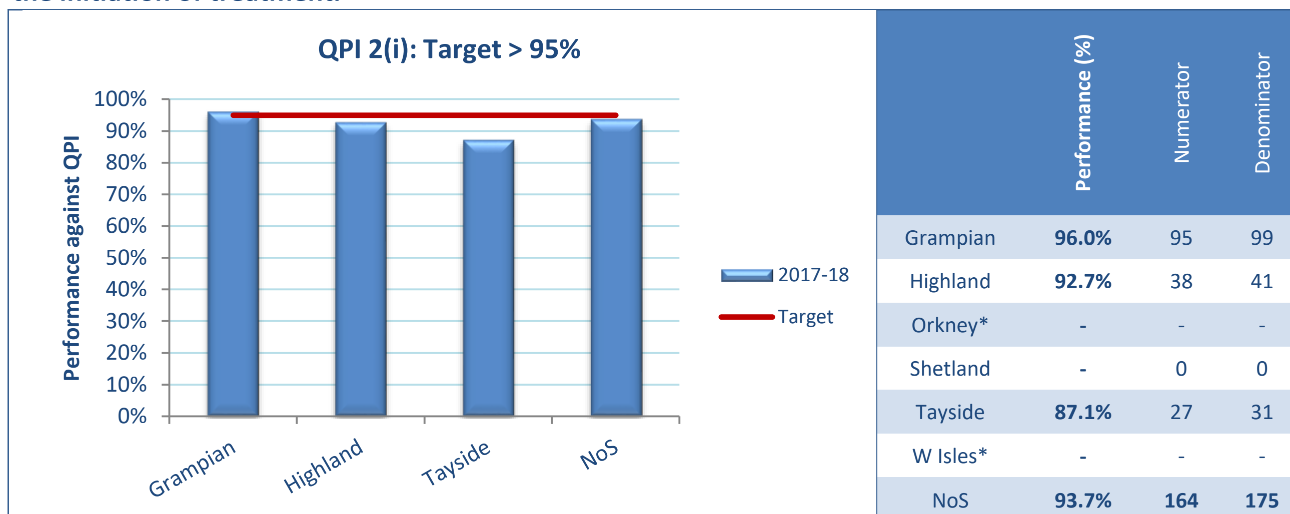
	Performance (%)	Numerator	Denominator
Grampian	**100%**	99	99
Highland	**97.9%**	47	48
Orkney*	-	-	-
Shetland	-	0	0
Tayside	**100%**	85	85
W Isles*	-	-	-
NoS	**99.6%**	**235**	**236**

*Where the number of cases per Board is between one and four, this is excluded from charts and tables to minimise the risk of disclosure. However, these excluded Board numbers are included within the total for the North of Scotland.

Clinical Commentary	This QPI continues to be met across the North of Scotland.
Actions	No action required
Risk Status	Tolerate

QPI 2	Imaging
Proportion of patients with head and neck cancer who undergo CT and/or MRI of the primary site and draining lymph nodes with CT of the chest before the initiation of treatment and where the report is available within 2 weeks of the final imaging procedure.	

Specification (i) Patients with head and neck cancer who are evaluated with appropriate imaging before the initiation of treatment.



	Performance (%)	Numerator	Denominator
Grampian	**96.0%**	95	99
Highland	**92.7%**	38	41
Orkney*	-	-	-
Shetland	-	0	0
Tayside	**87.1%**	27	31
W Isles*	-	-	-
NoS	**93.7%**	**164**	**175**

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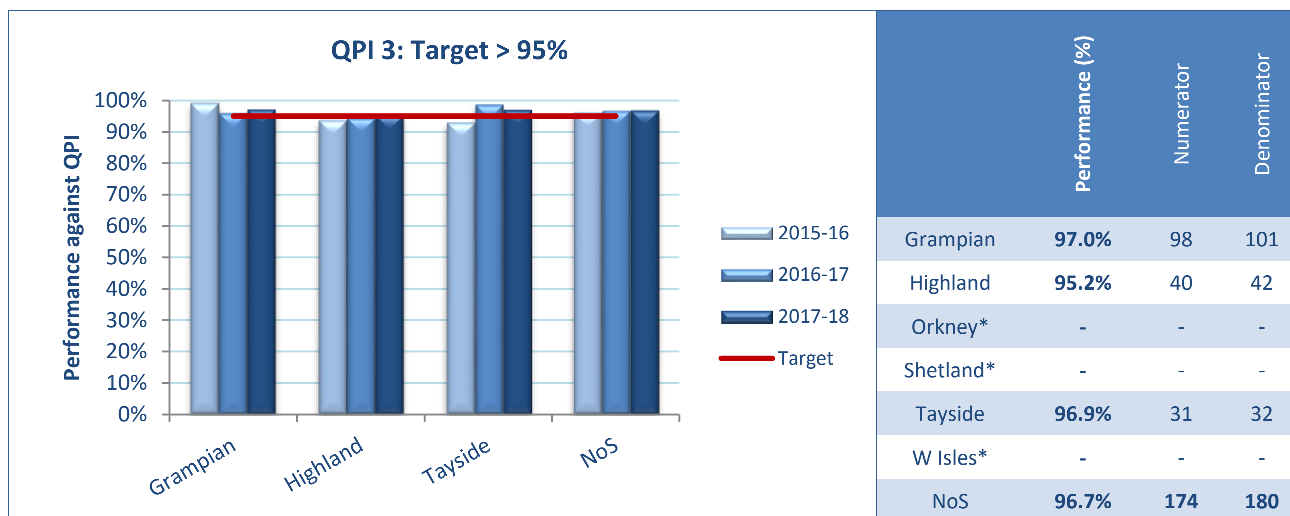
Specification (ii) Patients with head and neck cancer who are evaluated with appropriate imaging before the initiation of treatment where the report is available within 2 weeks of the final imaging procedure – this new specification cannot be reported until 2018-19 as the necessary data was not collected for patients diagnosed in 2017-18.

Clinical Commentary	There were a small number of patients in the North region who did not receive clinical imaging prior to treatment. All Head & Neck cancer patients should receive appropriate imaging before the initiation of treatment and aid with the appropriate TNM staging of disease.
Actions	1. Through the NCHNPB, clinicians are reminded that patients should undergo a CT and/or MRI prior to initiation of treatment. 2. NHS Tayside have changed practice so T1 disease patients undergo a CT and/or MRI prior to initiation of treatment. This will be reflected in the revised clinical management guidelines (CMGs) being produced by the NCHNPB.
Risk Status	Mitigate

QPI 3	Multi-Disciplinary Team Meeting (MDT)
Proportion of patients with head and neck cancer who are discussed at a MDT meeting before definitive treatment.	



	Performance (%)	Numerator	Denominator
Grampian	**97.0%**	98	101
Highland	**95.2%**	40	42
Orkney*	**-**	-	-
Shetland*	**-**	-	-
Tayside	**96.9%**	31	32
W Isles*	**-**	-	-
NoS	**96.7%**	**174**	**180**

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Clinical Commentary	Performance in this QPI across the North of Scotland remains high.
Actions	No action required
Risk Status	Tolerate

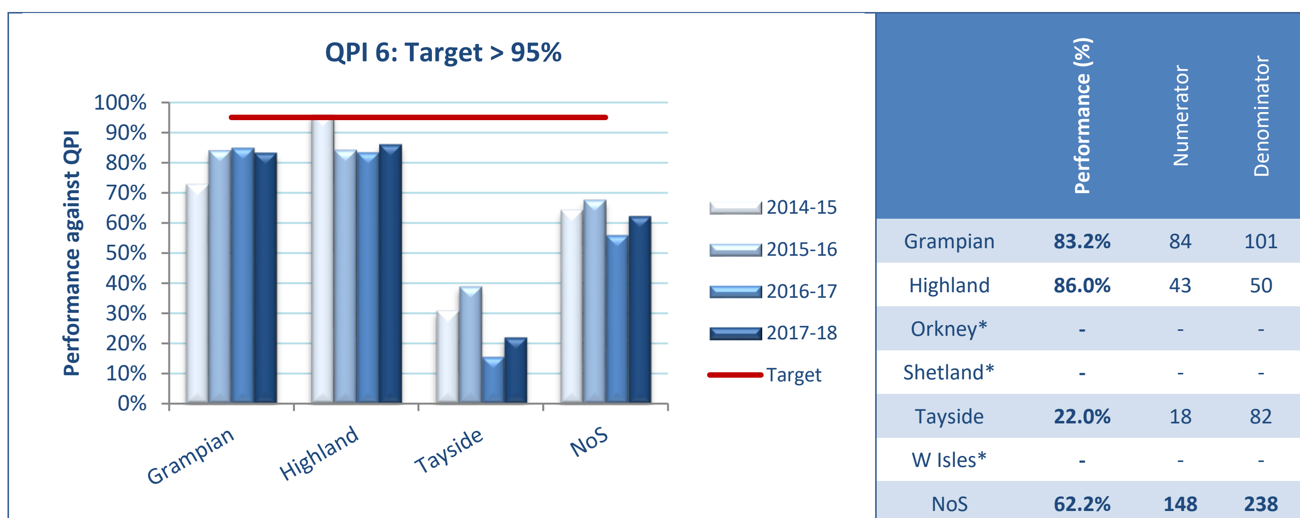
QPI 4	Smoking Cessation
Proportion of patients with head and neck cancer who smoke who are offered referral to smoking cessation before first treatment.	

This QPI was changed significantly through the Formal Review of Head and Neck Cancer QPIs in 2018. Data required to report this revised standard has not been collected for patients diagnosed in 2017-2018 and therefore it is not possible to report performance against this target here. Results will be reported for patients diagnosed in 2018-2019.

QPI 5	Oral and Dental Rehabilitation Plan
Proportion of patients with head and neck cancer deemed in need of an oral and dental rehabilitation plan who have an assessment before initiation of treatment.	

This QPI was changed significantly through the Formal Review of Head and Neck Cancer QPIs in 2018. Data required to report this revised standard has not been collected for patients diagnosed in 2017-2018 and therefore it is not possible to report performance against this target here. Results will be reported for patients diagnosed in 2018-2019.

QPI 6	Nutritional Screening
Patients with head and neck cancer should undergo MUST nutritional screening before first treatment.	



	Performance (%)	Numerator	Denominator
Grampian	**83.2%**	84	101
Highland	**86.0%**	43	50
Orkney*	-	-	-
Shetland*	-	-	-
Tayside	**22.0%**	18	82
W Isles*	-	-	-
NoS	**62.2%**	**148**	**238**

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Clinical Commentary	The requirement for MUST screening will be embedded in the regional Head & Neck Cancer Pathway, including in the revised Clinical Management Guidelines, and practice across the North to ensure this is done before treatment. The development of a process to capture this information should improve the QPI results across the region.
Actions	1. NCHNPB to develop a paper proforma to record details of pre-treatment MUST assessment that follows the patient around the Pathway. 2. NHS Tayside have improved data collection methods for this QPI, ensuring MUST assessment is recorded electronically at Head & Neck MDT. 3. NCA, on behalf of the NCCLG, to write to each board's Medical Director to raise awareness of this issue and encourage appropriate oversight in complying with this QPI. 4. NCCLG to monitor performance of this QPI until actions complete, at which point the risk can be deescalated.
Risk Status	Escalate

QPI 7	Specialist Speech and Language Therapist Access
Proportion of patients with oral, pharyngeal or laryngeal cancer undergoing treatment with curative intent who are seen by a Specialist SLT before treatment.	

	Performance (%)	Numerator	Denominator
Grampian	**71.4%**	60	84
Highland	**10.3%**	4	39
Orkney*	-	-	-
Shetland	-	0	0
Tayside	**66.7%**	30	45
W Isles*	-	-	-
NoS	**56.4%**	**97**	**172**

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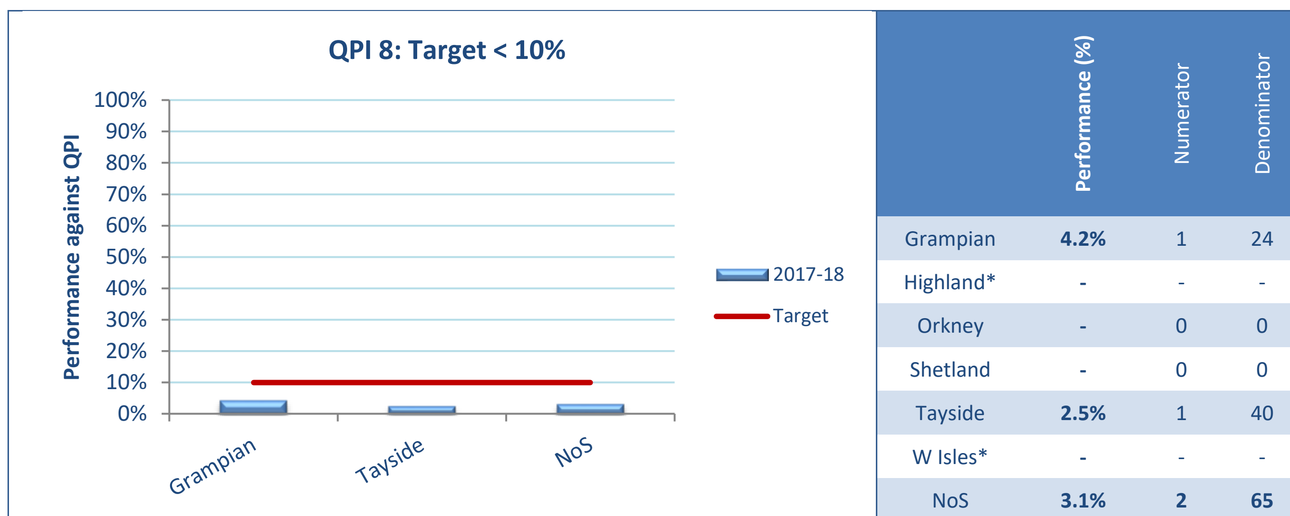
Clinical Commentary	Continuing issue across the North region is Speech and Language Therapist resource. Building on Grampian's actions, development of a paper proforma will help the North region better record engagement with SLT specialist prior to treatment.
Actions	1. NCHNPB to develop a paper proforma to record details of pre-treatment Speech & Language Therapist access that follows the patient around the pathway. 2. NHS Highland and NHS Tayside to improve patient pathways and data collection for Highland patients who have treatment in Tayside to ensure access to specialist SLT is recorded and available to Highland audit staff. 3. Through the Case for Change Surgery, NCHNPB to document workforce size in the North of Scotland against capacity to deliver Head & Neck services. 4. NCCLG to monitor performance of this QPI and assess risk in subsequent years of reporting and escalate as required if target continues to be missed.
Risk Status	Mitigate

QPI 8	Surgical Margins
Proportion of patients with squamous cell carcinoma of the oral cavity, larynx or pharynx with final excision margins of less than 1mm after open surgical resection with curative intent.	



	Performance (%)	Numerator	Denominator
Grampian	**4.2%**	1	24
Highland*	-	-	-
Orkney	-	0	0
Shetland	-	0	0
Tayside	**2.5%**	1	40
W Isles*	-	-	-
NoS	**3.1%**	**2**	**65**

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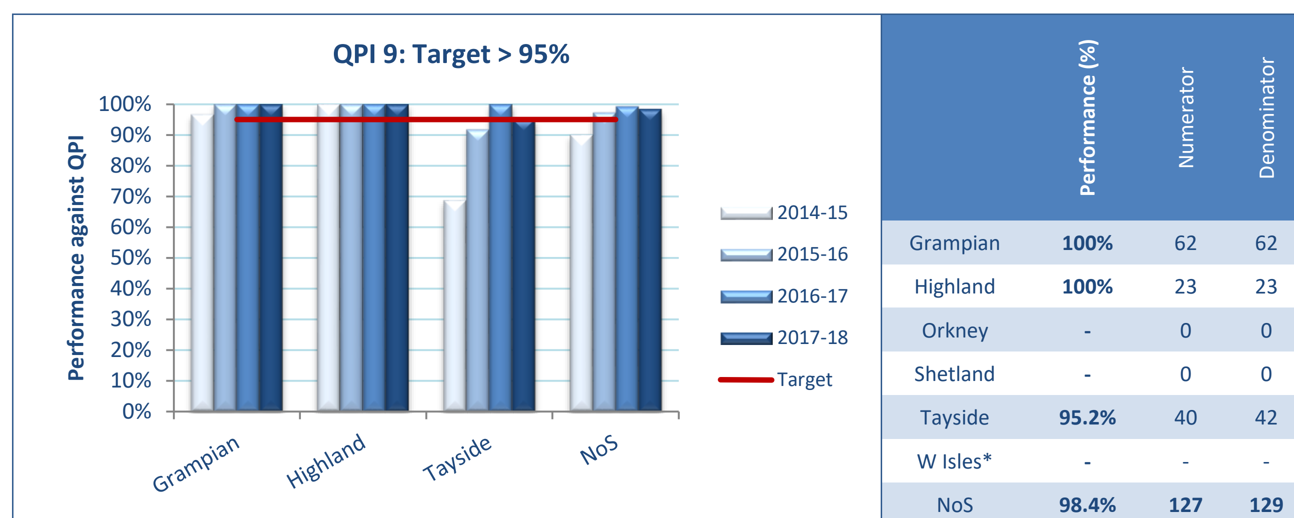
Clinical Commentary	Performance has improved in this QPI due to a change in definition, removing patients who would never meet this QPI due to nature of disease. The adjustment in this benchmark now shows that we are meeting these high standards of care for most patients in the North of Scotland.
Actions	No action required
Risk Status	Tolerate

QPI 9	Intensity Modulated Radiotherapy (IMRT)
Proportion of patients with head and neck cancer undergoing radiotherapy who receive IMRT.	



	Performance (%)	Numerator	Denominator
Grampian	**100%**	62	62
Highland	**100%**	23	23
Orkney	-	0	0
Shetland	-	0	0
Tayside	**95.2%**	40	42
W Isles*	-	-	-
NoS	**98.4%**	**127**	**129**

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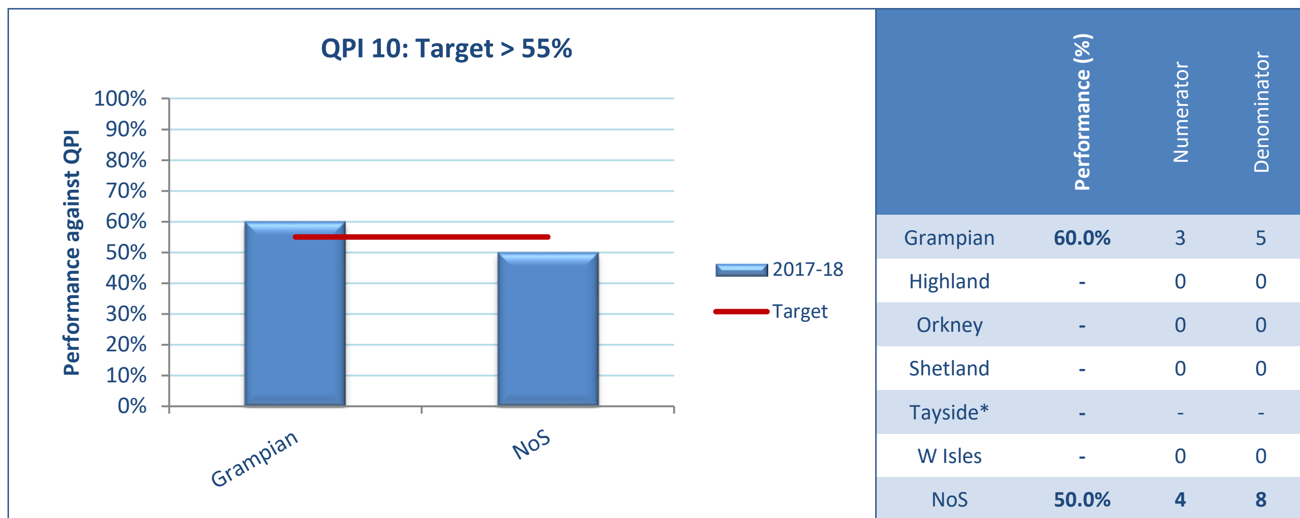
Clinical Commentary	IMRT is the treatment of choice where radiotherapy is required in the North of Scotland – performance in the North has improved in recent years.
Actions	No action required
Risk Status	Tolerate

QPI 10	Post Operative Chemotherapy
Proportion of patients with squamous cell carcinoma of the oral cavity, larynx or pharynx with nodal extracapsular spread and/or involved margins (<1mm) following surgical resection who receive chemoradiation.	



	Performance (%)	Numerator	Denominator
Grampian	**60.0%**	3	5
Highland	-	0	0
Orkney	-	0	0
Shetland	-	0	0
Tayside*	-	-	-
W Isles	-	0	0
NoS	**50.0%**	**4**	**8**

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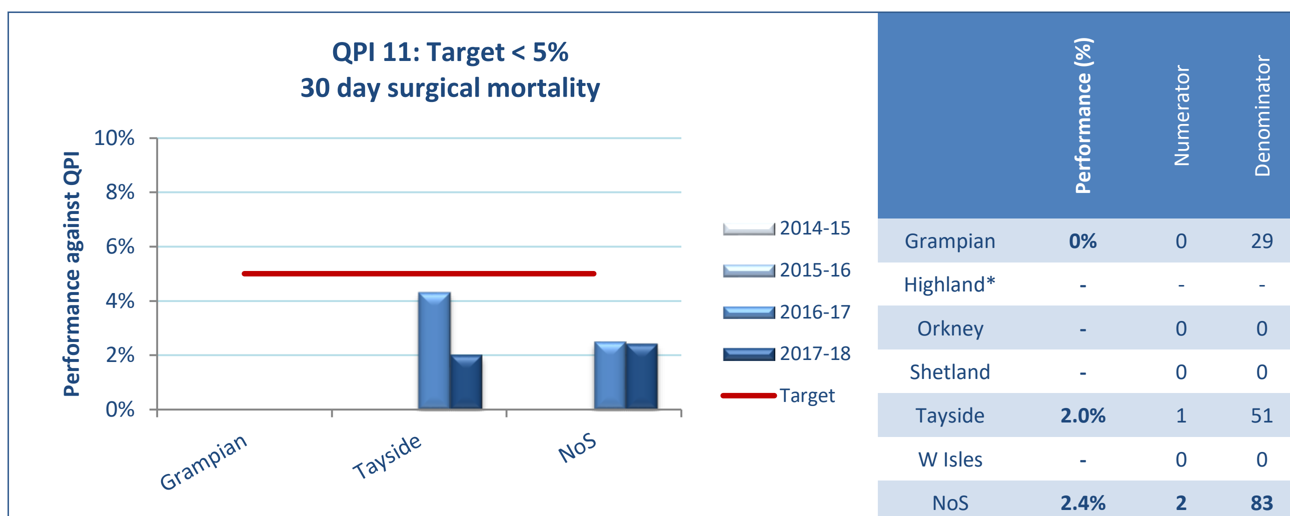
Clinical Commentary	Performance has improved against the new benchmark target, however this QPI involves small numbers of patients overall.
Actions	No action required
Risk Status	Tolerate

QPI 11	30 and 90 Day Mortality
Proportion of patients with head and neck cancer who die within 30 or 90 days of curative treatment.	



	Performance (%)	Numerator	Denominator
Grampian	**0%**	0	29
Highland*	-	-	-
Orkney	-	0	0
Shetland	-	0	0
Tayside	**2.0%**	1	51
W Isles	-	0	0
NoS	**2.4%**	**2**	**83**

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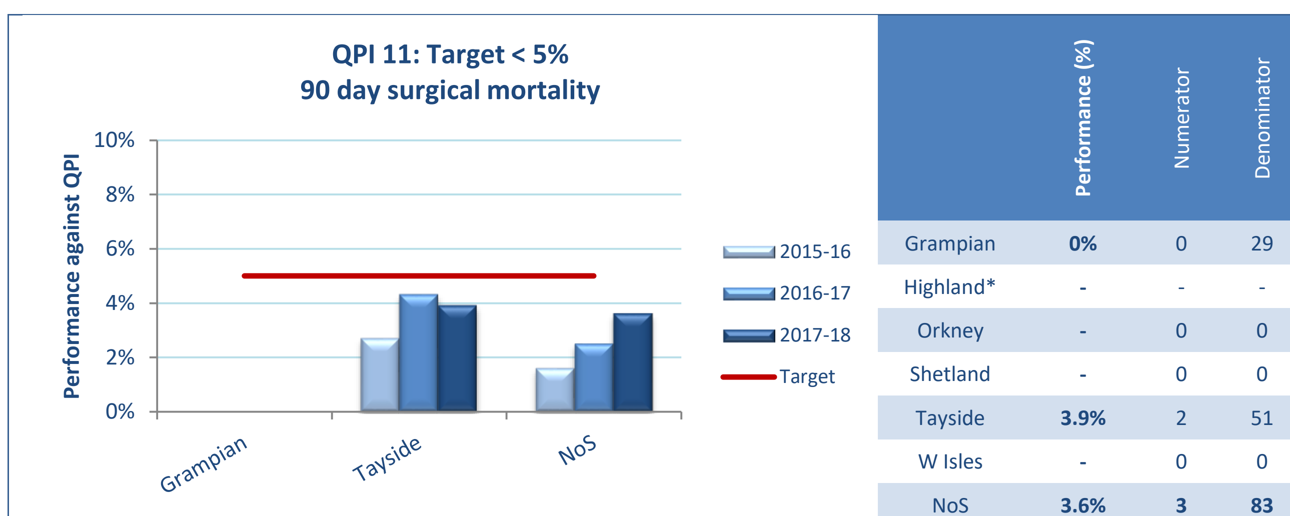

	Performance (%)	Numerator	Denominator
Grampian	**0%**	0	29
Highland*	-	-	-
Orkney	-	0	0
Shetland	-	0	0
Tayside	**3.9%**	2	51
W Isles	-	0	0
NoS	**3.6%**	**3**	**83**

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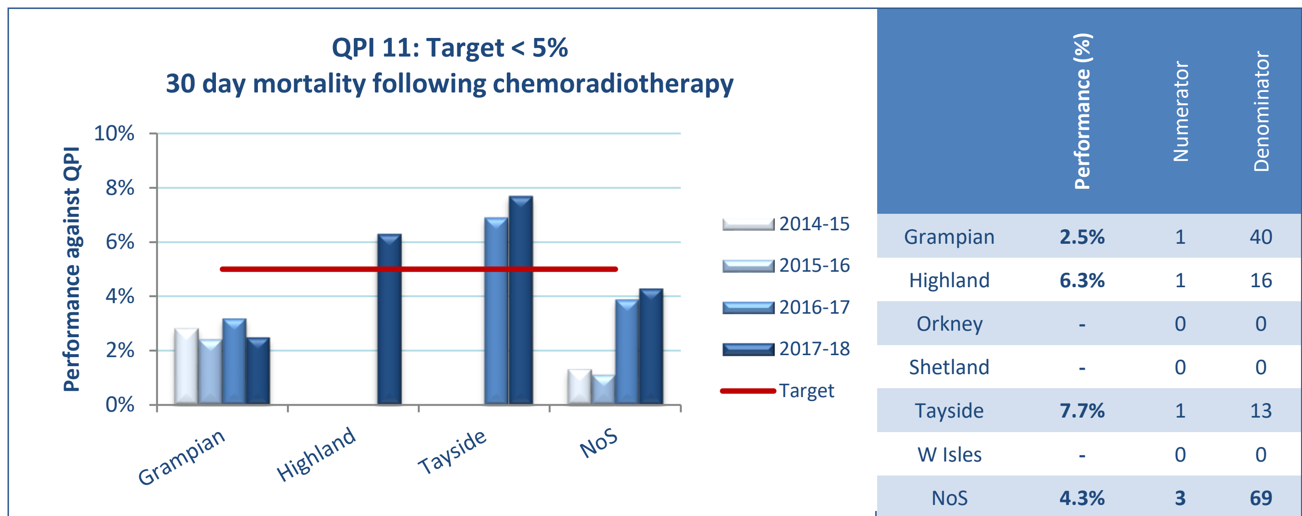
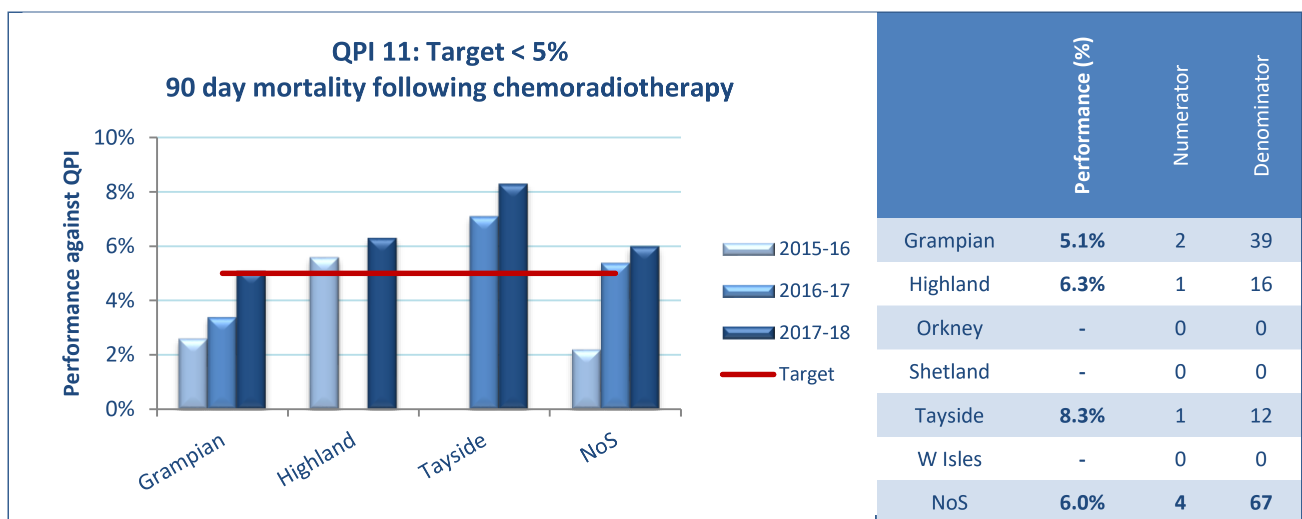
QPI 11: Target < 5%
30 and 90 Day Mortality following Radical Radiotherapy

No graph provided as mortality was 0%

	Performance (%)	Numerator	Denominator
Grampian	**0%**	0	21
Highland	**0%**	0	14
Orkney	-	0	0
Shetland	-	0	0
Tayside	**0%**	0	19
W Isles	-	0	0
NoS	**0%**	**0**	**54**



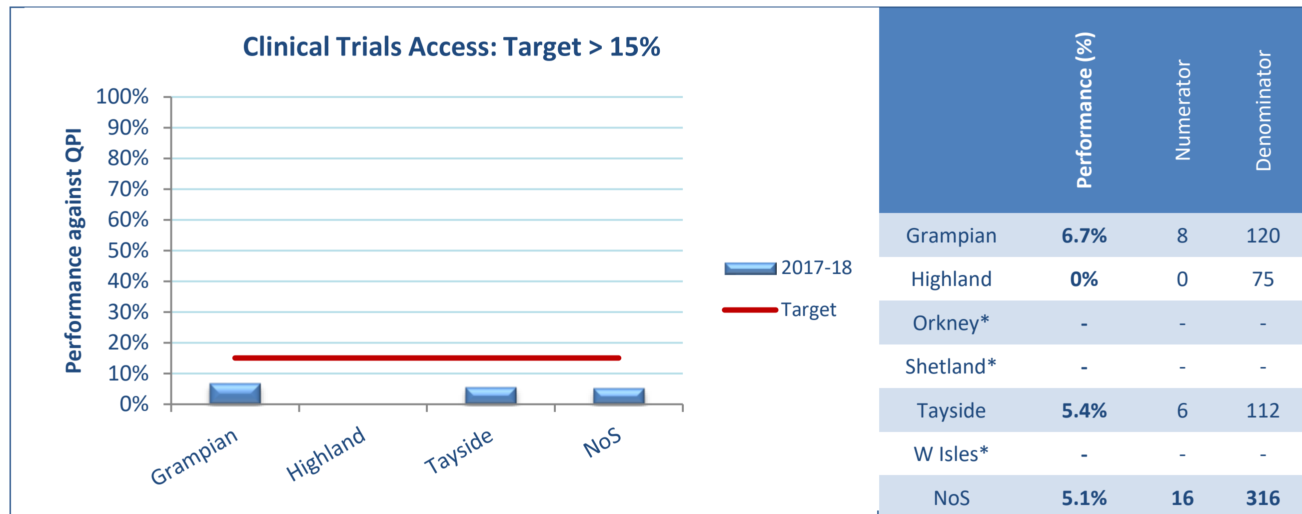
	Performance (%)	Numerator	Denominator
Grampian	**2.5%**	1	40
Highland	**6.3%**	1	16
Orkney	**-**	0	0
Shetland	**-**	0	0
Tayside	**7.7%**	1	13
W Isles	**-**	0	0
NoS	**4.3%**	**3**	**69**



	Performance (%)	Numerator	Denominator
Grampian	**5.1%**	2	39
Highland	**6.3%**	1	16
Orkney	**-**	0	0
Shetland	**-**	0	0
Tayside	**8.3%**	1	12
W Isles	**-**	0	0
NoS	**6.0%**	**4**	**67**

Clinical Commentary	This QPI includes small numbers with one target missed for 90-day mortality following chemoradiotherapy.
Actions	1. Development of NCHNPB work plan as part of the Surgery Case for Change to ensure an equitable and sustainable service in the North that improves survival from cancer. 2. NCCLG to be provided with confirmation of mortality reviews being undertaken by the NCHNPB. Once confirmation provided, this risk can be de-escalated.
Risk Status	Escalate

Clinical Trial and Research Study Access QPI
Proportion of patients with head and neck cancer who are consented for a clinical trial / translational research. Data reported for patients enrolled in 2017.



	Performance (%)	Numerator	Denominator
Grampian	**6.7%**	8	120
Highland	**0%**	0	75
Orkney*	**-**	-	-
Shetland*	**-**	-	-
Tayside	**5.4%**	6	112
W Isles*	**-**	-	-
NoS	**5.1%**	**16**	**316**

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Clinical Commentary	Continuing to recruit more patients into open clinical trials, and ensuring these are registered in the EDGE database for data collection purposes. This remains a challenging QPI across all tumour sites.
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. Communication about available trials to be improved through the NCHNPB.
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. Information Services Division. Cancer Incidence Projections for Scotland 2013-2017. August 2015. Available at: http://www.isdscotland.scot.nhs.uk/Health-Topics/Cancer/Cancer-Statistics/Incidence-Projections/

3. 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

4. Scottish Cancer Taskforce, 2018. Head and Neck Cancer Clinical Performance Indicators, Version 3.0. Health Improvement Scotland. http://www.healthcareimprovementscotland.org/his/idoc.ashx?docid=f04d14f5-b832-4d92-ba4e-1c5493c49a02&version=-1

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

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

Appendix 1: Clinical Trials and Research studies for head and neck cancer open to recruitment in the North of Scotland in 2017

Trial	Principle Investigator	Patients consented
CheckMate 714	Rafael Moleron (NHS Grampian)	yes
CompARE Trial	Rafael Moleron (NHS Grampian)	yes
Head & Neck 5000 Follow Up Study	Richard Casasola (NHS Tayside)	yes
Javelin Head and Neck	Rafael Moleron (NHS Grampian)	no
Patritumab in Head and Neck	Rafael Moleron (NHS Grampian)	no