Quality Performance Indicators Audit Report

Tumour Area:	Head and Neck Cancer
Patients Diagnosed:	1st April 2018 – 31st March 2019
Published Date:	11th January 2021
Clinical Commentary:	Summary of comments submitted by boards

1. Head and Neck Cancer in Scotland

Head and neck cancer is the fifth most common cancer type in Scotland with 1,270 patients diagnosed with the disease in Scotland in 2017 and incidences increasing by 3.2% in the last 10 years[1]. Incidences of head and neck cancer are predicted to continue to increase over the coming years[2].

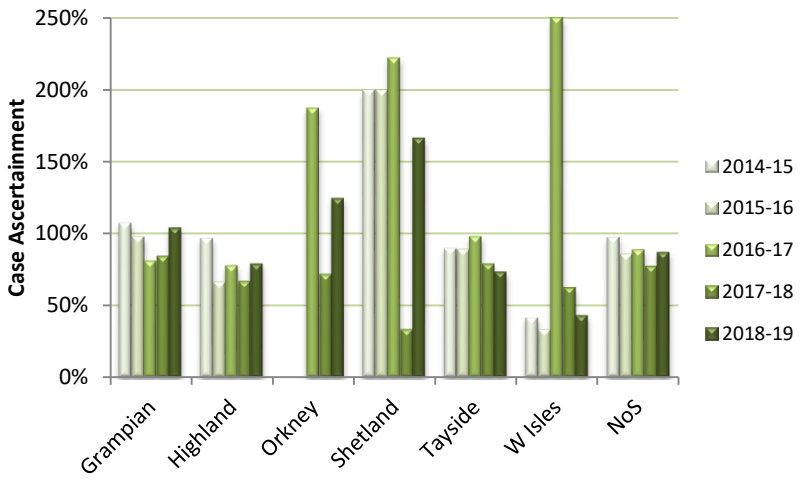
Relative survival from head and neck cancer is also increasing[3]. The table below details the percentage change in 1 and 5 year relative survival for patients diagnosed 1987-1991 to 2007-2011.

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 2018 and 31st March 2019 a total of 272 cases of head and neck cancer were diagnosed in the North of Scotland and recorded through audit. Overall case ascertainment was 87.5%. 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 offered referral to smoking cessation services is reported not being recorded for over 30% of patients. Similar, but less pronounced recording issues can be seen for nutritional screening and whether oral assessment is required. 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.

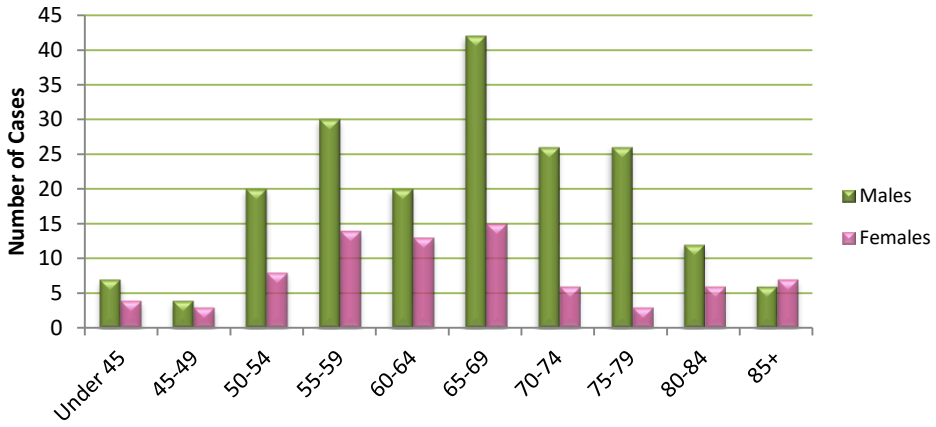


Case ascertainment by NHS Board for patients diagnosed with head and neck cancer in 2014-2019.

	Grampian	Highland	Orkney	Shetland	Tayside	W Isles	NoS
No. of Patients 2018-19	123	58	2	5	82	2	**272**
% of NoS total	45.2%	21.3%	0.7%	1.8%	30.1%	0.7%	**100%**
Mean ISD Cases 2013-17	118	73	2	3	111	5	**311**
% Case ascertainment 2018-19	104.4%	79.5%	125.0%	166.7%	74.0%	43.5%	**87.5%**

3. Age Distribution

The figure below shows the age distribution of patients diagnosed with head and neck cancer in the North of Scotland in 2018-19, with numbers highest in the 65-69 years age bracket.



Age distribution of patients diagnosed with head and neck cancer in North of Scotland 2018-19.

4. Performance against Quality Performance Indicators (QPIs)

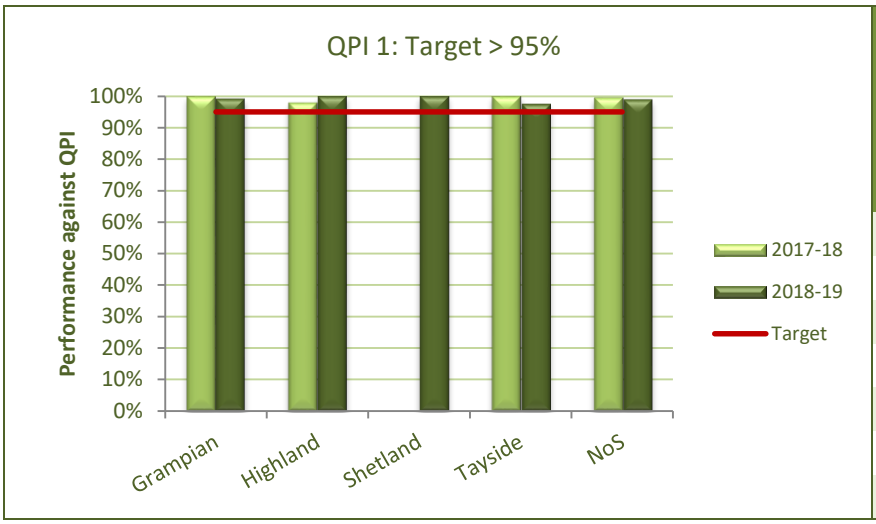
Definitions for the QPIs reported in this section are published by Health Improvement Scotland[4], while further information on datasets and measurability used are available from Public Health Scotland[5]. Data for most QPIs are presented by Board of diagnosis; however QPI 8, relating to surgical margins, 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

QPI performance is overseen by the North Cancer Alliance and its constituent groups, with an assessment of clinical risk and action planning undertaken collaboratively and reporting at board and regional level. Actions will be overseen by the Pathway Boards and reported concurrently into the NCA governance groups and the Clinical Governance committees at each North of Scotland health boards.

Further information is available **here.**

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.	



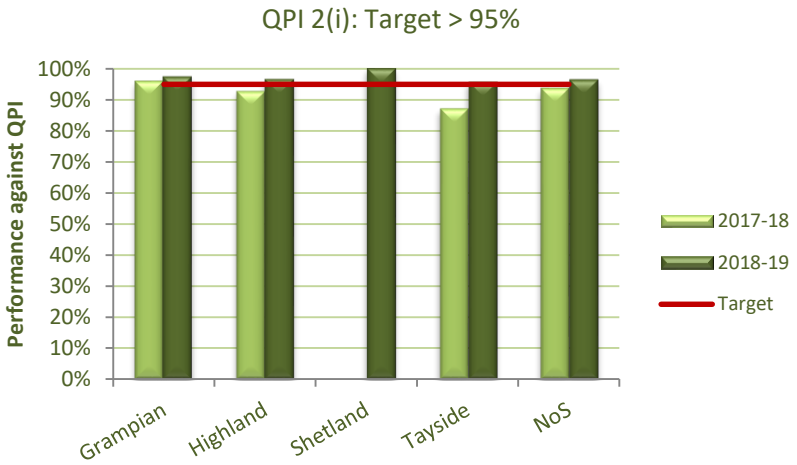
	Performance (%)	Numerator	Denominator
Grampian	**99.1%**	115	116
Highland	**100%**	58	58
Orkney*	-	-	-
Shetland	**100%**	5	5
Tayside	**97.5%**	77	79
W Isles*	-	-	-
NoS	**98.9%**	**259**	**262**

*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	The North of Scotland continues to meet this QPI with 98.9% of patients having a cytological or histological diagnosis before treatment.
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	**97.4%**	113	116
Highland	**96.5%**	55	57
Orkney*	-	-	-
Shetland	**100%**	5	5
Tayside	**95.6%**	65	68
W Isles*	-	-	-
NoS	**96.4%**	**241**	**250**

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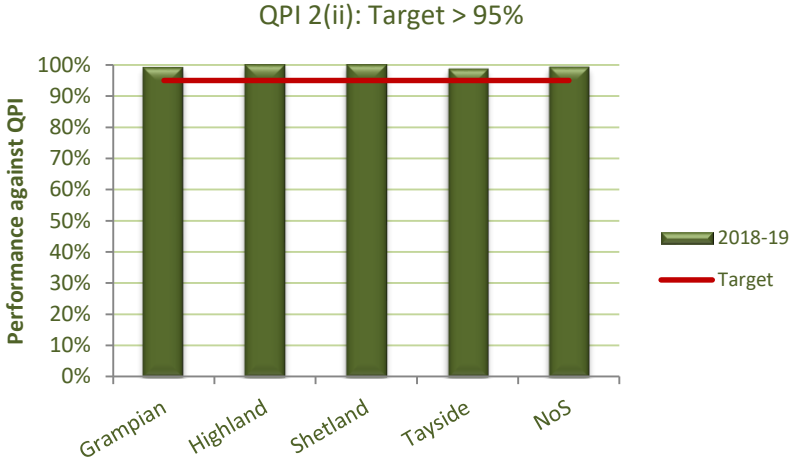
Specification (ii) Patients with head and neck cancer who are evaluated with appropriate imaging before the initiation of treatment where the report is available within 2 weeks of the final imaging procedure

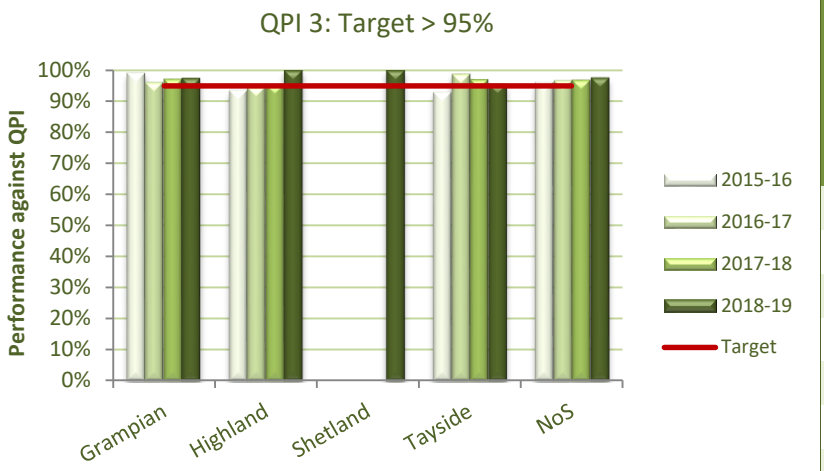


	Performance (%)	Numerator	Denominator
Grampian	**99.1%**	112	113
Highland	**100%**	55	55
Orkney*	-	-	-
Shetland	**100%**	5	5
Tayside	**98.5%**	64	65
W Isles*	-	-	-
NoS	**99.2%**	**239**	**241**

*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	Pathway changes within NHS Tayside have improved performance so that the North of Scotland now meets these QPI targets to ensure the use of imaging for diagnosis of Head & Neck cancer.
Actions	No action required
Risk Status	Tolerate

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.	

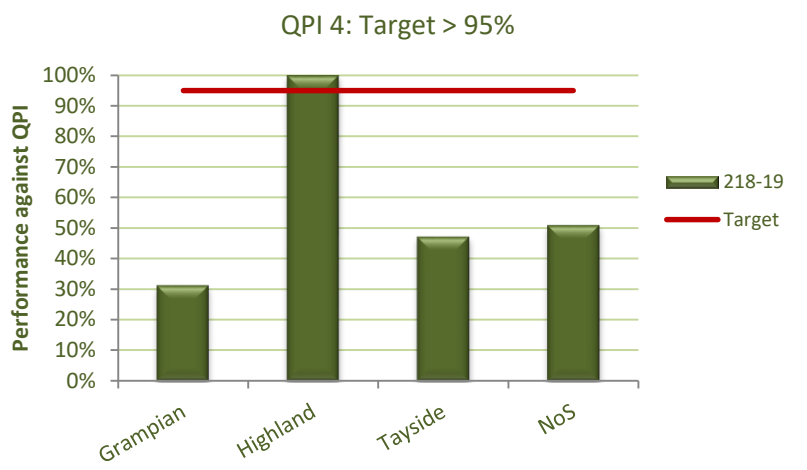


	Performance (%)	Numerator	Denominator
Grampian	**97.5%**	119	122
Highland	**100%**	57	57
Orkney*	-	-	-
Shetland	**100%**	5	5
Tayside	**95.5%**	64	67
W Isles*	-	-	-
NoS	**97.6%**	**249**	**255**

*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	The North of Scotland continues to meet this QPI target with increased performance for patients diagnosed in 2018/19 cohort.
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.	

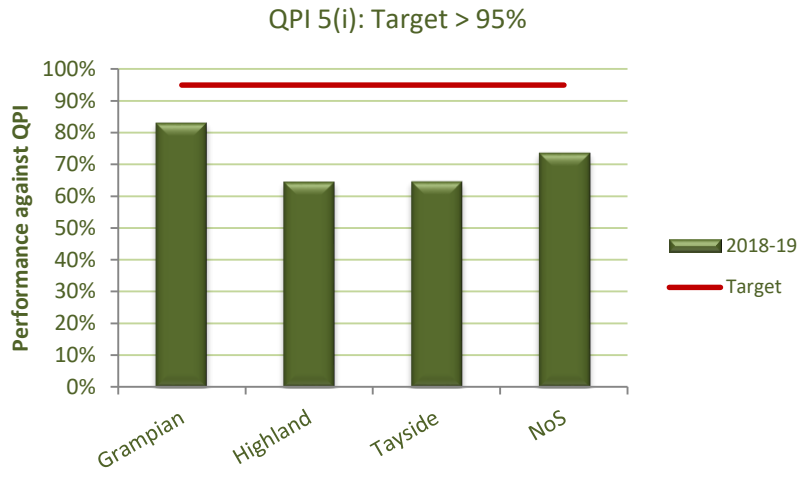


	Performance (%)	Numerator	Denominator
Grampian	**31.4%**	16	51
Highland	**100%**	21	21
Orkney*	-	-	-
Shetland	-	0	0
Tayside	**47.4%**	9	19
W Isles	-	0	0
NoS	**51.1%**	**47**	**92**

Clinical Commentary	There continue to be significant challenges in collecting this data. This new QPI definition attempts to record the number of patients offered referral to smoking cessation services. In practice, all patients who smoke are offered this within the outpatient clinic however data recording of this is not sufficient for audit purposes; often it is not recorded, or recorded in patient notes that are not accessible to audit staff. The NCA Head & Neck Pathway Board have discussed this issue and believe that all patients who smoke are offered referral to smoking cessation before first treatment; however this is not a documented conversation and pathway improvements are required to ensure this can be recorded. *[Audit Note – for 37% of patients this information was not recorded, largely in NHS Grampian (67% not recorded)– which would likely result in performance being underestimated]*
Actions	1. NCA Head & Neck Pathway Board to consider pathway improvements to ensure data recording to record the offering of smoking cessation services to patients. 2. NCA Head & Neck Pathway Board to learn from experience of NHS Highland who achieve 100% in this QPI. 3. NCA to escalate this issue to individual boards for consideration of actions required for improvement.
Risk Status	Escalate

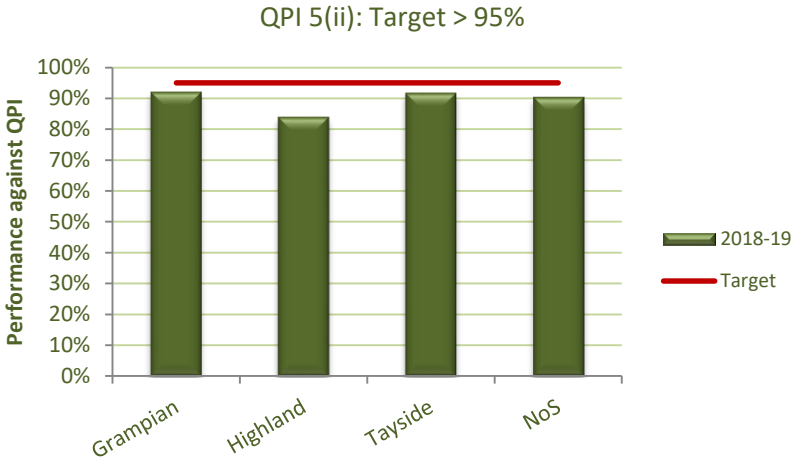
QPI 5	Oral and Dental Rehabilitation Plan
Proportion of patients with head and neck cancer deemed in need of an oral and dental rehabilitation plan who have an assessment before initiation of treatment.	

Specification (i) Patients in whom the decision for requiring pre-treatment assessment has been made jointly by Consultants in Restorative Dentistry and the MDT



	Performance (%)	Numerator	Denominator
Grampian	**83.0%**	88	106
Highland	**64.6%**	31	48
Orkney*	-	-	-
Shetland*	-	-	-
Tayside	**64.7%**	33	51
W Isles*	-	-	-
NoS	**73.7%**	**157**	**213**

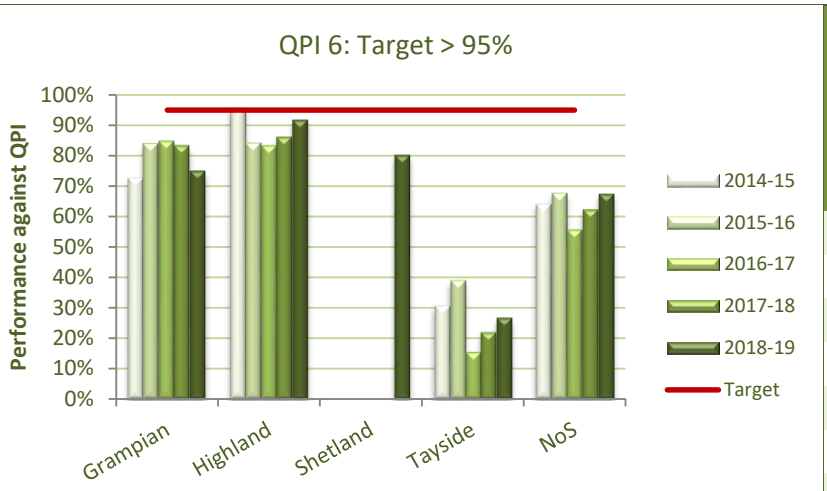
Specification (ii) Patients who require pre-treatment assessment that have this carried out before initiation of treatment.



	Performance (%)	Numerator	Denominator
Grampian	**92.0%**	80	87
Highland	**83.9%**	26	31
Orkney*	-	-	-
Shetland*	-	-	-
Tayside	**91.7%**	11	12
W Isles*	-	-	-
NoS	**90.3%**	**121**	**134**

Clinical Commentary	Within the North of Scotland, there are limited resources for Restorative Dentistry and representatives are not always able to attend Head & Neck Cancer MDT meetings where these decisions are made. As per the QPI definitions, this decision must be made jointly by the MDT and Restorative Dentistry for patients to be included. Therefore performance in the North of Scotland is satisfactory to the level of resources available within the North of Scotland. *[Audit note – for 33 of the patients not meeting Spec (i) information on whether there was a discussion with MDT and restorative dentistry was not recorded].*
Actions	1. NCA Head & Neck Pathway Board to consider pathway improvements to ensure data recording to ensure patients who require an oral and dental rehabilitation plan are assessed jointly before first treatment. 2. NCA to escalate this issue to individual boards for consideration of actions required for improvement. 3. As part of low volume surgery programme, NCA Head & Neck Pathway Board to support development of regional MDT with input from restorative dentistry for required patients.
Risk Status	Escalate

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



	Performance (%)	Numerator	Denominator
Grampian	**74.8%**	92	123
Highland	**91.4%**	53	58
Orkney*	-	-	-
Shetland	**80.0%**	4	5
Tayside	**26.7%**	16	60
W Isles*	-	-	-
NoS	**67.2%**	**168**	**250**

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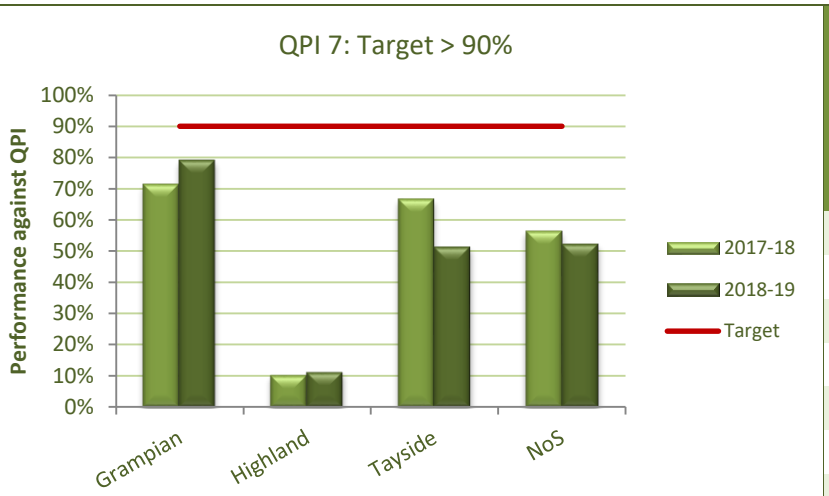
Clinical Commentary	There is different use of the MUST screening tool within the North of Scotland. In NHS Grampian, this is used within the ward setting but not the outpatient clinic and there is a requirement to look at the resourcing of this service to ensure all patients can have a MUST nutritional assessment undertaken in a clinic setting. *[Audit Note – for 13% of patients this information was not recorded, which may have resulted in performance being underestimated].*
Actions	1. NCA Head & Neck Pathway Board to explore pathway improvements to ensure nutritional screening is recorded for Head & Neck cancer patients. 2. NCA to escalate this issue to individual boards for consideration of actions required for improvement. 3. NCA to ask for consideration at QPI formal review the tools used for nutritional screening and reflect these within the criteria for this QPI.
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	**79.1%**	72	91
Highland	**11.3%**	6	53
Orkney*	-	-	-
Shetland*	-	-	-
Tayside	**51.5%**	17	33
W Isles*	-	-	-
NoS	**52.4%**	**97**	**185**

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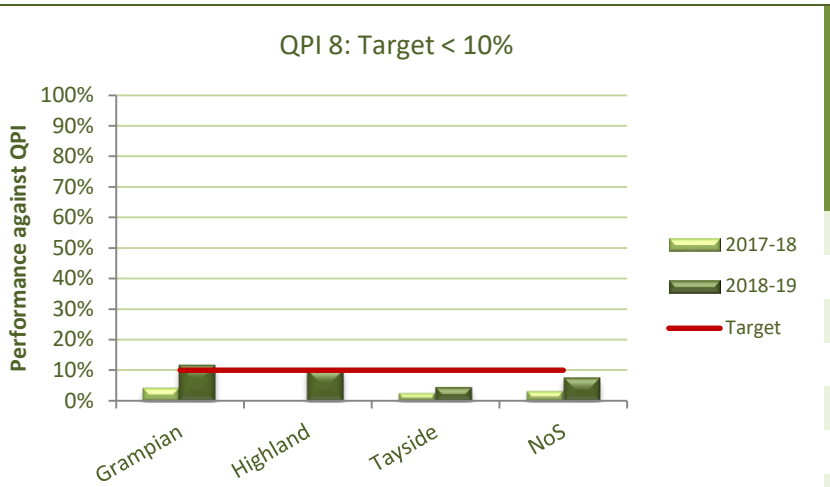
Clinical Commentary	Resources for Speech and Language Therapy in the North of Scotland are scarce and there is a requirement to redesign the approach to access these services. There is currently not capacity to embed SLT professionals within Head & Neck clinics to ensure all patients who require to be seen by Specialist SLT before treatment, do so. A referral pathway should be developed to ensure patients are seen by Specialist SLT prior to treatment, however this is additional administrative and resources required to embed this model of care.
Actions	1. NCA Head & Neck Pathway Board to consider pathway improvements to ensure patients are seen by specialist SLT staff prior to curative treatment. 2. NCCLG to monitor performance of this QPI until actions complete, at which point the risk can be deescalated. 3. NCA to escalate this issue to individual boards for consideration of actions required for improvement.
Risk Status	Escalate

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	**11.5%**	3	26
Highland	**10.0%**	1	10
Orkney	-	0	0
Shetland	-	0	0
Tayside	**4.5%**	2	44
W Isles	-	0	0
NoS	**7.5%**	**6**	**80**

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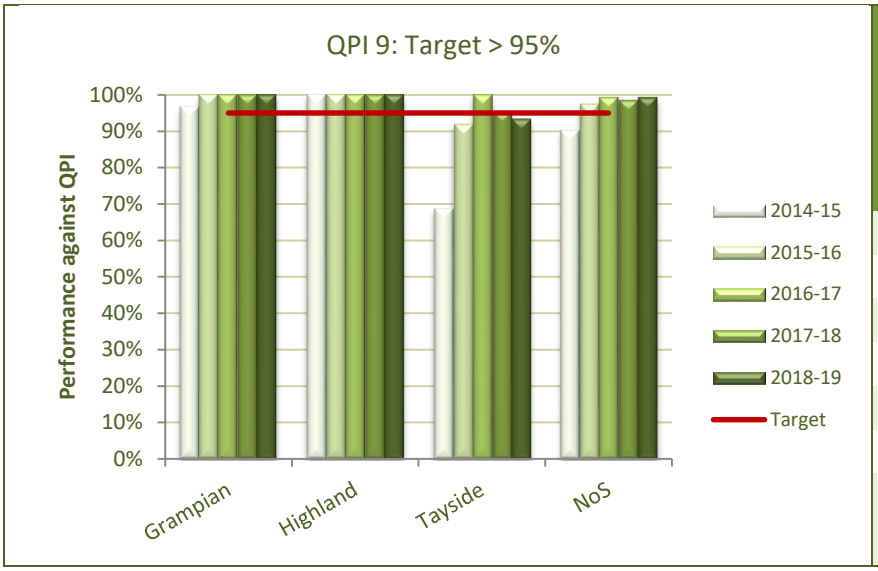
Clinical Commentary	Performance across the North of Scotland was below target, however it should be noted that NHS Grampian did not meet the target and therefore focus needs to be given in future years to ensure there is no trend in open resections where the surgical margins targets are not met.
Actions	1. Performance to be escalated to North of Scotland boards for consideration of improvement actions required.
Risk Status	Escalate

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



	Performance (%)	Numerator	Denominator
Grampian	**100%**	80	80
Highland	**100%**	32	32
Orkney*	-	-	-
Shetland*	-	-	-
Tayside	**93.3%**	14	15
W Isles	-	0	0
NoS	**99.2%**	**130**	**131**

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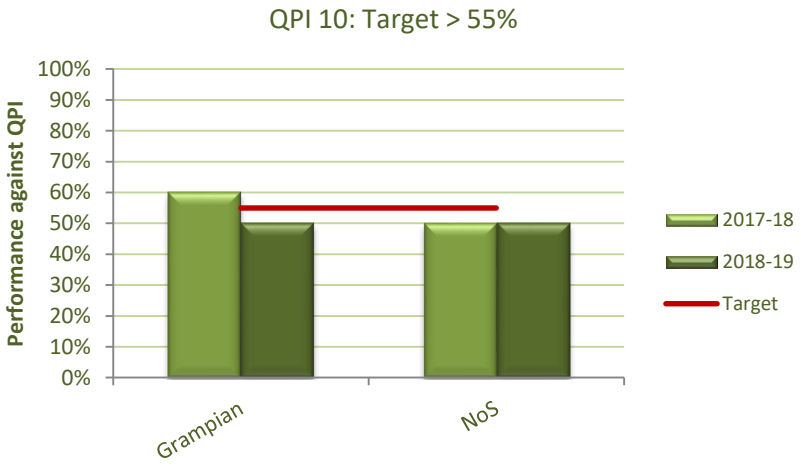
Clinical Commentary	The North of Scotland again achieved this QPI target for the fourth year in a row. A query has been raised on the denominators in the numbers of patients put forward for IMRT and this will be raised with individual boards to allow assessment of compliance to pathways.
Actions	1. NCA to escalate this QPI to individual boards for assessment of any action required. 2. NHS Tayside to consider staging of patients and access to IMRT through discussion at North of Scotland level and reflect requirements in radiotherapy guideline for Head & Neck patients.
Risk Status	Escalate

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	**50.0%**	3	6
Highland*	-	-	-
Orkney	-	0	0
Shetland	-	0	0
Tayside*	-	-	-
W Isles	-	0	0
NoS	**50.0%**	**5**	**10**

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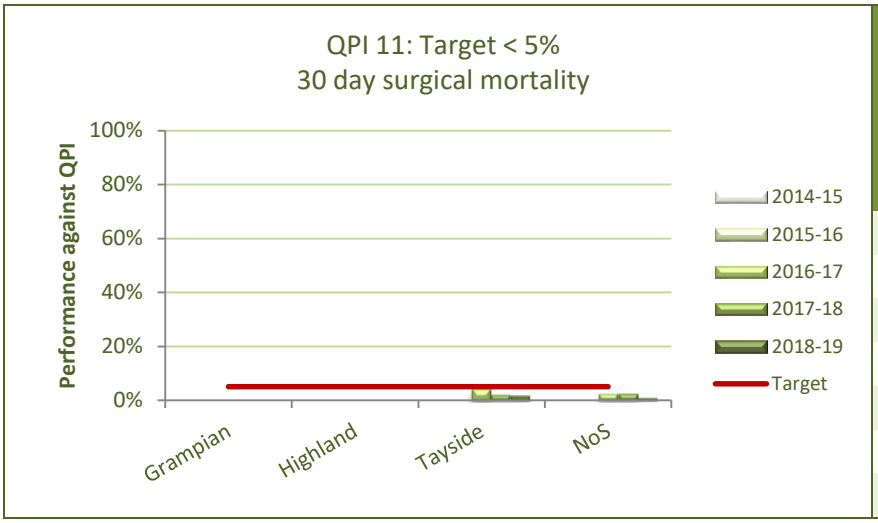
Clinical Commentary	For this small patient cohort, the target was again missed with only 50% of eligible patients receiving adjuvant chemoradiation. In some cases, this was due to patient choice, patient co-morbidities or contra-indications to this treatment.
Actions	No action required
Risk Status	Mitigate

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	30
Highland	**0%**	0	12
Orkney	-	0	0
Shetland	-	0	0
Tayside	**1.5%**	1	65
W Isles	-	0	0
NoS	**0.9%**	**1**	**107**

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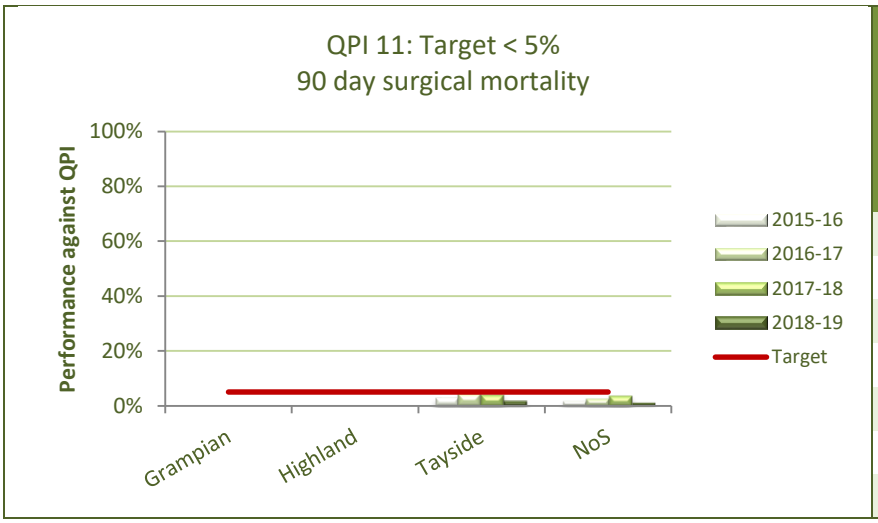

	Performance (%)	Numerator	Denominator
Grampian	**0%**	0	30
Highland	**0%**	0	12
Orkney	-	0	0
Shetland	-	0	0
Tayside	**1.5%**	1	65
W Isles	-	0	0
NoS	**0.9%**	**1**	**107**

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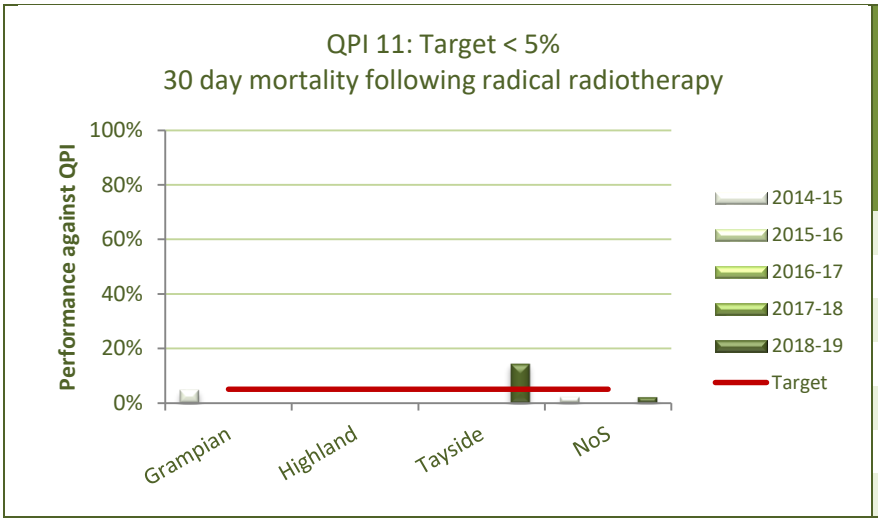

	Performance (%)	Numerator	Denominator
Grampian	**0%**	0	22
Highland	**0%**	0	15
Orkney	-	0	0
Shetland*	-	-	-
Tayside	**14.3%**	1	7
W Isles	-	0	0
NoS	**2.2%**	**1**	**45**

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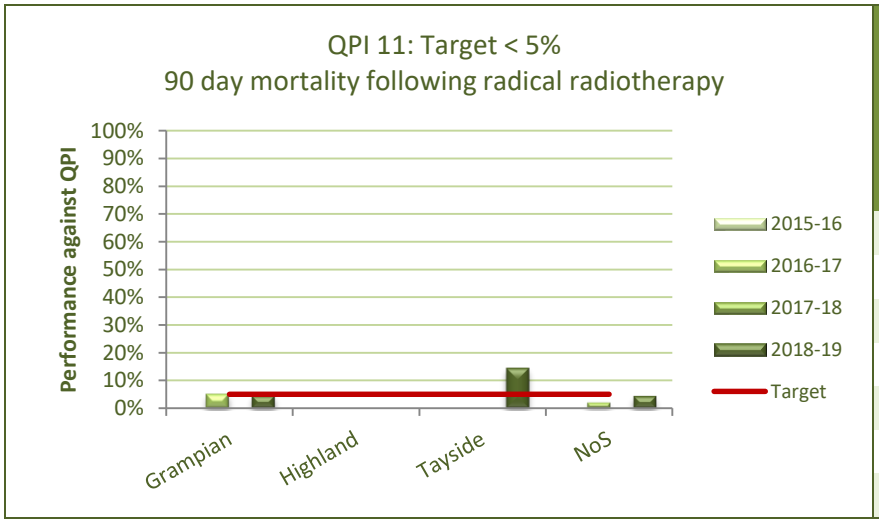
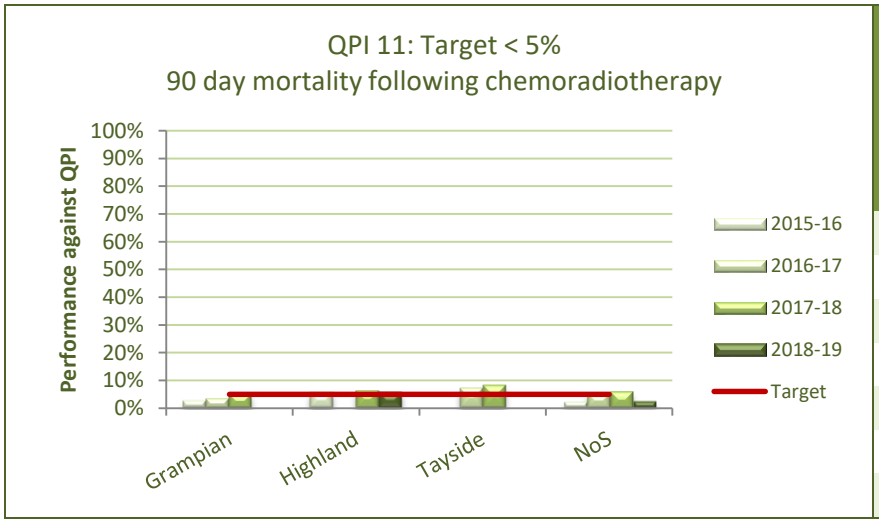
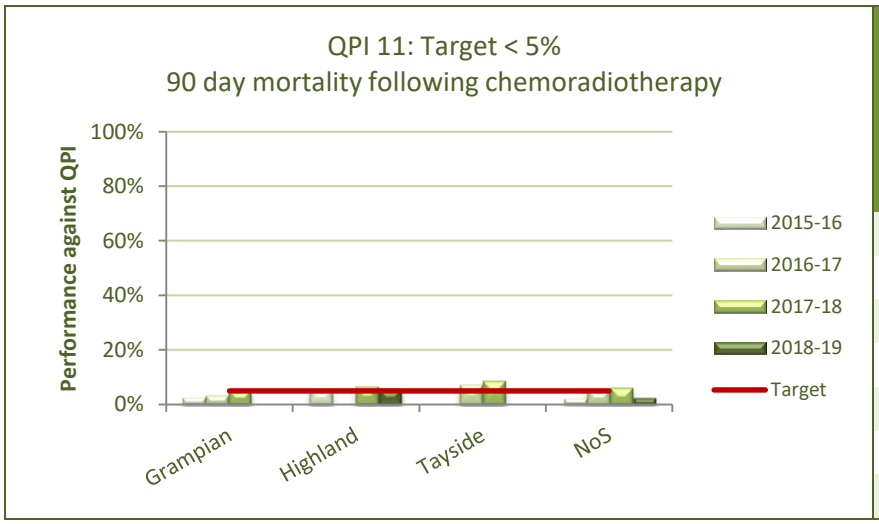


	Performance (%)	Numerator	Denominator
Grampian	**4.5%**	1	22
Highland	**0%**	0	15
Orkney	-	0	0
Shetland*	-	-	-
Tayside	**14.3%**	1	7
W Isles	-	0	0
NoS	**4.4%**	**2**	**45**



	Performance (%)	Numerator	Denominator
Grampian	**0%**	0	52
Highland	**5.6%**	1	18
Orkney*	-	-	-
Shetland*	-	-	-
Tayside	**0%**	0	11
W Isles	-	0	0
NoS	**2.4%**	**2**	**84**



	Performance (%)	Numerator	Denominator
Grampian	**0%**	0	50
Highland	**5.6%**	1	18
Orkney*	-	-	-
Shetland*	-	-	-
Tayside	**0%**	0	11
W Isles	-	0	0
NoS	**2.4%**	**2**	**82**

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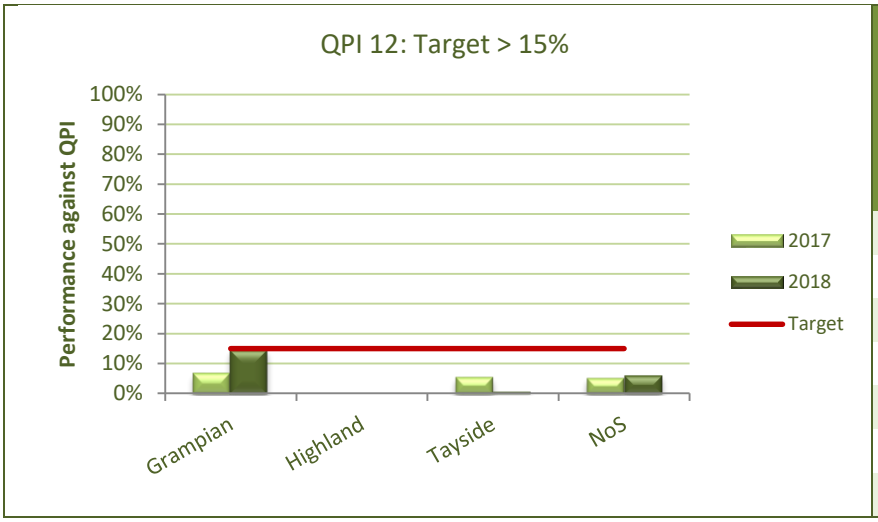
Clinical Commentary	All 30 and 90-day mortality targets are within the QPI tolerances. All patients who died captured within30 and 90 days of treatment are to be discussed at a NCA morbidity and mortality review meeting to provide a forum for shared learning amongst clinical staff in the North of Scotland.
Actions	No action required
Risk Status	Tolerate

QPI 12	Clinical Trial and Research Study Access
Proportion of patients with head and neck cancer who are consented for a clinical trial / translational research. Data reported for patients enrolled in 2018.	



	Performance (%)	Numerator	Denominator
Grampian	**14.4%**	17	118
Highland	**0%**	0	73
Orkney*	-	-	-
Shetland*	-	-	-
Tayside	**0.9%**	1	111
W Isles*	-	-	-
NoS	**6.1%**	**19**	**311**

*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	The number of patients being recruited to trials continues to increase. Regional awareness of open clinical trials is being shared through the Head & Neck Pathway Board, and inter-board referrals are to be encouraged.
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	Tolerate

References

1. Information Services Division. Cancer incidence and Prevalence in Scotland (to December 2017), April 2019 https://www.isdscotland.org/Health-Topics/Cancer/Publications/2019-04-30/2019-04-30-Cancer-Incidence-Report.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/

Appendix 1: Clinical Trials and Research studies for head and neck cancer open to recruitment in the North of Scotland in 2018

Trial	Principle Investigator	Patients consented
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)	yes
CheckMate 714	Rafael Moleron (NHS Grampian)	no
IMVOKE	Rafael Moleron (NHS Grampian)	no