Quality Performance Indicators Audit Report

Tumour Area:	**Upper GI Cancer**
Patients Diagnosed:	1st January – 31st December 2021
Published Date:	06/01/2023

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

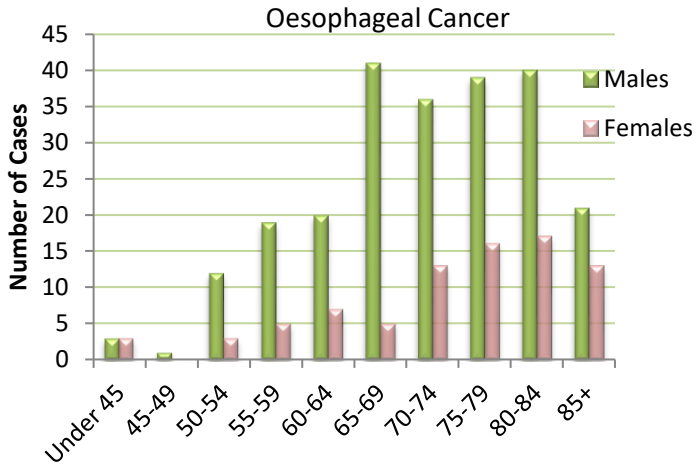
A total of 385 Upper GI cancer diagnoses in the North of Scotland were recorded through audit between 1st January and 31st December 2021, with 314 cases of oesophageal cancer and 71 cases of gastric cancer. Overall case ascertainment for Upper GI was good at 97.2%. Case ascertainment figures are provided for guidance and are not an exact measurement of audit completeness as it is not possible to compare the same cohort of patients.

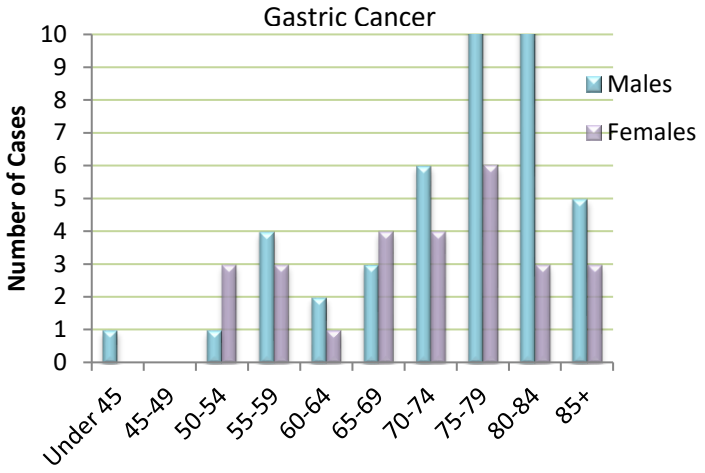
Case ascertainment and proportion of NoS total for patients diagnosed with Upper GI Cancer in 2021

	Grampian	Highland	Orkney	Shetland	Tayside	W. Isles	NoS
No. of Oesophageal Cancer Patients 2021	122	70	2	6	106	8	314
No. of Gastric Cancer Patients 2021	23	19	0	4	21	4	71
Total no. of Upper GI Patients 2021	145	89	2	10	127	12	385
% of NoS Total	37.7%	23.1%	0.5%	2.6%	33.0%	3.1%	100%
Average ISD Cases (2016-20)	151.8	92.6	4.6	6.0	130.4	10.8	396.2
% Case ascertainment	95.5%	96.1%	43.5%	166.7%	97.4%	111.1%	97.2%

2. Age Distribution

The age distribution of patients diagnosed with oesophageal and gastric cancer in the North of Scotland in 2021 is shown in the following charts. Incidences of oesophageal cancer peaked in the 65-69 year age group for males and in the 80-84 year age group for females. And incidences of gastric cancer peaked in the 75-84 year age group for males and in the 75-79 year age group for females.





Age distribution of patients diagnosed with oesophageal and gastric cancer in North of Scotland 2020.

3. Performance against Quality Performance Indicators (QPIs)

Definitions for the QPIs reported in this section are published by Health Improvement Scotland[1], while further information on datasets and measurability used are available from Public Health Scotland[2]. Data are largely presented by Board of diagnosis. However, surgical focussed QPIs (QPIs 7, 8, 9 and 10) are reported by hospital of surgery. Further QPI 14, clinical trials and research access, is reported by NHS Board of residence.

The following QPIs were amended during the last formal review process and will not be reported until next year – QPIs 4(i), 5(ii) and 9.

**Where the number of cases per Board is between one and four, results have been excluded from charts and tables to minimise the risk of disclosure. However, all board results are included within the total for the North of Scotland.*

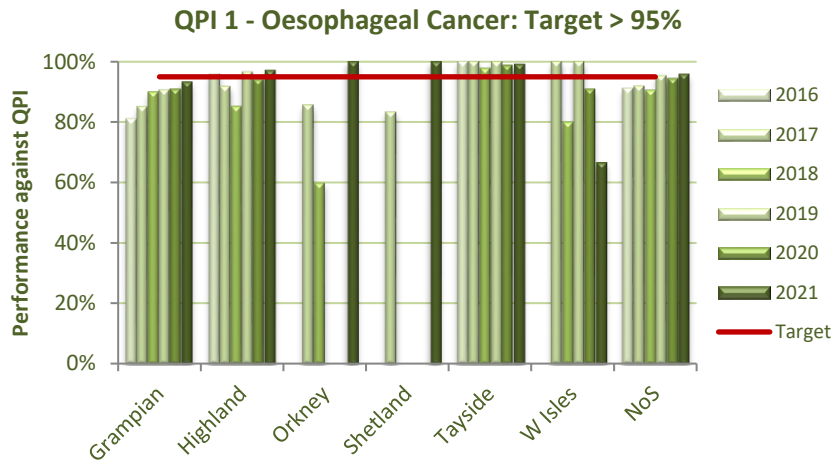
In regards to mortality following SACT, a decision has been taken nationally to move to a new generic QPI (30-day mortality for SACT) applicable across all tumour types. This new QPI will use CEPAS (Chemotherapy ePrescribing and Administration System) data to measure SACT mortality to ensure that the QPI focuses on the prevalent population rather than the incident population. The measurability for this QPI is still under development to ensure consistency across the country and it is anticipated that performance against this measure will be reported in the next audit cycle (the target will be revised from <5% to <10% when it is reported using CEPAS due to the increased clinical cohort who will be receiving appropriate palliative chemotherapy). In the meantime all deaths within 30 days of SACT will continue to be reviewed at NHS Board level.

4. Governance and Risk

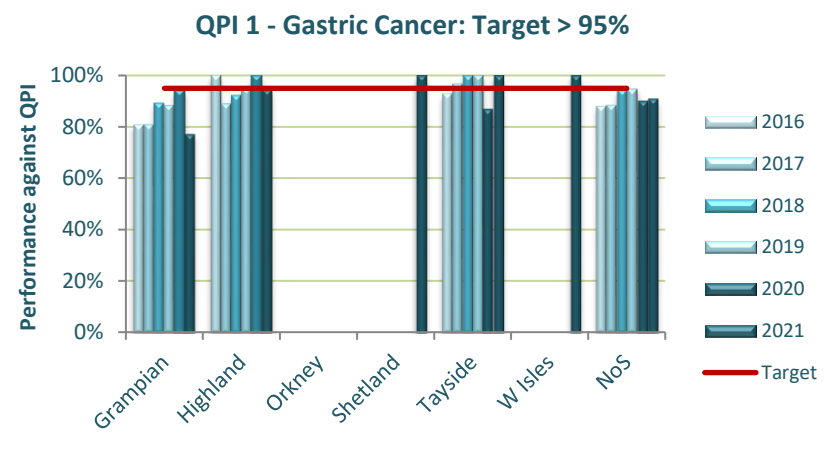
QPI performance is overseen by the North Cancer Alliance and its constituent groups, with an assessment of clinical risk and action planning undertaken collaboratively and reporting at board and regional level. Actions will be overseen by the Pathway Boards and reported concurrently into the NCA governance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

Further information is available here.

QPI 1	Endoscopy
Proportion of patients with oesophageal or gastric cancer who have a histological diagnosis made within 6 weeks of initial endoscopy and biopsy.	



	Performance (%)	Numerator	Denominator
Grampian	**93.3%**	112	120
Highland	**97.1%**	68	70
Orkney*	-	-	-
Shetland*	-	-	-
Tayside	**99.1%**	105	106
W Isles	**66.7%**	4	6
NoS	**95.8%**	**296**	**309**

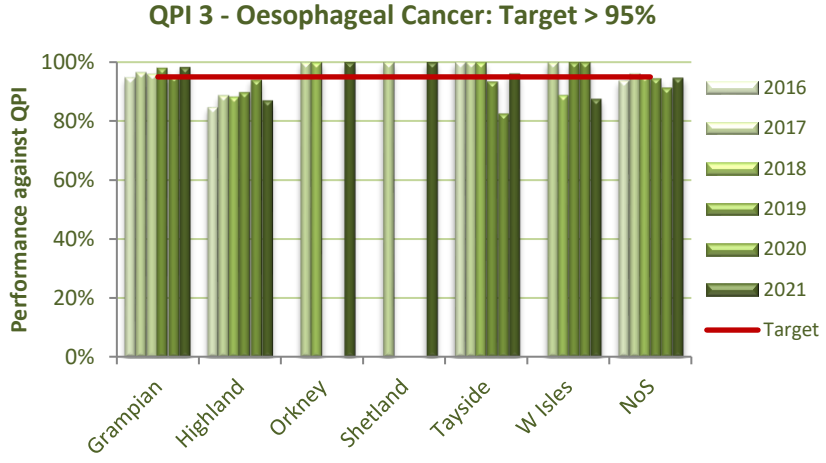


	Performance (%)	Numerator	Denominator
Grampian	**77.3%**	17	22
Highland	**94.4%**	17	18
Orkney	-	0	0
Shetland*	-	-	-
Tayside	**100%**	20	20
W Isles*	-	-	-
NoS	**91.0%**	**61**	**67**

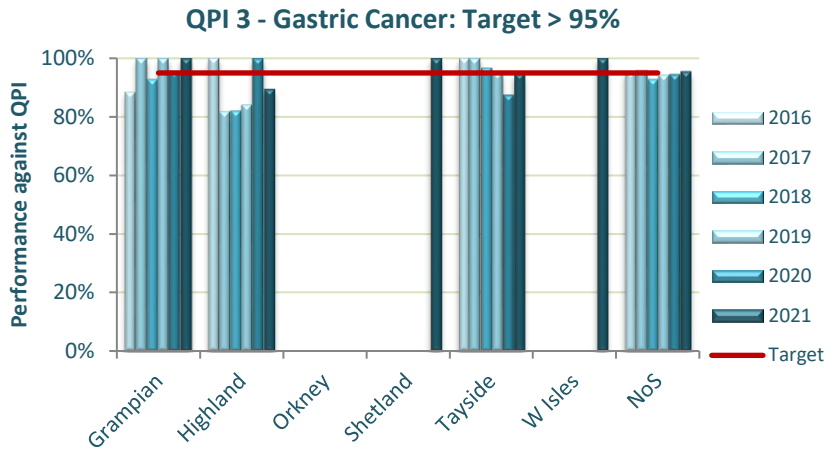
The North of Scotland boards narrowly missed this target because patients either had a histological diagnosis just out with of target date, or were deemed not fit for further diagnostics. Almost all patients did have a positive histological diagnosis prior to treatment.

Of note, robust criteria for equivocal reporting of invasive disease on endoscopic biopsies are appropriately applied under review by specialist upper GI pathologists.

QPI 3	Multi-Disciplinary Team (MDT) Meeting
Proportion of patients with oesophageal or gastric cancer who are discussed at MDT meeting before definitive treatment.	



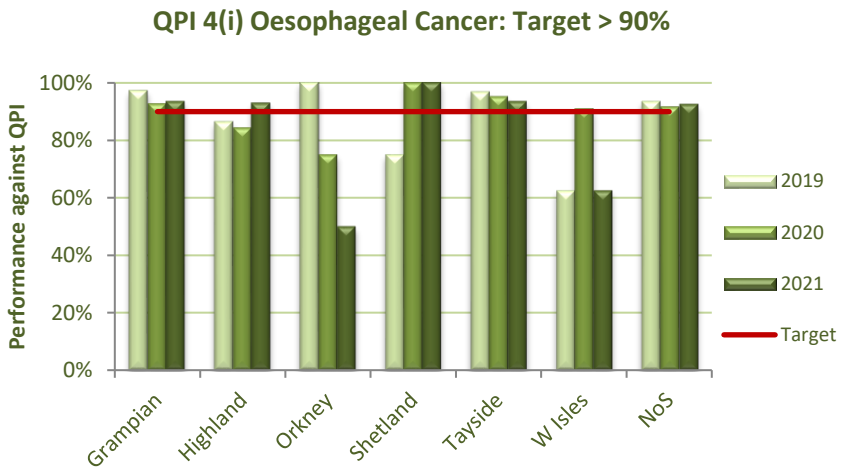
	Performance (%)	Numerator	Denominator
Grampian	**98.3%**	115	117
Highland	**87.0%**	60	69
Orkney*	-	-	-
Shetland	**100%**	6	6
Tayside	**96.1%**	98	102
W Isles	**87.5%**	7	8
NoS	**94.7%**	**288**	**304**



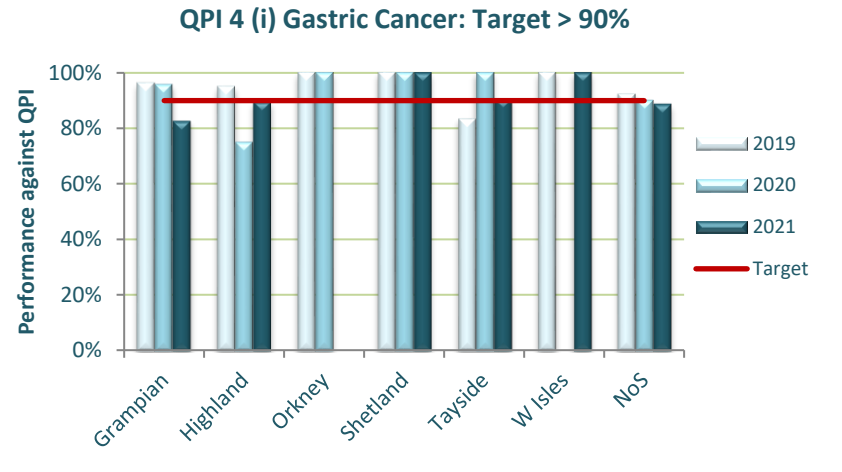
	Performance (%)	Numerator	Denominator
Grampian	**100%**	20	20
Highland	**89.5%**	17	19
Orkney	-	0	0
Shetland*	-	-	-
Tayside	**94.7%**	18	19
W Isles*	-	-	-
NoS	**95.5%**	**63**	**66**

QPI 4	Staging and Treatment Intent
Proportion of patients with oesophageal or gastric cancer who have TNM stage and treatment intent recorded at MDT meeting prior to treatment.	

Specification (i) TNM Stage

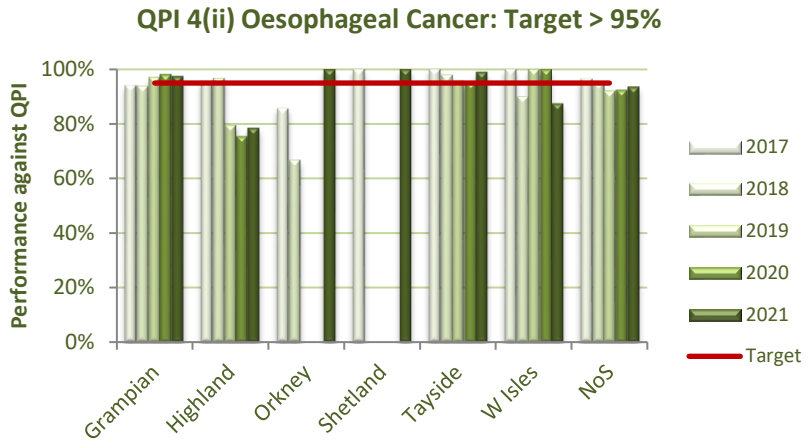


	Performance (%)	Numerator	Denominator
Grampian	**93.4%**	114	122
Highland	**92.9%**	65	70
Orkney*	-	-	-
Shetland	**100%**	6	6
Tayside	**93.4%**	99	106
W Isles	**62.5%**	5	8
NoS	**92.4%**	**290**	**314**

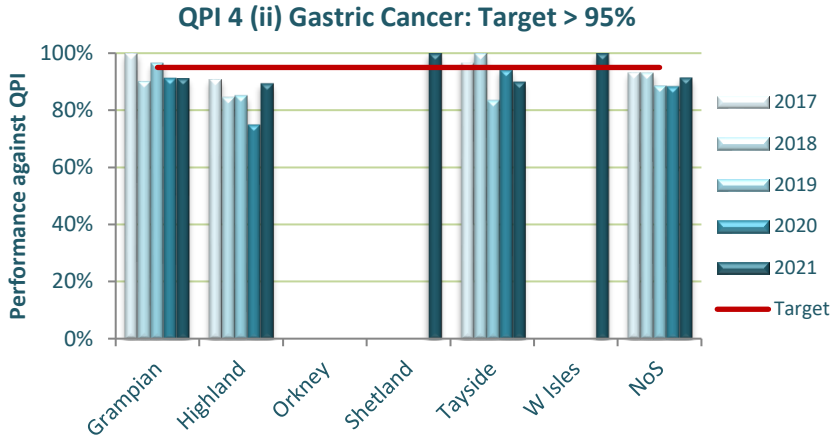


	Performance (%)	Numerator	Denominator
Grampian	**82.6%**	19	23
Highland	**89.5%**	17	19
Orkney	-	0	0
Shetland*	-	-	-
Tayside	**90.5%**	19	21
W Isles*	-	-	-
NoS	**88.7%**	**63**	**71**

Specification (ii) Treatment Intent



	Performance (%)	Numerator	Denominator
Grampian	**97.5%**	119	122
Highland	**78.6%**	55	70
Orkney*	-	-	-
Shetland	**100%**	6	6
Tayside	**99.0%**	104	105
W Isles	**87.5%**	7	8
NoS	**93.6%**	**293**	**313**

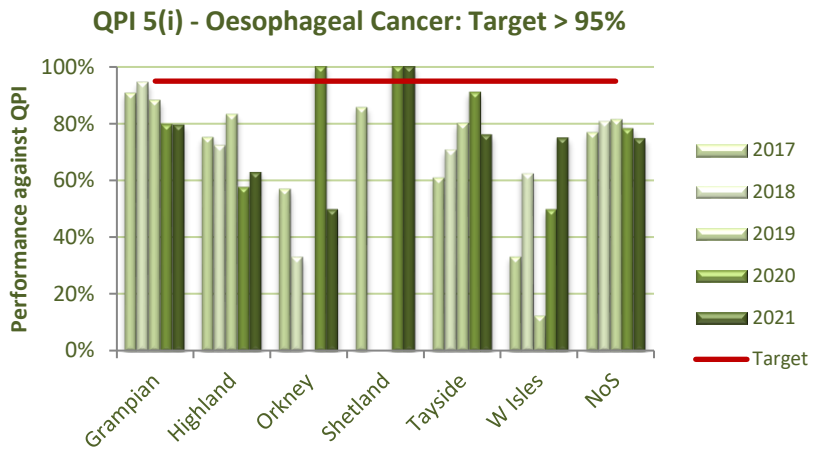


	Performance (%)	Numerator	Denominator
Grampian	**91.3%**	21	23
Highland	**89.5%**	17	19
Orkney	-	0	0
Shetland*	-	-	-
Tayside	**90.0%**	18	20
W Isles*	-	-	-
NoS	**91.4%**	**64**	**70**

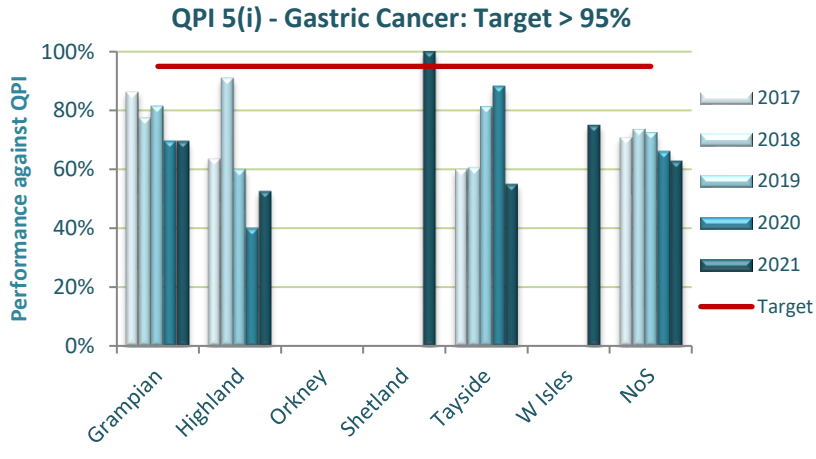
The North of Scotland narrowly missed this target due to data recording and this result acts as a reminder to the group for MDT capture of intent and staging. A sub-group of the NCA Upper GI Pathway Board is looking at a unified MDT proforma to improve collection of intent and TNM through the regional MDT.

QPI 5	Nutritional Assessment
Proportion of patients with oesophageal or gastric cancer who undergo nutritional screening before first treatment and are referred to a dietitian where appropriate.	

Specification (i) MUST assessment before first treatment



	Performance (%)	Numerator	Denominator
Grampian	**79.5%**	97	122
Highland	**62.9%**	44	70
Orkney*	-	-	-
Shetland	**100%**	6	6
Tayside	**76.2%**	80	105
W Isles	**75.0%**	6	8
NoS	**74.8%**	**234**	**313**

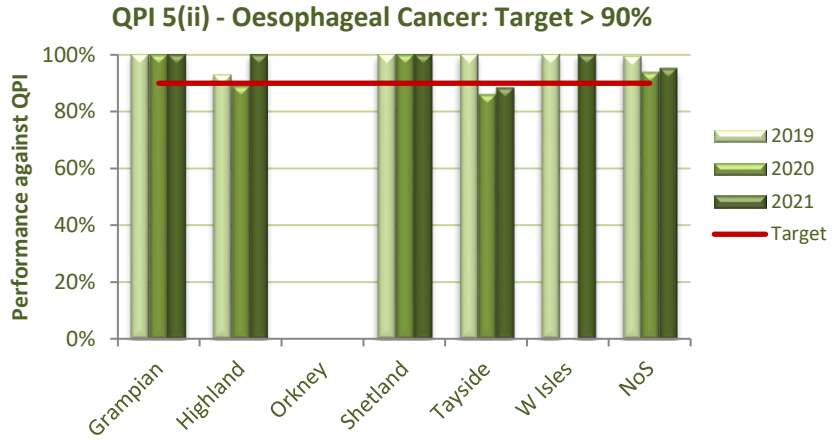


	Performance (%)	Numerator	Denominator
Grampian	**69.6%**	16	23
Highland	**52.6%**	10	19
Orkney	-	0	0
Shetland*	-	-	-
Tayside	**55.0%**	11	20
W Isles*	-	-	-
NoS	**62.9%**	**44**	**70**

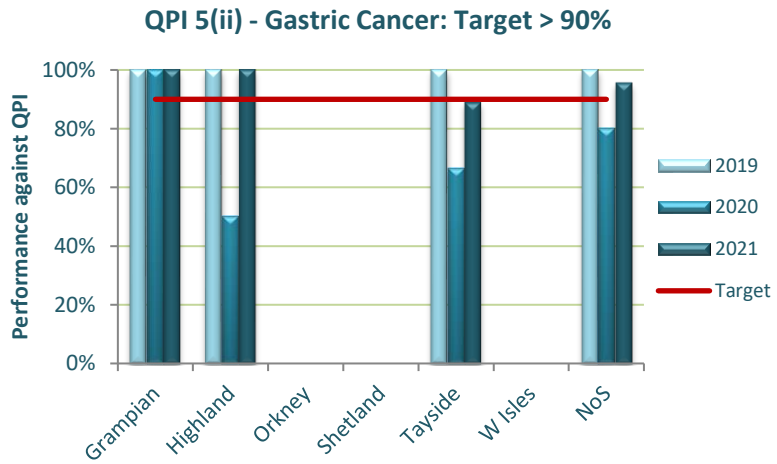
Referrals are made automatically by Upper GI nurses upon notification of diagnosis. Recording of nutritional screening remains variable across North of Scotland and this will reviewed through the pathway board. It is also noted that the score needs to be electronic for audit to capture and teams are working towards making this available.

Many more patients than reflected here are being seen by dietician and MUST score may not be the best indicator for dietician.

Specification (ii) Patients with MUST score 2 or more and are assessed by a dietician

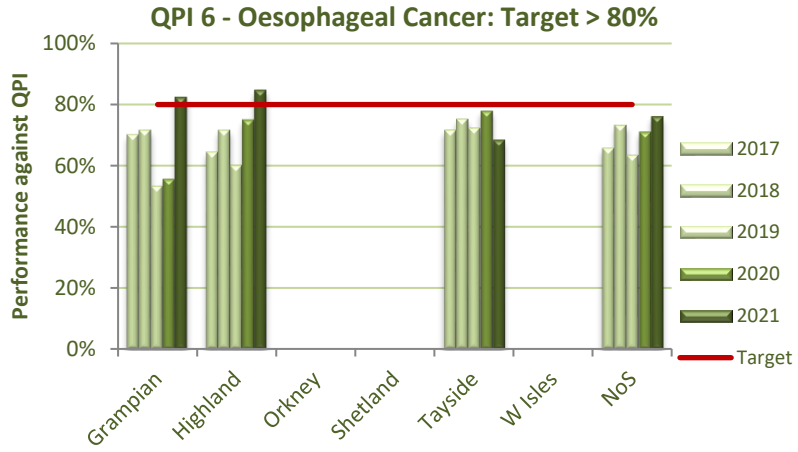


	Performance (%)	Numerator	Denominator
Grampian	**100%**	51	51
Highland	**100%**	6	6
Orkney	-	0	0
Shetland*	-	-	-
Tayside	**88.4%**	38	43
W Isles*	-	-	-
NoS	**95.2%**	**99**	**104**

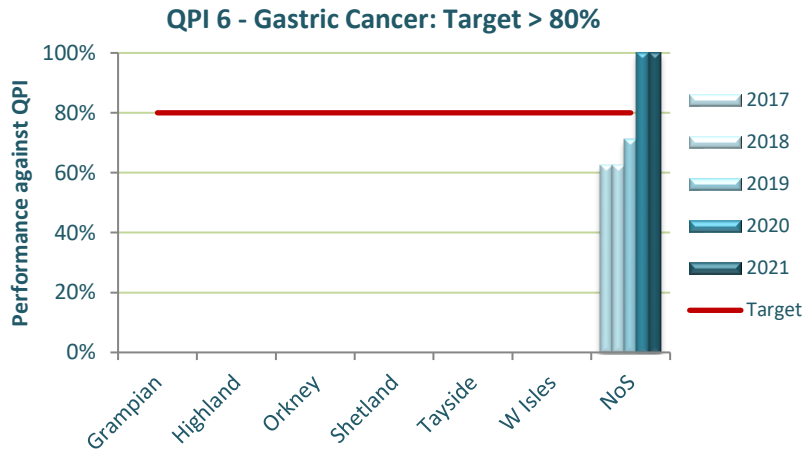


	Performance (%)	Numerator	Denominator
Grampian	**100%**	10	10
Highland*	-	-	-
Orkney	-	0	0
Shetland	-	0	0
Tayside	**88.9%**	8	9
W Isles	-	0	0
NoS	**95.5%**	**21**	**22**

QPI 6	Appropriate Selection of Surgical Patients
Proportion of patients with oesophageal or gastric cancer who receive neo-adjuvant chemotherapy or chemoradiotherapy who then go on to have surgical resection.	



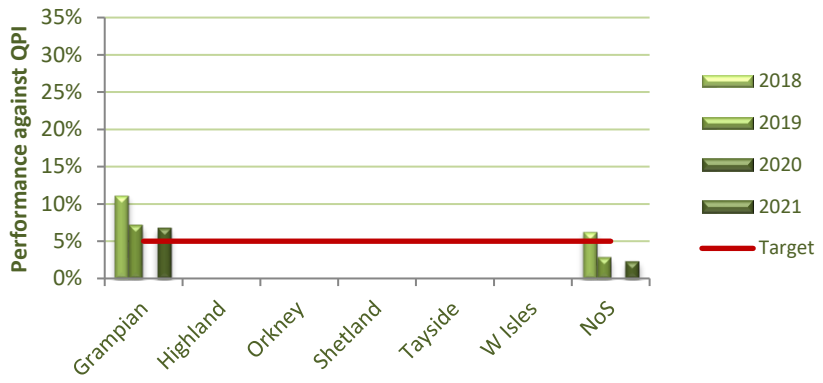
	Performance (%)	Numerator	Denominator
Grampian	**82.4%**	14	17
Highland	**84.6%**	11	13
Orkney	-	0	0
Shetland	-	0	0
Tayside	**68.4%**	13	19
W Isles*	-	-	-
NoS	**76.0%**	**38**	**50**



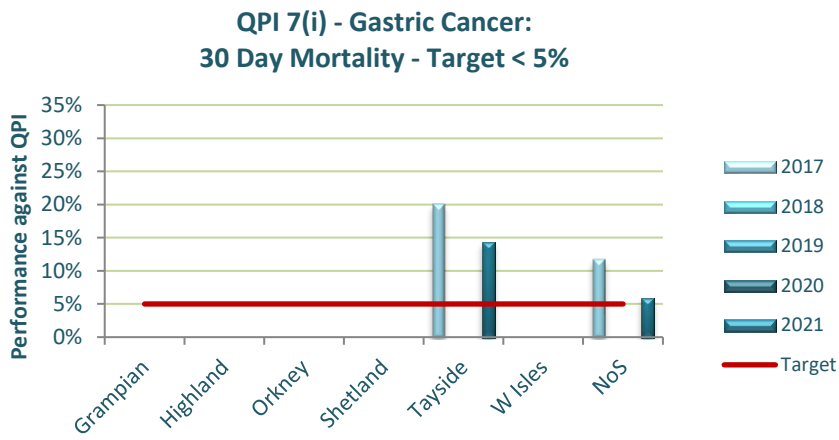
	Performance (%)	Numerator	Denominator
Grampian*	-	-	-
Highland*	-	-	-
Orkney	-	0	0
Shetland	-	0	0
Tayside*	-	-	-
W Isles*	-	-	-
NoS	**100%**	**8**	**8**

Patients who did not meet this QPI in NHS Tayside had neo-adjuvant treatment but did not progress to surgery due to patient choice and fitness.

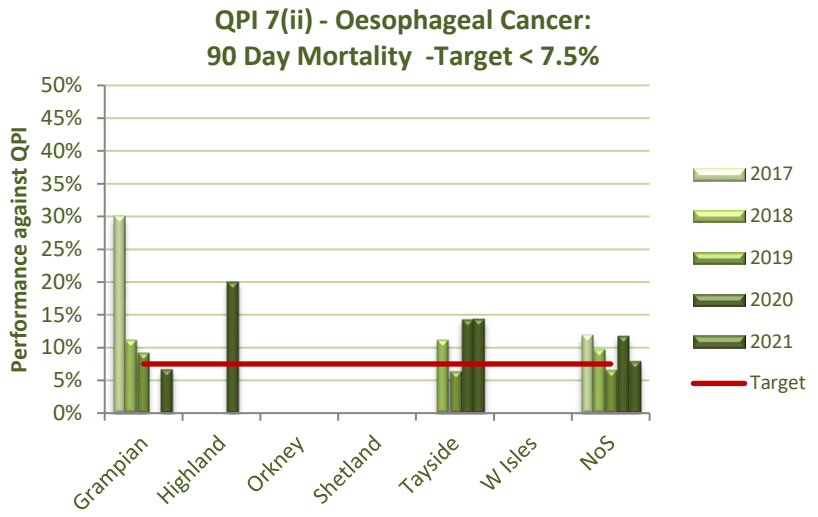
QPI 7	30/90 Day Mortality Following Surgery
Proportion of patients with oesophageal or gastric cancer who die within 30 or 90 days of surgical resection for oesophageal or gastric cancer.	



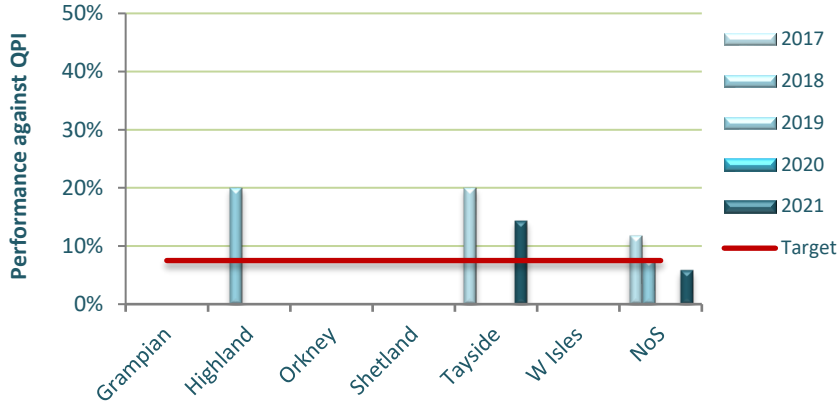
	Performance (%)	Numerator	Denominator
Grampian	**6.7%**	1	15
Highland	**0.0%**	0	11
Orkney	-	0	0
Shetland	-	0	0
Tayside	**0.0%**	0	17
W Isles	-	0	0
NoS	**2.3%**	**1**	**43**



	Performance (%)	Numerator	Denominator
Grampian*	-	-	-
Highland*	-	-	-
Orkney	-	0	0
Shetland	-	0	0
Tayside	**14.3%**	1	7
W Isles	-	0	0
NoS	**5.9%**	**1**	**17**



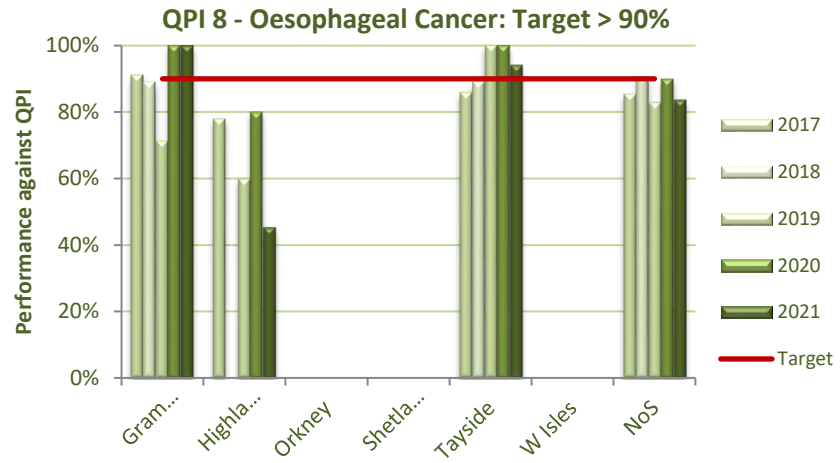
	Performance (%)	Numerator	Denominator
Grampian	**6.7%**	1	15
Highland	**0.0%**	0	9
Orkney	-	0	0
Shetland	-	0	0
Tayside	**14.3%**	2	14
W Isles	-	0	0
NoS	**7.9%**	**3**	**38**



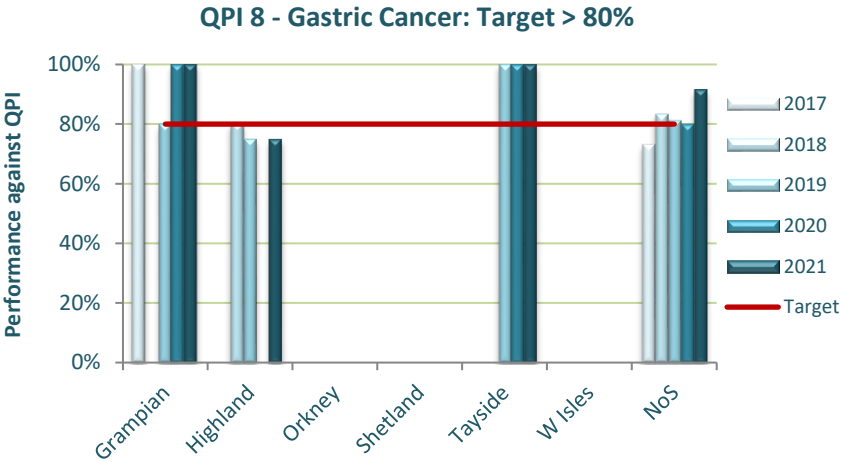
	Performance (%)	Numerator	Denominator
Grampian*	-	-	-
Highland*	-	-	-
Orkney	-	0	0
Shetland	-	0	0
Tayside	**14.3%**	1	7
W Isles	-	0	0
NoS	**5.9%**	**1**	**17**

This measure was narrowly missed for both Oesophageal (90-day) and Gastric (30-day); the individual cases have been reviewed through local board processes. There is ongoing work to ensure service provision in the NCA through the Getting it Right for the North programme.

QPI 8	Lymph Node Yield
Proportion of patients with oesophageal or gastric cancer who undergo surgical resection where ≥15 lymph nodes are resected and pathologically examined.	



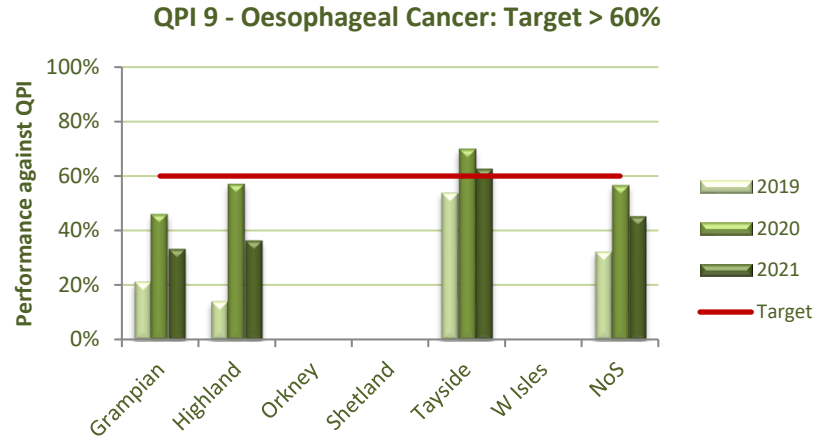
	Performance (%)	Numerator	Denominator
Grampian	**100%**	15	15
Highland	**45.5%**	5	11
Orkney	-	0	0
Shetland	-	0	0
Tayside	**94.1%**	16	17
W Isles	-	0	0
NoS	**83.7%**	**36**	**43**



	Performance (%)	Numerator	Denominator
Grampian*	**100%**	5	5
Highland*	-	-	-
Orkney	-	0	0
Shetland	-	0	0
Tayside*	-	-	-
W Isles	-	0	0
NoS	**91.7%**	**11**	**12**

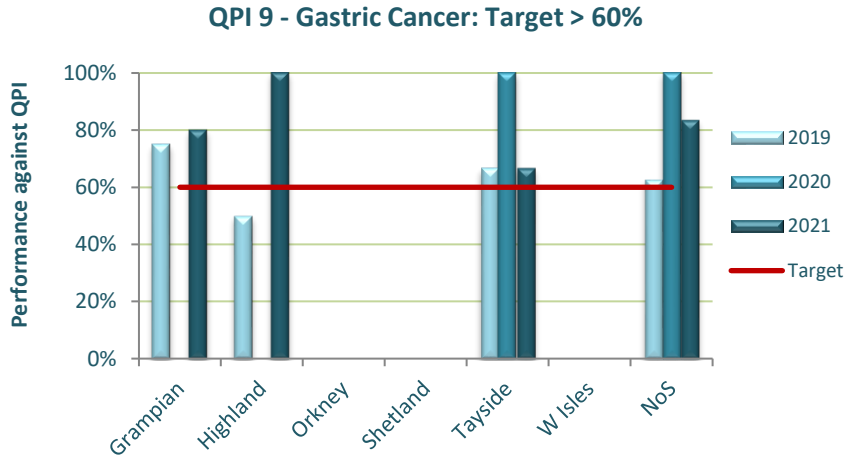
It was observed NHS Highland Oesophageal lymph node yields were lower than targets and local teams are auditing pathology reports. These results have been escalated to NHS Highland.

QPI 9	Length of Hospital Stay Following Surgery
Proportion of patients undergoing surgical resection for oesophageal or gastric cancer who are discharged within 14 days of surgical procedure.	



	Performance (%)	Numerator	Denominator
Grampian	**33.3%**	5	15
Highland	**36.4%**	4	11
Orkney	-	0	0
Shetland	-	0	0
Tayside	**62.5%**	10	16
W Isles	-	0	0
NoS	**45.2%**	**19**	**42**

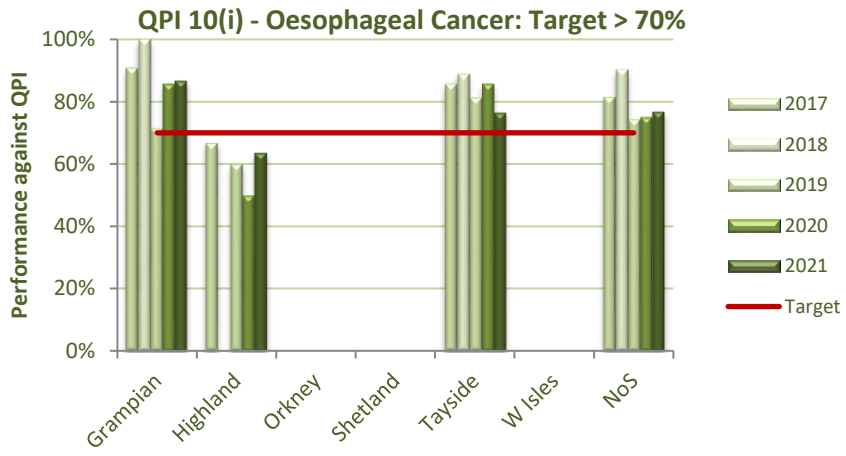
In Grampian, 80% of all patients were discharged within 3 weeks. Boards continue to optimise prehabilitation and enhanced recovery program to support early discharge.



	Performance (%)	Numerator	Denominator
Grampian	**80.0%**	4	5
Highland*	-	-	-
Orkney	-	0	0
Shetland	-	0	0
Tayside*	-	-	-
W Isles	-	0	0
NoS	**83.3%**	**10**	**12**

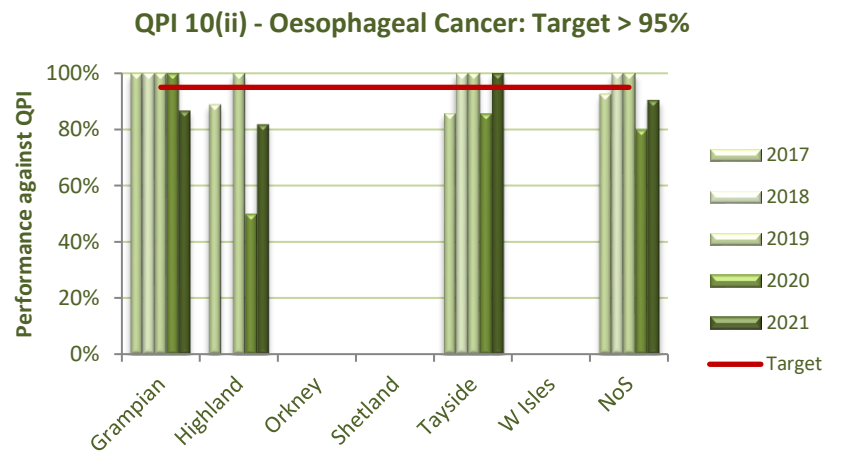
QPI 10	Resection Margins
Proportion of patients with oesophageal or gastric cancer who undergo surgical resection in which surgical margin is clear of tumour, i.e. negative surgical margin.	

Specification (i) – Circumferential Margin



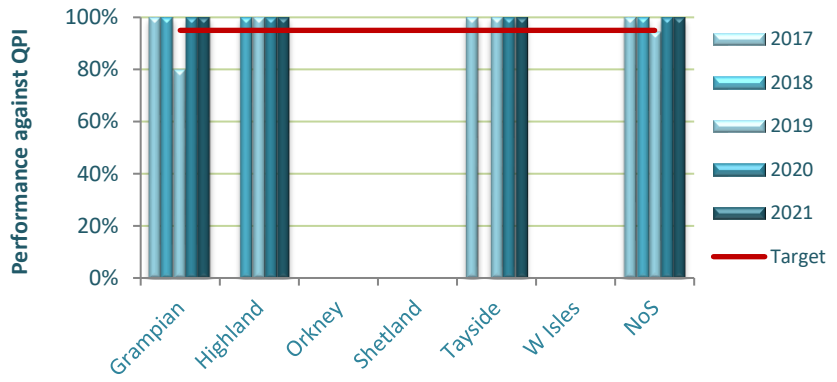
	Performance (%)	Numerator	Denominator
Grampian	**86.7%**	13	15
Highland	**63.6%**	7	11
Orkney	-	0	0
Shetland	-	0	0
Tayside	**76.5%**	13	17
W Isles	-	0	0
NoS	**76.7%**	**33**	**43**

Specification (ii) – Longitudinal Margin



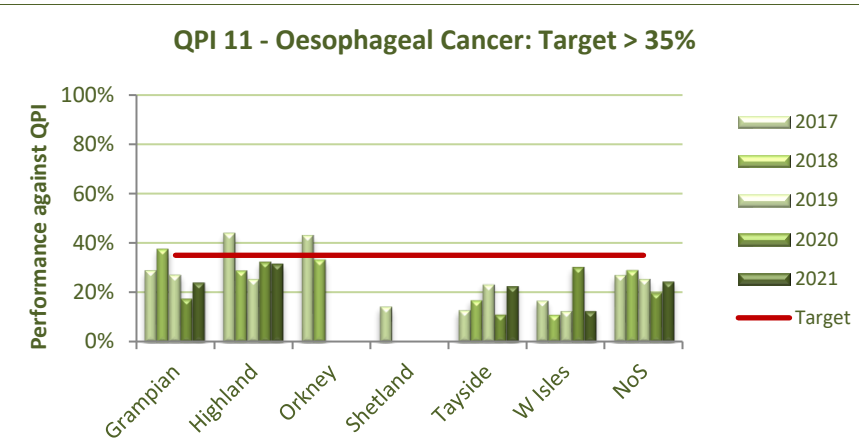
	Performance (%)	Numerator	Denominator
Grampian	**86.7%**	13	15
Highland	**81.8%**	9	11
Orkney	-	0	0
Shetland	-	0	0
Tayside	**100%**	16	16
W Isles	-	0	0
NoS	**90.5%**	**38**	**42**

Patients who did not meet this measure were reviewed by clinical teams. Previous and current reviews found no particular factors to suggest failure.

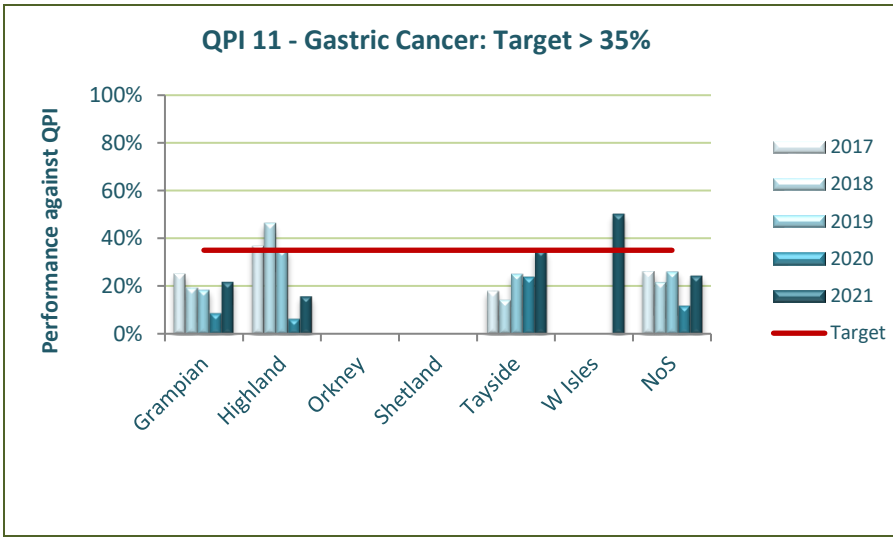


	Performance (%)	Numerator	Denominator
Grampian	**100%**	5	5
Highland	**100%**	5	5
Orkney	-	0	0
Shetland	-	0	0
Tayside	**100%**	7	7
W Isles	-	0	0
NoS	**100%**	**17**	**17**

QPI 11	Curative Treatment Rates
Proportion of patients with oesophageal or gastric cancer who undergo curative treatment.	



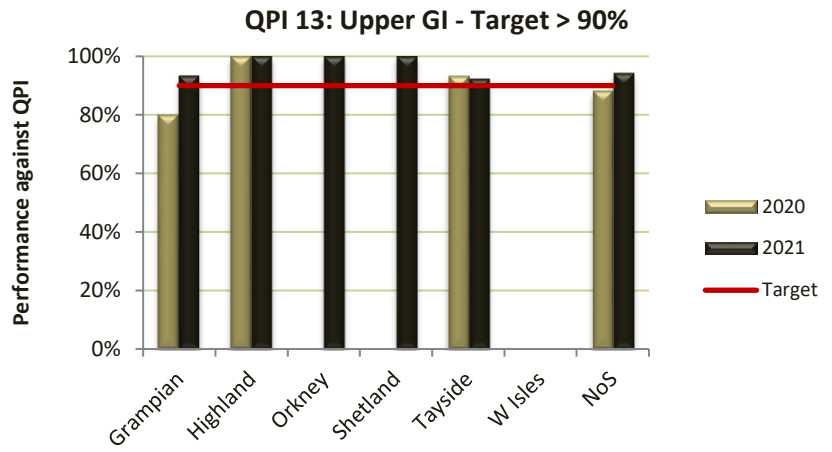
	Performance (%)	Numerator	Denominator
Grampian	**24.0%**	29	121
Highland	**31.4%**	22	70
Orkney*	-	-	-
Shetland*	-	-	-
Tayside	**22.4%**	22	98
W Isles	**12.5%**	1	8
NoS	**24.3%**	**74**	**305**



	Performance (%)	Numerator	Denominator
Grampian	**21.7%**	5	23
Highland	**15.8%**	3	19
Orkney	-	0	0
Shetland*	-	-	-
Tayside	**35.0%**	7	20
W Isles*	-	-	-
NoS	**24.3%**	**17**	**70**

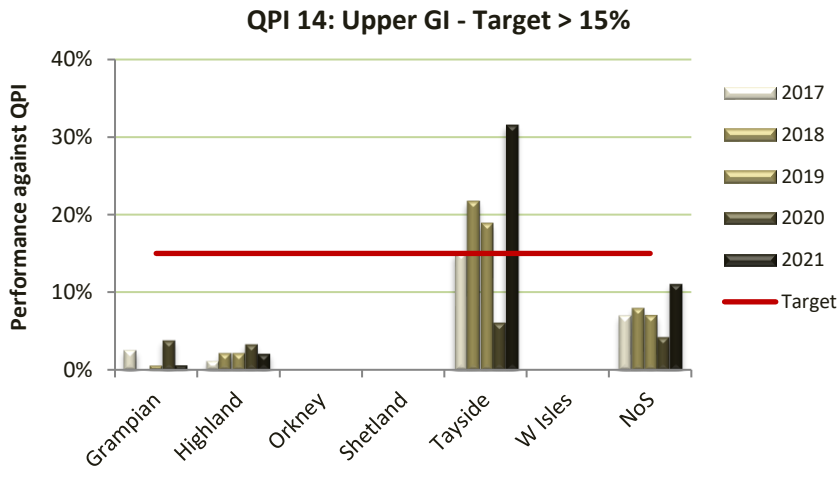
Given the therapeutic modalities available, the stage at presentation and the increasing age and comorbidity of this patient cohort, a target of 35% remains challenging. The NCA Upper GI Pathway Board believe this performance represents a positive recovery after the disruption of the pandemic.

QPI 13	HER2 Status for Decision Making
Proportion of patients with oesophageal or gastric adenocarcinoma undergoing first line palliative chemotherapy as their initial treatment for whom the HER2 status is reported prior to commencing treatment.	



	Performance (%)	Numerator	Denominator
Grampian	**93.3%**	14	15
Highland	**100%**	8	8
Orkney*	-	-	-
Shetland*	-	-	-
Tayside	**92.3%**	24	26
W Isles	-	0	0
NoS	**94.2%**	**49**	**52**

QPI 14	Clinical Trials and Research Study Access
Proportion of patients diagnosed with upper GI cancer who are consented for a clinical trial / research study.	



	Performance (%)	Numerator	Denominator
Grampian	**0.7%**	1	152
Highland	**2.2%**	2	93
Orkney	**0.0%**	0	5
Shetland	**0.0%**	0	6
Tayside	**31.5%**	41	130
W Isles	**0%**	0	11
NoS	**11.1%**	**44**	**397**

There is now active consideration at the MDT to enter patients into trials so this measure will be monitored for improvement.

4. References

1. Scottish Cancer Taskforce, 2021. Prostate Cancer Clinical Performance Indicators, Version 4.0. Health Improvement Scotland. http://www.healthcareimprovementscotland.org/his/idoc.ashx?docid=68f17a82-0e75-4a99-baab-4ef5a4c220b6&version=-1

2. Public Health Scotland https://www.isdscotland.org/Health-Topics/Cancer/Cancer-Audit/#background

Appendix 1: Clinical Trials and Research Studies open for recruitment in the North of Scotland in 2021

Trial	Principle Investigator	Patients consented
Add Aspirin	Douglas Adamson (Tayside) Russell Mullen (Highland)	N
DESTINY – Gastric 03	Russell Petty (Tayside)	N
DS-8021a in participants with HER2+ Cancer after disease progression	Russell Petty (Tayside)	N
DZB-CS-202: phase 1b/2 HER2-negative gastric adenocarcinoma study	Russell Petty (Tayside)	Y
ELEVATE	Russell Petty (Tayside)	Y
Gastric Cancer – 2252/0056-Five Prime	Russell Petty (Tayside)	N
KEYNOTE 585	Russell Petty (Tayside)	N
KEYNOTE 975	Adnan Shaukat (Grampian)	N
KEYNOTE 811	Russell Petty (Tayside)	N
LEAP 015	Russell Petty (Tayside)	N
MATTERHORN	Russell Petty (Tayside)	Y
OCCAMS	Russell Petty (Tayside)	
PLATFORM	Russell Petty (Tayside)	Y
REGAL	Russell Petty (Tayside)	Y
SCOPE 2	Adnan Shaukat (Grampian) Uti MacGregor (Highland)	N
SPOTLIGHT	Adnan Shaukat (Grampian) Russell Petty (Tayside) Mark Baxter (Tayside)	Y
TOASTIE	Mark Baxter (Tayside)	Y
YO42137 ATEZOLIZUMAB with or without TIRAGOLUMAB (ANTI-TIGIT ANTIBODY)	Russell Petty (Tayside)	Y