West of Scotland Cancer Network
Head and Neck Cancer
Managed Clinical Network

Audit Report

Head and Neck Cancer Quality Performance Indicators

Clinical Audit Data: 01 April 2021 to 31 March 2022

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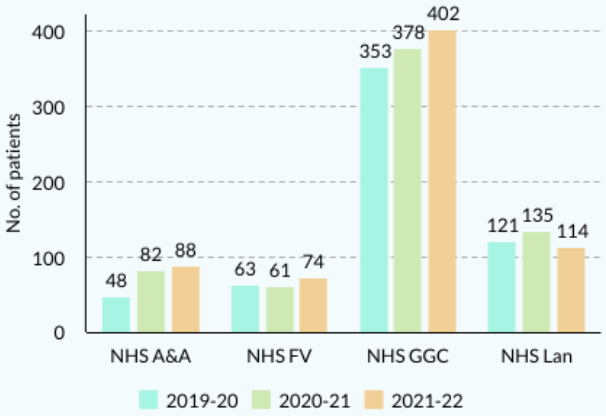
CONTENTS

Head and Neck Cancer QPI Overview

Patients diagnosed April 2021 - March 2022

Number of cases diagnosed:	678
Gender split:	
Male	68.6%
Female	31.4%
Mode age group:	
Male	65-69
Female	65-69
Case ascertainment:	98.0%

Where are patients diagnosed



Deprivation Category

Performance (%)

	Target	Performance 2021-22
QPI 1: Pathological Diagnosis	95%	95%
QPI 2: Imaging	(i) 95%	(i) 98%
	(ii) 95%	(ii) 92%
QPI 3: Multi-Disciplinary Team Meeting	95%	99%
QPI 4: Smoking Cessation	95%	77%
QPI 5: Oral and Dental Rehabilitation Plan	(i) 95%	(i) 98%
	(ii) 95%	(ii) 89%
QPI 6: Nutritional Screening	(i) 95%	(i) 91%
	(ii) 90%	(ii) 91%
	(iii) 90%	(iii) 81%
QPI 7: Specialist Speech and Language Therapist Access	90%	58%
QPI 8: Surgical Margins	<10	7%
QPI 11: 30 day Mortality	(i) <5%	(i) 1%
	(ii) <5%	(ii) 0%
	(iii) <5%	(iii) 1%
QPI 11: 90 day Mortality	(i) <5%	(i) 2%
	(ii) <5%	(ii) 0%
	(iii) <5%	(iii) 1%
QPI 14: Time from Surgery to Adjuvant Radiotherapy / Chemoradiotherapy:	50%	37%
QPI 15: PD-L1 Combined Proportion Score (CPS) for Decision Making	75%	88%

Key Achievements:

- Targets met for Pathological diagnosis before treatment.
- QPI consistently met for Multi-Disciplinary Team meeting and Surgical Margins.
- Low levels of mortality following curative treatments.

Areas for Improvement:

- Referral of patients to smoking cessation before first treatment.
- Patients to be seen by a specialist SLT before treatment.
- Commencement of adjuvant treatment within 7 weeks of surgical resection.

Executive Summary

Introduction

This report contains an assessment of the performance of West of Scotland (WoS) head and neck cancer services using clinical audit data relating to patients diagnosed with head and neck cancer in the twelve months between 1st April 2021 and 31st March 2022. Twelve months of data were measured against v4.0 of the Head and Neck Cancer Quality Performance Indicators (QPIs) which were implemented for patients diagnosed on or after 01 April 2021.

Methodology

Further detail on the audit and analysis methodology and data quality is available in the meta data within Appendix 1.

Results

A summary of the Head and Neck Cancer QPIs (QPI 1 to 15) 2021 - 22 clinical audit data is presented below. Results for each QPI are shown in detail in the main report and illustrate regional/treatment centre performance against each target and overall regional results for each performance indicator. Results are presented graphically and the accompanying tabular format also highlights any missing data and its possible effect on any of the measured outcomes.

Where the number of cases meeting the denominator criteria for any indicator is between one and four, the percentage calculation has not been shown on any associated charts or tables. This is to avoid any unwarranted variation associated with small numbers and to minimise the risk of disclosure. Any charts or tables impacted by this restricted data are denoted with a dash (-). An asterisk (*) is applied to indicate a denominator of zero and to distinguish between this and a 0% performance.

Any commentary provided by NHS Health Boards relating to the impacted indicators will however be included as a record of continuous improvement.

Summary of Head & Neck QPI Results

Colour Key		Symbol Key	
	Above QPI target	†	Analysed by Board/hospital of surgery
	Below QPI target	^	Small numbers in some Boards - percentage comparisons over a single year should be viewed with caution

Quality Performance Indicator (QPI)	Performance by NHS Board of diagnosis						
	QPI target	Year	AA	FV	GGC	Lan	WoSCAN
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.	**95%**	2021-22	96% (77/80)	96% (71/74)	93% (357/383)	97% (109/113)	95% (614/650)
		2020-21	94%	97%	94%	99%	95%
		2019-20	98%	98%	92%	98%	94%
QPI 2(i) – Imaging Proportion of patients with head and neck cancer who undergo CT/ MRI of the primary site, draining lymph nodes with CT of the chest before the initiation of treatment.	**95%**	2021-22	99% (72/73)	94% (62/66)	98% (331/337)	99% (106/107)	98% (571/583)
		2020-21	98%	92%	96%	96%	96%
		2019-20	89%	97%	93%	98%	94%
QPI 2(ii) – Imaging Proportion of patients with head and neck cancer who undergo CT/ MRI of the primary site, draining lymph nodes with CT of the chest before the initiation of treatment where the report is available within 2 weeks of the final imaging procedure.	**95%**	2021-22	92% (66/72)	97% (60/62)	94% (311/331)	81% (86/106)	92% (523/571)
		2020-21	95%	100%	99%	98%	98%
		2019-20	88%	100%	93%	100%	95%

Quality Performance Indicator (QPI)	Performance by NHS Board of diagnosis						
	QPI target	Year	AA	FV	GGC	Lan	WoSCAN
QPI 3 – Multi-Disciplinary Team Meeting (MDT): Proportion of patients with head and neck cancer who are discussed at MDT meeting before definitive treatment.	**95%**	2021-22	96% (70/73)	100% (66/66)	99% (351/355)	100% (108/108)	99% (595/602)
		2020-21	100%	97%	97%	99%	98%
		2019-20	88%	97%	94%	99%	95%
QPI 4 – Smoking Cessation: Proportion of patients with head and neck cancer who smoke who are offered referral to smoking cessation before first treatment.	**95%**	2021-22	96% (21/22)	95% (21/21)	78% (98/125)	45% (14/31)	77% (153/199)
		2020-21	65%	68%	75%	27%	63%
		2019-20	24%	50%	59%	31%	49%
QPI 5(i) – Oral and Dental Rehabilitation Plan: Proportion of patients with head and neck cancer undergoing active treatment in whom the decision for requiring pre-treatment assessment has been made jointly by Consultants in Restorative Dentistry and the MDT.	**95%**	2021-22	100% (63/63)	98% (57/58)	97% (247/255)	100% (72/72)	98% (439/448)
		2020-21	100%	100%	100%	100%	100%
		2019-20	94%	100%	100%	100%	99%
QPI 5(ii) – 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.	**95%**	2021-22	97% (35/36)	87% (26/30)	88% (142/162)	93% (26/28)	89% (229/256)
		2020-21	100%	80%	95%	95%	95%
		2019-20	83%	96%	88%	90%	89%

Quality Performance Indicator (QPI)	Performance by NHS Board of diagnosis						
	QPI target	Year	AA	FV	GGC	Lan	WoSCAN
QPI 6 (i) – Nutritional Screening: Proportion of patients with head and neck cancer who undergo nutritional screening with the Malnutrition Universal Screening Tool (MUST) before first treatment.	**95%**	2021-22	87% (73/84)	96% (71/74)	92% (368/402)	89% (102/114)	91% (614/674)
		2020-21	99%	93%	84%	99%	90%
		2019-20	27%	95%	76%	97%	79%
QPI 6 (ii) – Nutritional Screening: Proportion of patients with head and neck cancer at high risk of malnutrition (MUST Score of 2 or more) who are assessed by a specialist dietitian.	**90%**	2021-22	-	94% (16/17)	94% (50/53)	89% (24/27)	91% (92/101)
		2020-21					
		2019-20					
QPI 6 (iii) – Nutritional Screening: Proportion of patients with oral, pharyngeal or laryngeal cancer undergoing treatment with curative intent who are assessed by a specialist dietitian.	**90%**	2021-22	85% (45/53)	88% (46/52)	79% (189/239)	77% (47/61)	81% (327/405)
		2020-21					
		2019-20					
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.	**90%**	2021-22	71% (29/41)	33% (17/51)	53% (123/232)	91% (53/58)	58% (222/382)
		2020-21	85%	31%	82%	91%	79%
		2019-20	25%	68%	42%	91%	54%

Quality Performance Indicator (QPI)	Performance by NHS Board of diagnosis						
	QPI target	Year	AA	FV	GGC	Lan	WoSCAN
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.	**<10%**	2021-22	8% (1/13)	0% (0/6)	7% (10/146)	7% (2/30)	7% (13/195)
		2020-21	6%	0%	9%	10%	9%
		2019-20	0%	0%	6%	6%	5%
QPI 11 – 30 Day Mortality – Surgery: Proportion of patients with head and neck cancer who die within 30-days of curative surgical treatment.	**< 5%**	2021-22	0% (0/24)	0% (0/9)	1% (1/187)	0% (0/43)	1% (1/263)
		2020-21	5%	0%	1%	0%	1%
		2019-20	0%	0%	0%	3%	0%
QPI 11 – 90 Day Mortality – Surgery: Proportion of patients with head and neck cancer who die within 90-days of curative surgical treatment.	**< 5%**	2021-22	0% (0/24)	11% (1/9)	2% (4/187)	2% (1/43)	2% (6/263)
		2020-21	4.8%	0.0%	2.4%	2.3%	2.6%
		2019-20	0.0%	0.0%	0.6%	10.5%	2.2%
QPI 11 – 30 Day Mortality – Radical Radiotherapy: Proportion of patients with head and neck cancer who die within 30-days of radical radiotherapy.	**< 5%**	2021-22	0% (0/24)	0% (0/8)	0% (0/53)	0% (0/11)	0% (0/96)
		2020-21	0.0%	11.1%	1.6%	0.0%	1.8%
		2019-20	0.0%	7.1%	0.0%	5.6%	1.9%

Quality Performance Indicator (QPI)	Performance by NHS Board of diagnosis						
	QPI target	Year	AA	FV	GGC	Lan	WoSCAN
QPI 11 – 90 Day Mortality – Radical Radiotherapy: Proportion of patients with head and neck cancer who die within 90-days of radical radiotherapy.	**< 5%**	2021-22	0% (0/24)	0% (0/8)	0% (0/52)	0% (0/11)	0% (0/95)
		2020-21	4.3%	12.5%	1.6%	0.0%	2.7%
		2019-20	0.0%	7.1%	0.0%	5.6%	1.9%
QPI 11 – 30 Day Mortality – Chemoradiotherapy: Proportion of patients with head and neck cancer who die within 30-days of chemoradiotherapy.	**< 5%**	2021-22	-	0% (0/16)	2% (1/61)	0% (0/21)	1% (1/100)
		2020-21	0.0%	0.0%	1.9%	0.0%	1.1%
		2019-20	0.0%	0.0%	0.0%	7.7%	2.1%
QPI 11 – 90 Day Mortality – Chemoradiotherapy: Proportion of patients with head and neck cancer who die within 90-days of chemoradiotherapy.	**< 5%**	2021-22	-	0% (0/14)	2% (1/59)	0% (0/21)	1% (1/96)
		2020-21	0.0%	0.0%	2.0%	0.0%	1.1%
		2019-20	0.0%	0.0%	2.0%	7.7%	3.1%
QPI 14: Time from Surgery to Adjuvant Radiotherapy / Chemoradiotherapy: Proportion of patients with squamous cell carcinoma of the oral cavity, pharynx or larynx who undergo adjuvant radiotherapy or chemoradiotherapy and commence this within 7 weeks of definitive surgical resection.	**50%**	2021-22	-	20% (1/5)	38% (13/34)	33% (3/9)	37% (19/52)
		2020-21					
		2019-20					

Quality Performance Indicator (QPI)	Performance by NHS Board of diagnosis						
	QPI target	Year	AA	FV	GGC	Lan	WoSCAN
QPI 15: PD-L1 Combined Proportion Score (CPS) for Decision Making: Proportion of patients with squamous cell head and neck cancer undergoing first line palliative SACT for whom PD-L1 CPS is reported within 14 days of MDT request.	**75%**	2021-22	-	-	95% (19/20)	-	88% (23/26)
		2020-21					
		2019-20					

(-) Data is not shown; denominator less than 5.

Conclusions and Action Required

Cancer audit has underpinned much of the regional development and service improvement work of the MCN and the regular reporting of activity and performance have been fundamental in assuring the quality of care delivered across the region. Following the development of QPIs, this has now become an established national programme to drive continuous improvement and ensure equity of care for patients across Scotland.

The results presented within this report illustrate that some of the QPI targets set have been challenging for NHS Boards to achieve and there remains room for further service improvement, however it is encouraging that targets relating to Multi-Disciplinary Team meeting, surgical margins and 30 and 90 day mortality after radical radiotherapy and chemoradiotherapy were met by all Boards. Low mortality at 30 and 90 days following surgery was also observed.

In line with the agreed regional governance process, each NHS Board was asked to complete a Performance Summary Report (PSR), providing detailed comments where QPI targets were not met. In the main, feedback from the Boards indicates valid clinical reasons or that, in some cases, patient choice or co-morbidities have influenced patient management. Additionally, Boards have indicated where positive action has already been taken at a local level to address any issues highlighted through the QPI data analysis. It is anticipated that these positive changes will result in improved performance going forward.

The MCN will actively take forward regional actions identified and NHS Boards are asked to develop local Action/Improvement Plans in response to the findings presented in the report.

Actions required:

QPI 2: Imaging

- NHS Ayrshire & Arran to review reasons for delays in CT reporting and agree local action to ensure CT reports are available within 2 weeks of CT/ MRI.
- NHS Forth Valley to confirm improvement actions agreed with the radiology team.

QPI 4: Smoking Cessation

- NHS Lanarkshire and NHSGGC to devise robust mechanism to ensure the offer of a referral to smoking cessation services is formally documented in systems that are accessible to local audit teams.

QPI 6: Nutritional Screening

- NHS Ayrshire & Arran to confirm what improvement action has been taken locally to ensure MUST scores are recorded at MDT going forward.
- NHS Lanarkshire to confirm the improvement action agreed locally to ensure compliance going forward.

QPI 7: Specialist Speech and Language Therapist Access

- NHS Forth Valley SALT team to develop processes to ensure all appropriate patients are referred and registered for SALT input.
- NHSGGC to develop an action plan to address known issues with availability of SALT resource.

Completed Action Plans should be returned to WoSCAN within a timely manner to allow the plans to be reviewed at the Regional Cancer Oversight Group.

Progress against these plans will be monitored by the MCN Advisory Board and any service or clinical issue which the Advisory Board considers not to have been adequately addressed will be escalated to the NHS Board Territorial Lead Cancer Clinician and Regional Lead Cancer Clinician.

1. Introduction

This report contains an assessment of the performance of West of Scotland (WoS) head and neck cancer services using clinical audit data relating to patients diagnosed with head and neck cancer in the twelve months between 1st April 2021 and 31st March 2022. The QPI definitions were updated in 2021 and applied to cases diagnosed from April 2021 onwards. These audit data underpin much of the regional development/service improvement work of the Managed Clinical Network (MCN) and regular reporting of activity and performance is a fundamental requirement of a MCN to assure the quality of care delivered across the region.

QPI data has been presented alongside data for previous years where results have remained comparable after processes of review. Future reports will continue to compare clinical audit data in successive years to further illustrate trends.

2. Background

2.1 National Context

Head and neck cancer is the fifth most common cancer in Scotland with 1228 new diagnoses in 2020[1]. There is a gender difference with head and neck cancer occurring more often in males where it is the fourth most common cancer with approximately 843 cases in 2020. In females, it is the ninth most common cancer with 385 cases in 2020[4]. The incidence rate over the last 10 year period (2010-2020) has decreased both in men and women by around 9.8% and 7.7%[3] respectively.

The mortality rate for head and neck cancer over the last 10 year period has seen significant increase in both males and females, showing a 12% increase in males and 21% increase in females[1, 8].

Data shows that for head and neck cancer patients diagnosed between 2013 – 2017, 1 year net survival was 76.8% in males and 76.0% in females. 5 year net survival is marginally higher in females than males at 57.3% and 56.8% respectively[4].

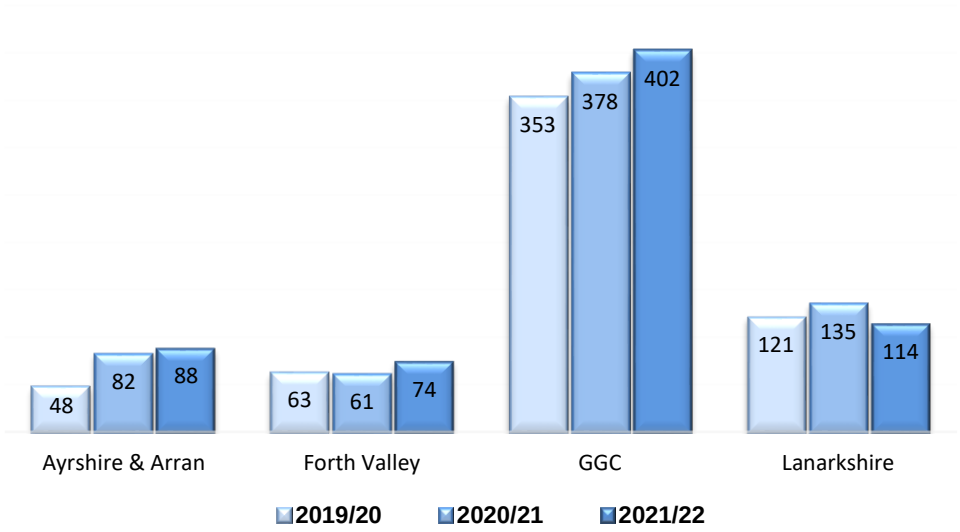
2.2 West of Scotland Context

A total of 678 cases of head and neck cancer were recorded through audit as diagnosed in the WoS between 1 April 2021 and 31 March 2022.

The Head and Neck Cancer MCN continues to support and develop the clinical service for these patients, with head and neck cancer services currently organised around two Multi-Disciplinary Teams (MDTs) serving 2.5 million people in four NHS Boards – NHS Ayrshire & Arran, NHS Forth Valley, NHS Greater Glasgow and Clyde (NHSGGC) and NHS Lanarkshire. The Network continues to benefit from enthusiastic engagement of a range of healthcare professionals and managers across the WoS. The WoS contains some of the worst areas of socio-economic deprivation in Scotland[6], and the overall life expectancy for specific postcode areas is lower than that of any other area in the United Kingdom[7]. This high index of deprivation is coupled with above average levels of smoking and alcohol use[7].

The number of patients diagnosed within each NHS Board is presented in Figure 1. As the largest WoS Board, 59.3% of all new cases of head and neck cancer, submitted for audit, were diagnosed in NHSGGC.

Fig 1: Number of patients diagnosed with head and neck cancer by NHS Board of diagnosis, April 2021 to March 2022

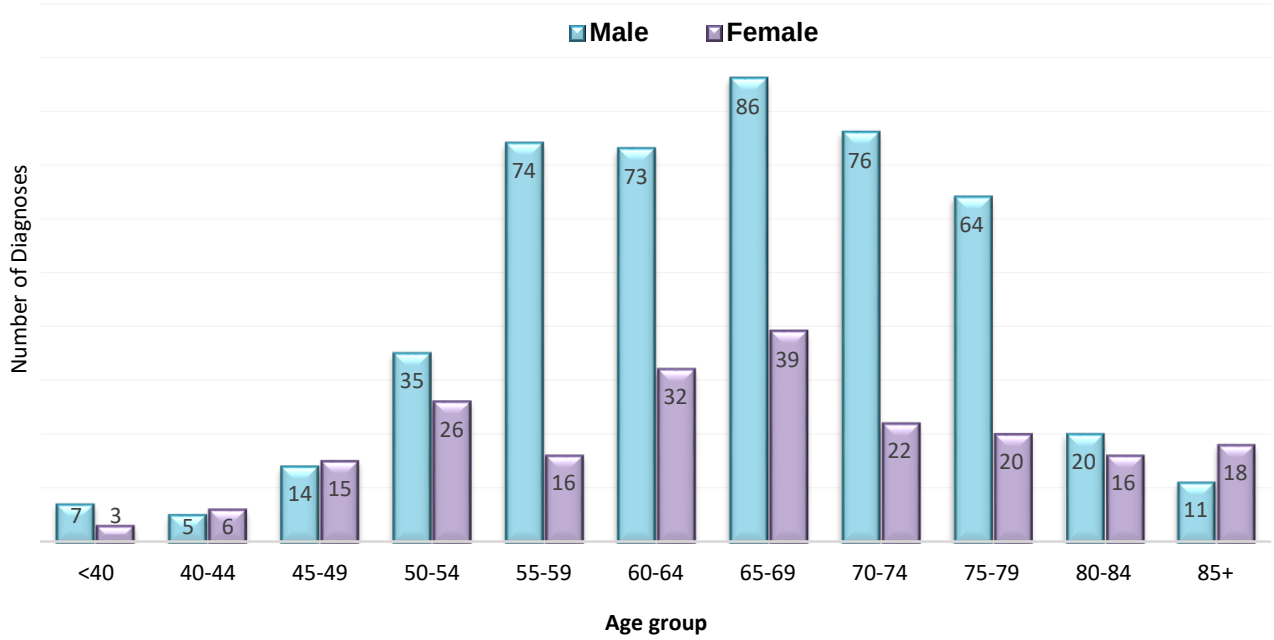


Health Board of diagnosis	2019/20		2020/21		2021/22	
	n	%	n	%	n	%
Ayrshire & Arran	48	8.9%	82	12.5%	88	13.0%
Forth Valley	63	11.7%	61	9.3%	74	10.9%
GGC	353	65.7%	378	57.6%	402	59.3%
Lanarkshire	121	22.5%	135	20.6%	114	16.8%
WoS	**537**		**656**		**678**	

2.3 Age and Gender Distribution

Figure 2 illustrates the distribution of head and neck cancer cases by age group and gender. As with previous years data, the occurrence of head and neck cancer is higher in males (68.6% of cases) than in females (31.4% of cases). Head and neck cancer is more prevalent in the 65-69 age group for both sexes with 18.5% and 18.3% for males and females respectively, diagnosed in 2021-22.

Fig 2: Age/gender distribution of head and neck cancer patients within WoS, 1st April 2021 to 31st March 2022.

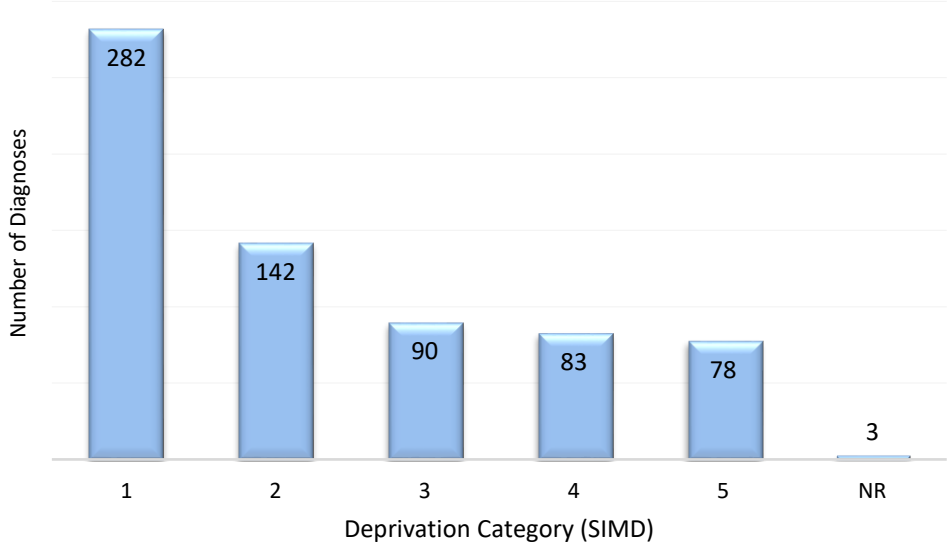


		<40	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	Total
Male	**N**	7	5	14	35	74	73	86	76	64	20	11	**465**
	%	1.5%	1.1%	3.0%	7.5%	15.9%	15.7%	18.5%	16.3%	13.8%	4.3%	2.4%	
Female	**N**	3	6	15	26	16	32	39	22	20	16	18	**213**
	%	1.4%	2.8%	7.0%	12.2%	7.5%	15.0%	18.3%	10.3%	9.4%	7.5%	8.5%	

2.4 Deprivation Category

Deprivation category is calculated using the Scottish Index of Multiple Deprivation (SIMD). As displayed in Figure 3, head and neck cancer incidence is inversely proportional to the deprivation areas, with deprivation category 1 representing the most deprived and category 5 the least deprived areas.

Fig 3: Deprivation category of patients diagnosed with head and neck cancer, 1st April 2021 to 31st March 2022.

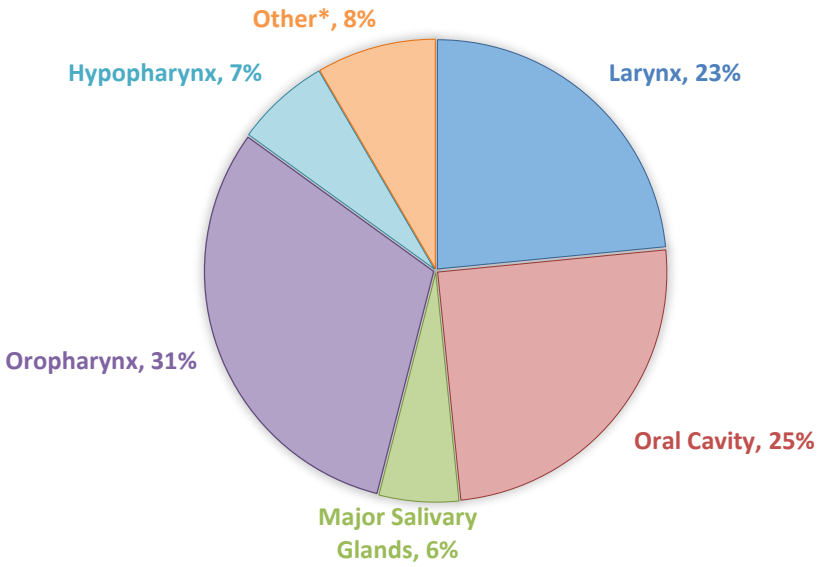


	Ayrshire & Arran		Forth Valley		GGC		Lanarkshire		WoS	
	n	%	n	%	n	%	n	%	n	%
1	32	36.4%	15	20.3%	199	49.5%	36	31.6%	282	41.6%
2	22	25.0%	9	12.2%	74	18.4%	37	32.5%	142	20.9%
3	15	17.0%	18	24.3%	40	10.0%	17	14.9%	90	13.3%
4	10	11.4%	16	21.6%	43	10.7%	14	12.3%	83	12.2%
5	7	8.0%	16	21.6%	45	11.2%	10	8.8%	78	11.5%
NR	2	2.3%	0	0.0%	1	0.2%	0	0.0%	3	0.4%
Total	**88**		**74**		**402**		**114**		**678**	

2.5 Site of Origin of Primary Tumour

Figure 4 displays the breakdown by cancer subsite and illustrates that oropharynx, oral cavity and larynx continue to be the most common type of head and neck cancers, accounting for the majority (79.4%) of the total cases registered, with oropharynx being the highest (31.0%).

Fig 4: Distribution of head and neck cancer subsite of patients diagnosed within WoS, 1st April 2021 to 31st March 22



	WoSCAN	
	N	%
Larynx	159	23.5%
Oral Cavity	169	24.9%
Oropharynx**	210	31.0%
Hypopharynx	45	6.6%
Major Salivary Glands	38	5.6%
Other*	57	8.3%
Total	**678**	

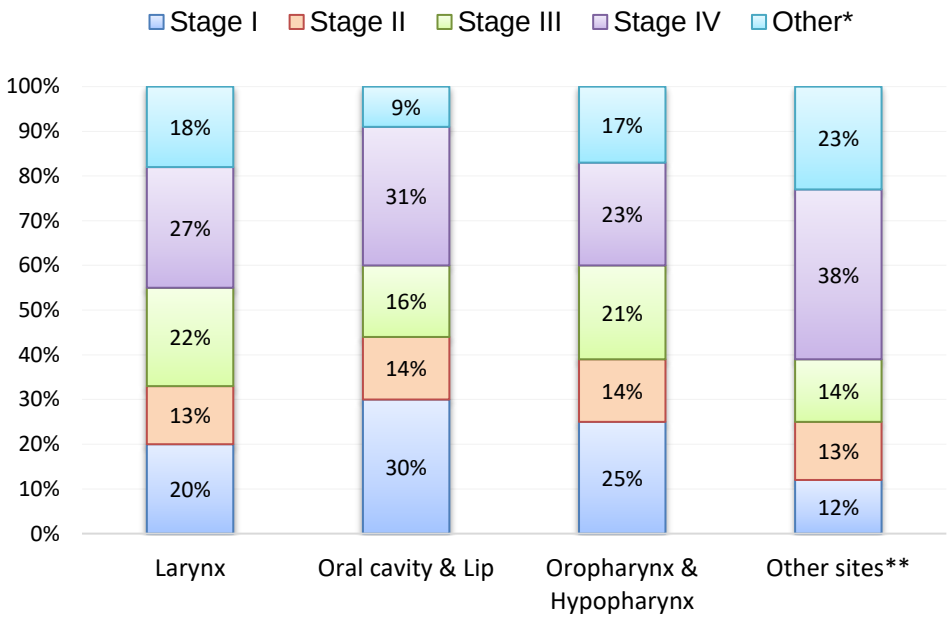
** Other includes Ill-defined Lip, Nasopharynx, Oral Cavity, Pharynx, Nasal Cavity & Middle Ear, Accessory Sinuses, Bones, Ill Defined Sites and Lip.*

***Staging information for 20 oropharynx patients could not be calculated due to lack of p16 status.*

2.6 Tumour Stage at Diagnosis

Figure 5 shows the distribution of head and neck cancers in WoS by stage, indicating the predominance of advanced stage disease.

Fig 5: Proportion of patients diagnosed with head and neck cancer in WoS by stage 2021 – 22



**Other includes inapplicable, not recorded, not assessable and unable to stage*

*Other sites** include Nasopharynx, Major Salivary Glands, Nasal Cavity & Middle Ear and Accessory Sinuses*

3. Methodology

Further detail on the audit and analysis methodology and data quality is available in the meta data within Appendix 1.

4. Results and Action Required

Results of the analysis of Head and Neck Cancer QPIs are set out in the following sections. Data are presented by location of diagnosis or treatment, and illustrate NHS Board performance against each target and overall regional performance for each performance indicator.

Results are presented graphically and the accompanying tables also highlight any missing data and its possible effect on any of the measured outcomes for the current year of analysis. Where the number of cases meeting the denominator criteria for any indicator is between one and four, the percentage calculation has not been shown on any associated charts or tables. This is to avoid any unwarranted variation associated with small numbers and to minimise the risk of disclosure. Any charts or tables impacted by this restricted data are denoted with a dash (-). An asterisk (*) is used to specify a denominator of zero and to distinguish between this and a 0% performance. Any commentary provided by NHS Boards relating to the impacted indicators will however be included as a record of continuous improvement.

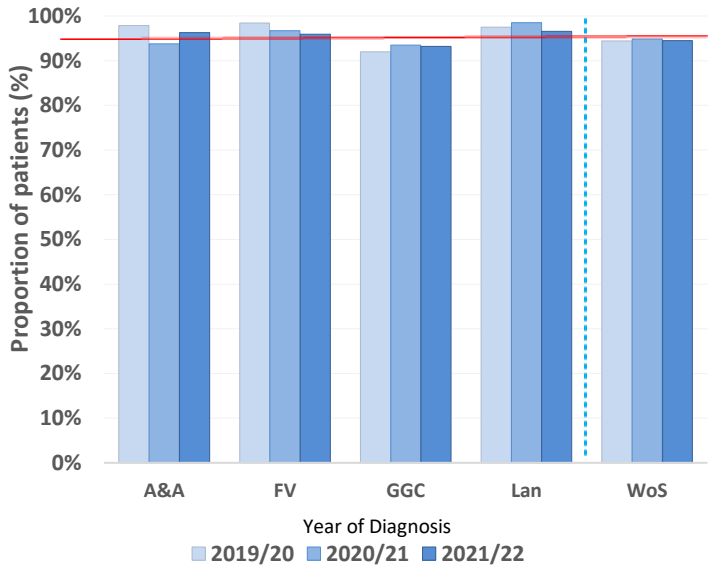
Specific regional and NHS Board actions have been identified to address issues highlighted through the data analysis.

QPI 1: Pathological Diagnosis

A definitive diagnosis is valuable in helping inform patients and carers about the nature of the disease, the likely prognosis and treatment choice[1]. QPI 1 states that 95% of patients with head and neck cancer should have a cytological or histological diagnosis before treatment. The tolerance within this target is designed to account for situations where it is not appropriate, safe or possible to obtain a cytological or histological diagnosis due to the performance status of the patient or the advanced nature of the disease.

QPI 1:	Patients with head and neck cancer should have a cytological or histological diagnosis before treatment.
Numerator:	Number of patients with head and neck cancer who have a cytological or histological diagnosis before treatment.
Denominator:	All patients with head and neck cancer.
Exclusions:	Patients who died before treatment and patients who decline treatment
Target:	**95%**

Fig 6: Proportion of patients who have a cytological or histological diagnosis before treatment.



		2019/20	2020/21	2021/22
AA	**N**	46	75	77
	D	47	80	80
	%	97.9%	93.8%	96.3%
FV	**N**	62	59	71
	D	63	61	74
	%	98.4%	96.7%	95.9%
GGC	**N**	297	344	357
	D	323	368	383
	%	92.0%	93.5%	93.2%
Lan	**N**	118	130	109
	D	121	132	113
	%	97.5%	98.5	96.6%
WoS	**N**	477	608	614
	D	507	641	650
	%	94.4%	94.9%	94.5%

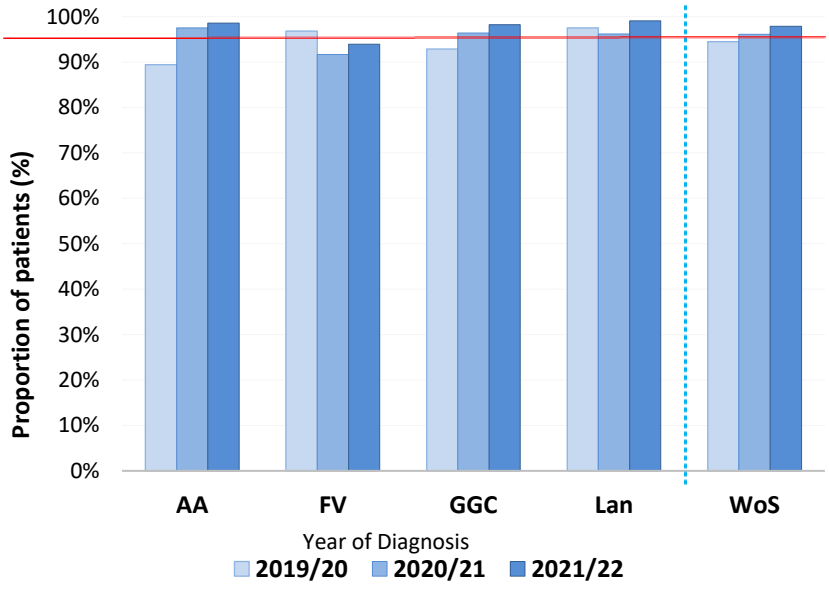
Overall in the WoS 94.5% of patients had a histological or cytological diagnosis prior to treatment. NHS Ayrshire & Arran, NHS Forth Valley and NHS Lanarkshire exceed the 95% target with NHSGGC marginally under, achieving 93.2%. NHSGGC commented that almost all cases not meeting the target were for supportive care.

QPI 2: Imaging

Accurate and timely staging is important to ensure appropriate treatment is delivered to patients with head and neck cancer. The target for this QPI is set at 95%. The tolerance allowed by the target reflects the fact that some patients may have significant co-morbidities or may not be fit for investigation and/or treatment[1].

QPI 2 i), ii):	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.
Numerator:	i) Number 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 initiation of treatment. ii) Number 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 initiation of treatment where the report is available within 2 weeks of the final imaging procedure.
Denominator:	i) All patients with head and neck cancer. ii) All 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
Exclusions:	Patients who undergo diagnostic excision biopsy as the definitive surgery, patients who died before treatment and patients who decline treatment.
Target:	**95%**

Fig 7: Proportion of patients who undergo CT and/or MRI of the primary site and draining lymph nodes with CT of the chest before initiation of treatment, 2019/20 – 2021/22.

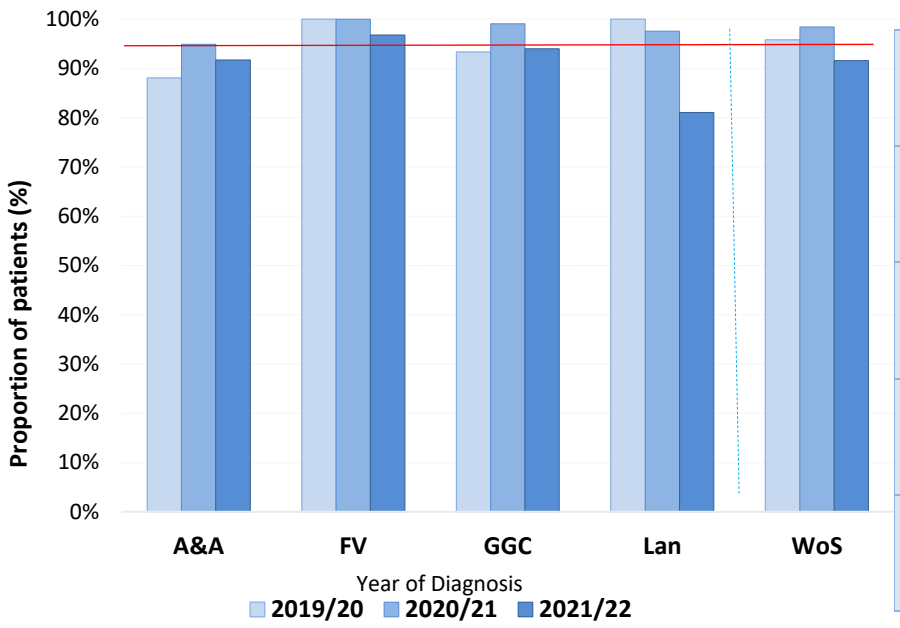


		2019/20	2020/21	2021/22
AA	**N**	42	78	72
	D	47	80	73
	%	89.4%	97.5%	98.6%
FV	**N**	61	55	62
	D	63	60	66
	%	96.8%	91.7%	93.9%
GGC	**N**	300	350	331
	D	323	363	337
	%	92.9%	96.4%	98.2%
Lan	**N**	117	126	106
	D	120	131	107
	%	97.5%	96.2%	99.1%
WoS	**N**	478	609	571
	D	506	634	583
	%	94.5%	96.1%	97.9%

In the WoS, 97.9% of patients with head and neck cancer underwent CT and/or MRI of the primary site and draining lymph nodes with CT of the chest before initiation of treatment, meeting the target of 95%. All Boards except NHS Forth Valley met the target.

NHS Forth Valley commented that of the 4 patients not meeting the target, 2 did not have imaging based on clinical decision and 2 cases had CT of neck but did not have CT of chest. This will be discussed with the radiology team.

Fig 8: Proportion of patients who undergo CT and/or MRI of the primary site and draining lymph nodes with CT of the chest before initiation of treatment where the report is available within 2 weeks of the final imaging procedure, 2019/20 – 2021/22.



		2019/20	2020/21	2021/22
AA	N	37	74	66
	D	42	78	72
	%	88.1%	94.9%	91.7%
FV	N	61	55	60
	D	61	55	62
	%	100.0%	100.0%	96.8%
GGC	N	280	347	311
	D	300	350	331
	%	93.3%	99.1%	94.0%
Lan	N	117	123	86
	D	117	126	106
	%	100.0%	97.6%	81.1%
WoS	N	458	599	523
	D	520	609	571
	%	95.8%	98.4%	91.6%

The overall performance for the WoS was 91.6% against the 95% target. All Boards except NHS Forth Valley, missed the target for the report being available within 2 weeks of the final imaging procedure. NHS Forth Valley continued to exceed the target with 96.8%.

NHS Ayrshire & Arran will take action locally to ensure CT reports are available within 2 weeks of CT/MRI.

NHS Lanarkshire commented that they failed to meet this QPI for the first time, with performance falling from 97.6% last year to 81.1% in the current reporting year. The Board confirmed that all cases were reviewed, with delays due to staffing issues within Radiology and actions have been put in place to recruit.

Actions:

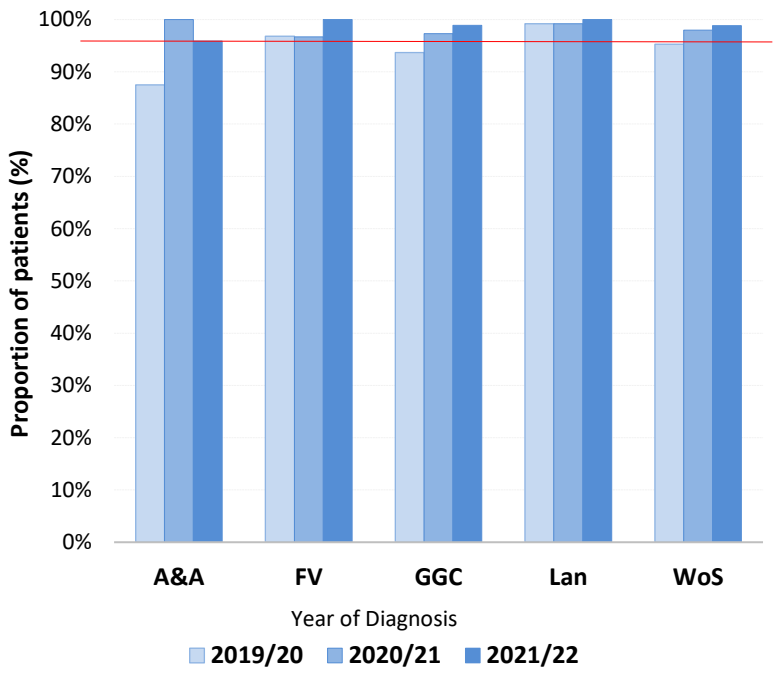
- NHS Ayrshire & Arran to review reasons for delays in CT reporting and agree local action to ensure CT reports are available within 2 weeks of CT/MRI.
- NHS Forth Valley to confirm improvement actions agreed with the radiology team.

QPI 3: Multi-Disciplinary Team Meeting

Effective MDT working is considered integral to provision of high quality head and neck cancer care, facilitating a cohesive treatment-planning function and ensuring treatment and care provision is individualised to patient needs. QPI 3 states that 95% of patients should be discussed at the MDT prior to definitive treatment. The tolerance allows for patients who need treatment urgently.

QPI 3:	Patients with head and neck cancer should be discussed by a multidisciplinary team before definitive treatment.
Numerator:	Number of patients with head and neck cancer discussed at the MDT before definitive treatment
Denominator:	All patients with head and neck cancer
Exclusions:	Patients who died before first treatment. Patients who undergo diagnostic excision biopsy as the definitive surgery.
Target:	**95%**

Fig 9: Proportion of patients discussed by a multidisciplinary team before definitive treatment, 2019/20 - 2021/22.



		2019/20	2020/21	2021/22
AA	N	42	80	70
	D	48	80	73
	%	87.5%	100.0%	95.9%
FV	N	61	58	66
	D	63	60	66
	%	96.8%	96.7%	100.0%
GGC	N	325	361	351
	D	347	371	355
	%	93.7%	97.3%	98.9%
Lan	N	119	131	108
	D	120	132	108
	%	99.2%	99.2%	100.0%
WoS	N	547	630	595
	D	578	643	602
	%	94.6%	98.0%	98.8%

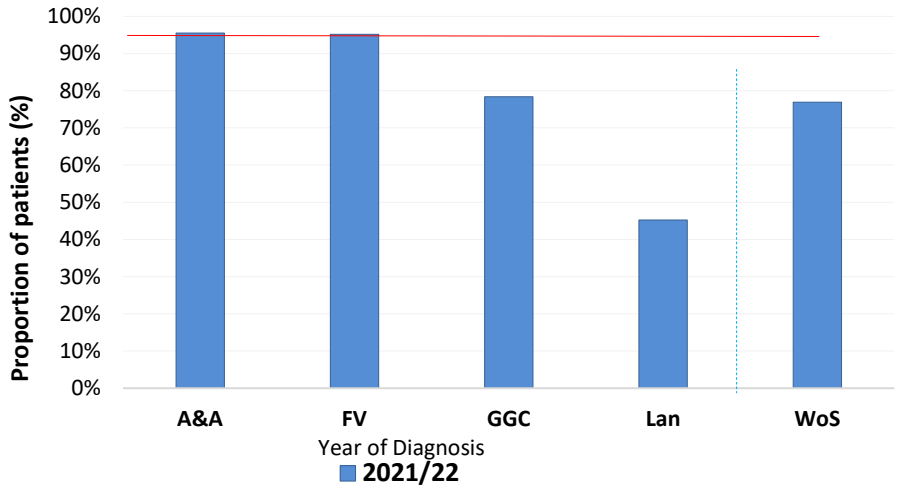
Of the 602 patients across the region with head and neck cancer, 595 were discussed at the MDT prior to definitive treatment. This equates to 98.8% and successfully meets the 95% QPI target for the eighth consecutive year, with NHS Forth Valley and NHS Lanarkshire achieving 100%.

QPI 4: Smoking Cessation

Smoking while undergoing treatment for head and neck cancer can increase risks for disease recurrence and treatment failure. It can also increase the risk of side effects.

QPI 4:	Patients with head and neck cancer who smoke should be offered referral to smoking cessation before first treatment.
Numerator:	Number of patients with head and neck cancer who smoke who are offered referral to smoking cessation before first treatment.
Denominator:	All patients with head and neck cancer who smoke.
Exclusions:	Patients undergoing supportive care only.
Target:	**95%**

Fig 10: Proportion of patients who smoke who are offered referral to smoking cessation before first treatment, 2021/22.



		2021/22
AA	N	21
	D	22
	%	95.5%
FV	N	20
	D	21
	%	95.2%
GGC	N	98
	D	125
	%	78.4%
Lan	N	14
	D	31
	%	45.2%
WoS	N	153
	D	199
	%	76.9%

Following formal review, an exclusion category was added to this QPI for patients undergoing best supportive care and therefore data cannot be compared against the previous years.

Overall in the WoS, 76.9% of head and neck cancer patients who smoke were offered referral to smoking cessation before their first treatment, which is below the QPI target of 95%.

NHS Lanarkshire and NHSGGC noted that this QPI result does not necessarily reflect the true numbers of patients being referred and seen by smoking cessation services. Both Boards have observed improvements in recent years, however cited difficulties in documenting the offer of a referral in a format that can easily be captured locally by clinical audit teams. All Consultants in NHS Lanarkshire have been prompted to document referral to smoking cessation and the CNS has taken action to incorporate referrals into the NHS Lanarkshire CNS clinic. NHS Lanarkshire Clinical Audit Department will continue to monitor this measure through local reports, and work with the team to further improve compliance.

Action:

- NHS Lanarkshire and NHSGGC to devise robust mechanism to ensure the offer of a referral to smoking cessation services is formally documented in systems that are accessible to local audit teams.

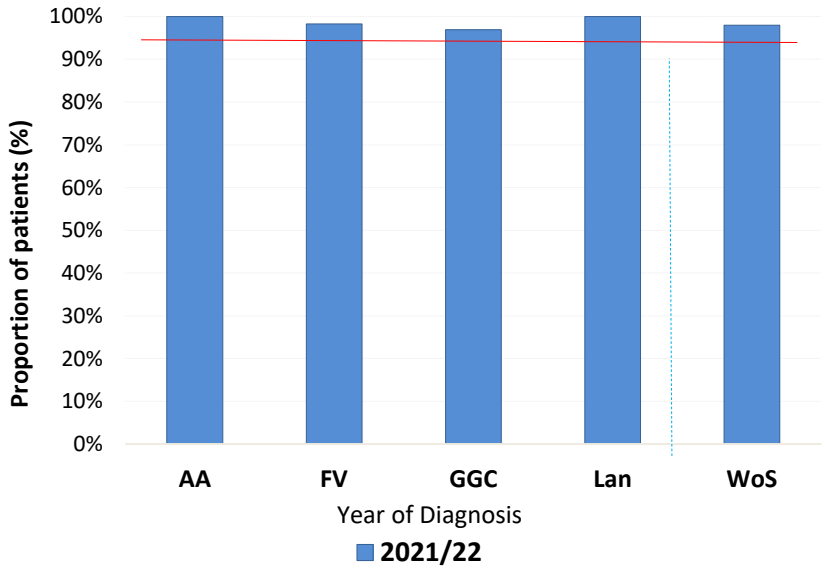
QPI 5: Oral Assessment

QPI 5 focuses on patients in whom the decision for pre-treatment assessment has been made jointly by Consultants in Restorative Dentistry and the MDT and also the number that have an assessment carried out prior to initiation of treatment.

QPI 5:	Patients whose head and neck cancer treatment may affect oral and dental appearance and function should have an assessment co-ordinated by a Consultant in Restorative Dentistry before initiation of treatment.
Numerator:	(i) Number of patients with head and neck cancer undergoing treatment with curative intent whom the decision for requiring pre-treatment assessment has been made jointly by Consultants in Restorative Dentistry and the MDT. (ii) Number of patients with head and neck cancer who are identified as requiring pre-treatment assessment that have assessment carried out before initiation of treatment.
Denominator:	(i) All patients with head and neck cancer undergoing treatment with curative intent. (ii) All patients with head and neck cancer undergoing treatment with curative intent who are identified by the Restorative Consultant and the MDT as requiring pre-treatment assessment.
Exclusions:	No exclusions.
Target:	**95%**

At formal review the denominator for specification (i) changed from all those undergoing active treatment to all those undergoing treatment with curative intent. Exclusion of patients with T1/T2/N0 larynx cancer has been removed from both specifications following formal review and therefore data cannot be compared against the previous years.

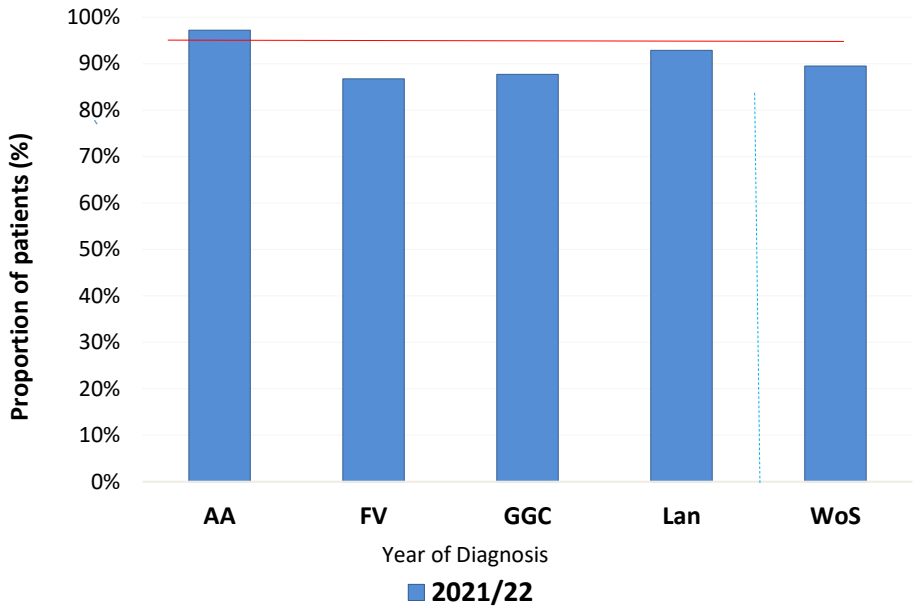
Fig 11: Proportion of patients undergoing active treatment in whom the decision for requiring pre-treatment assessment has been made jointly by Consultants in Restorative Dentistry and the MDT, 2021/22.



		2021/22
AA	N	63
	D	63
	%	100.0%
FV	N	57
	D	58
	%	98.3%
GGC	N	247
	D	255
	%	96.9%
Lan	N	72
	D	72
	%	100.0%
WoS	N	439
	D	448
	%	98.0%

98.0% of patients in all four Boards undergoing active treatment had the decision for requiring pre-treatment assessment made jointly by Consultants in Restorative Dentistry and the MDT, which exceeds the 95% QPI target. NHS Ayrshire & Arran and NHS Lanarkshire attained the target with 100%.

Fig 12: Proportion of patients who require pre-treatment assessment that have assessment carried out before initiation of treatment, 2021/22



		2021/22
AA	N	35
	D	36
	%	97.2%
FV	N	26
	D	30
	%	86.7%
GGC	N	142
	D	162
	%	87.7%
Lan	N	26
	D	28
	%	92.9%
WoS	N	229
	D	256
	%	89.5%

Of the 256 patients identified as requiring pre-treatment assessment, 89.5% (229) had the assessment carried out before initiation of treatment, which is below the QPI target of 95%. Only NHS Ayrshire & Arran met the target with 97.2%.

NHS Forth Valley reviewed the cases not meeting the QPI criteria, concluding that edentulous patients, and those having implants inserted by OMFS were managed appropriately in line with guidance from restorative dentistry.

NHS Lanarkshire reviewed the two cases failing to meet the QPI criteria and confirmed that there was no record of oral assessment documented. The Clinical Audit Team will monitor this through local reports.

QPI 6: Nutritional Screening

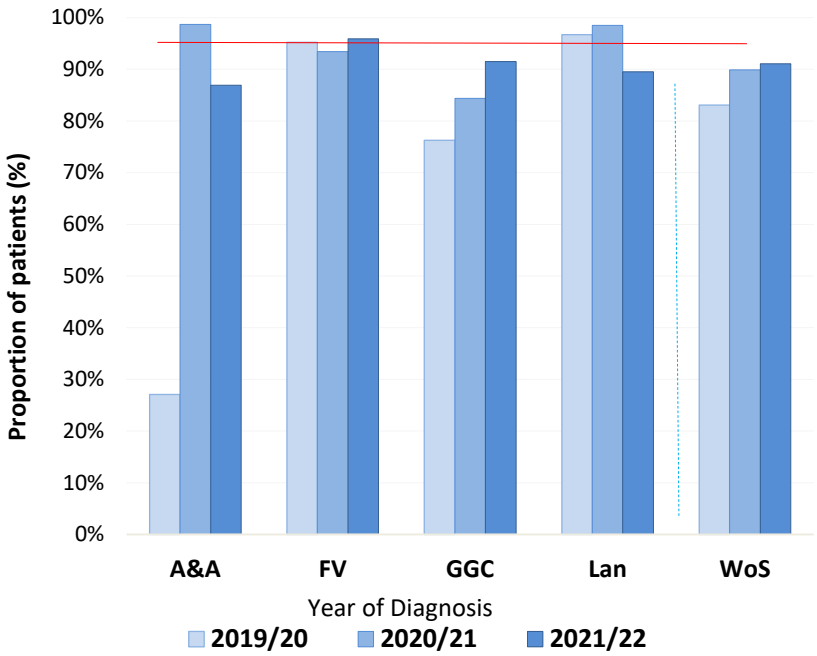
Patients with head and neck cancer should be screened at diagnosis for nutritional status using a validated screening tool appropriate to the patient population. The target for this QPI is set at 95% with the tolerance designed to account for those patients with very advanced disease who may not be fit for treatment, those patients who decline to be screened and factors of patient choice[1].

QPI 6:	Patients with head and neck cancer should undergo nutritional screening prior to first treatment and those at risk of malnutrition should be assessed by a specialist dietitian to optimise nutritional status.
Numerator:	(i) Number of patients with head and neck cancer who undergo nutritional screening with the Malnutrition Universal Screening Tool (MUST) before first treatment. (ii) Number of patients with head and neck cancer at high risk of malnutrition (MUST Score 2 or more) who are assessed by a specialist dietitian. (iii) Number of patients with oral, pharyngeal or laryngeal cancer undergoing treatment with curative intent who are assessed by a specialist dietitian.
Denominator:	(i) All patients with head and neck cancer. (ii) All patients with head and neck cancer at high risk of malnutrition (MUST Score of 2 or more). (iii) All patients with oral, pharyngeal or laryngeal cancer undergoing treatment with curative intent.
Exclusions:	No exclusions
Target:	**(i) 95%** **(ii) & (iii) 90%**

This QPI was separated into three parts at formal review; (i) to capture patients with head and neck cancer who undergo nutritional screening with the Malnutrition Universal Screening Tool (MUST) before first treatment, (ii) to capture assessment of those patients at risk of malnutrition (MUST score of 2 or more), (iii) to capture assessment of further patients that are likely to be at risk of malnutrition following treatment with curative intent.

As this QPI has two new parts, no previous years' data are available for specifications (ii) Proportion of patients with head and neck cancer at high risk of malnutrition (MUST Score of 2 or more) who are assessed by a specialist dietitian and (iii) Proportion of patients with oral, pharyngeal or laryngeal cancer undergoing treatment with curative intent who are assessed by a specialist dietitian.

Fig 13: Proportion of patients who undergo nutritional screening using MUST before first treatment, 2019/20 – 2021/22.



		2019/20	2020/21	2021/22
AA	N	13	78	73
	D	48	79	84
	%	27.1%	98.7%	86.9%
FV	N	60	57	71
	D	63	61	74
	%	95.2%	93.4%	95.9%
GGC	N	267	319	368
	D	350	378	402
	%	76.3%	84.4%	91.5%
Lan	N	117	132	102
	D	121	134	114
	%	96.7%	98.5%	89.5%
WoS	N	444	586	614
	D	534	652	674
	%	83.1%	89.9%	91.1%

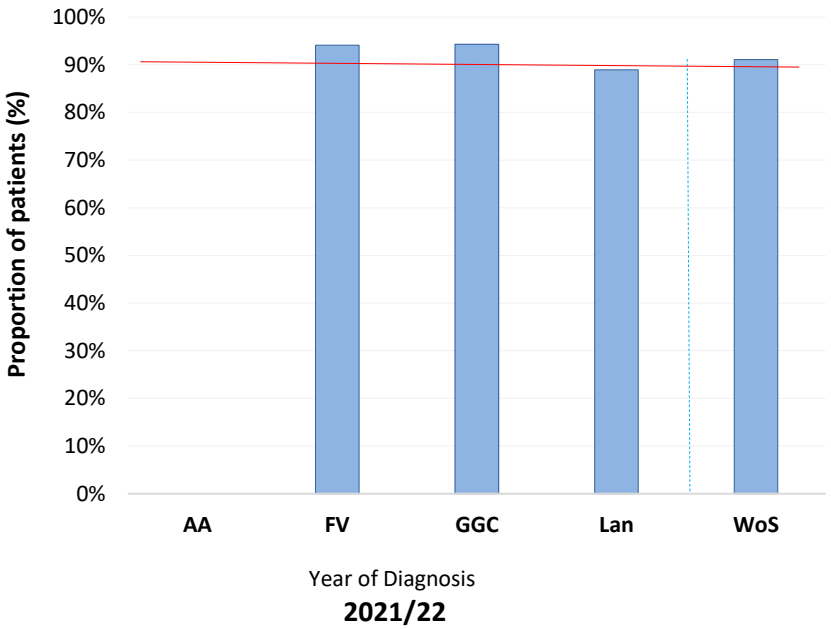
Overall in the WoS, 91.1% of patients with head and neck cancer underwent nutritional screening with the Malnutrition Universal Screening Tool (MUST) before first treatment, which is below the 95% QPI target but an improvement from previous years. NHS Forth Valley met the QPI achieving 95.9%.

NHS Ayrshire & Arran has taken action locally to ensure that going forward this is recorded on the MDT proforma to capture the information correctly.

NHS Lanarkshire reviewed all cases that failed to meet this QPI. They commented that MUST was not recorded for the majority of cases and that a small number of patients were screened after first treatment. All Consultants have been reminded to ensure MUST is clearly documented at MDT.

NHSGGC noted significant improvements over the last few years.

Fig 14: Proportion of patients with head and neck cancer at high risk of malnutrition (MUST score of 2 or more) who are assessed by a specialist dietitian, 2021-22



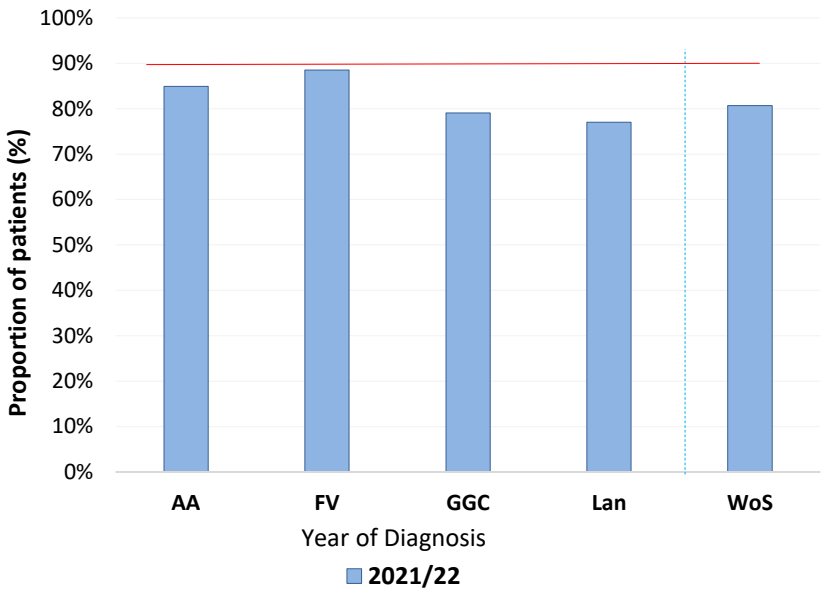
		2021/22
AA	N	-
	D	-
	%	-
FV	N	16
	D	17
	%	94.1%
GGC	N	50
	D	53
	%	94.3%
Lan	N	24
	D	27
	%	88.9%
WoS	N	92
	D	101
	%	91.1%

(-) Data is not shown; Denominator less than 5.

Of the 101 patients with head and neck cancer at high risk of malnutrition (MUST score of 2 or more), 92 were assessed by a specialist dietitian. This resulted in a WoS performance of 91.1% against the 90% QPI target.

NHS Lanarkshire reviewed the 3 failed cases, noting that patients either declined or did not attend a scheduled assessment.

Fig 15: Proportion of patients with oral, pharyngeal or laryngeal cancer undergoing treatment with curative intent who are assessed by a specialist dietitian.



		2021/22
AA	N	45
	D	53
	%	84.9%
FV	N	46
	D	52
	%	88.5%
GGC	N	189
	D	239
	%	79.1%
Lan	N	47
	D	61
	%	77.0%
WoS	N	327
	D	405
	%	80.7%

Overall in the WoS, 80.7% of the oral, pharyngeal or laryngeal cancer patients undergoing treatment with curative intent were assessed by a specialist dietitian, which is below the QPI target of 90%. All Boards failed this QPI, with performance ranging from 77.0% in NHS Lanarkshire to 88.5% in NHSGGC.

NHS Forth Valley commented that the 6 patients who failed to meet this QPI were not seen by a dietitian and no reason was documented. The Board noted that this will be discussed with the nutrition team with the emphasis on MUST score documentation.

NHS Lanarkshire reviewed all cases that failed to meet this QPI and commented that two patients failed to attend their appointments while the other cases were either not documented or not seen by dietetics within the required time frame due to staffing and capacity issues. The Board has discussed actions with the team and, going forward, expect to see an improvement in compliance.

Actions:

QPI 6 (i, ii, iii):

- NHS Ayrshire & Arran to confirm what improvement action has been taken locally to ensure MUST scores are recorded at MDT going forward.

QPI 6iii:

- NHS Lanarkshire to confirm the improvement action agreed locally to ensure compliance going forward.

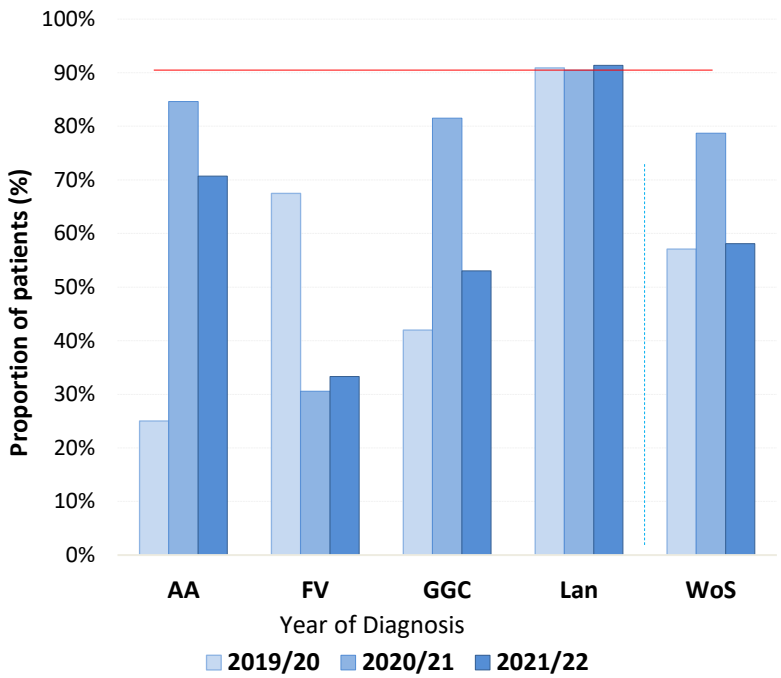
QPI 7: Specialist Speech and Language Therapist Access

Assessment of voice, speech and swallowing of patients is very difficult to measure accurately therefore uptake is utilised within this QPI as a proxy for assessment. Although it will not provide an absolute measure of patient access to this, it will give an indication of access across NHS Boards and highlight any areas of variance which can then be further examined[1]. The tolerance within this target is designed to account for situations where patients require treatment urgently. It also accounts for those patients where speech and language assessment may not be clinically required prior to treatment[1]

QPI 7:	Patients with oral, pharyngeal or laryngeal cancer should be seen by a specialist SLT* before treatment to assess voice, speech and swallowing.
Numerator:	Number of patients with oral, pharyngeal or laryngeal cancer undergoing treatment with curative intent who are seen by a specialist SLT before treatment.
Denominator:	All patients with oral, pharyngeal, or laryngeal cancer undergoing treatment with curative intent.
Exclusions:	Patients who refuse assessment.
Target:	**90%**

**Assessment by SLT may also include virtual consultation.*

Fig 16: Proportion of patients with oral, pharyngeal or laryngeal cancer undergoing treatment with curative intent who are seen by a specialist SLT before first treatment, 2019/20 – 2021/22.



		2019/20	2020/21	2021/22
AA	N	8	44	29
	D	32	52	41
	%	25.0%	84.6%	70.7%
FV	N	27	11	17
	D	40	36	51
	%	67.5%	30.6%	33.3%
GGC	N	84	167	123
	D	200	205	232
	%	42.0%	81.5%	53.0%
Lan	N	70	67	53
	D	77	74	58
	%	90.9%	90.5%	91.4%
WoS	N	181	289	222
	D	317	367	382
	%	57.1%	78.7%	58.1%

Overall in the WoS, 58.1% of patients with oral, pharyngeal or laryngeal cancer undergoing treatment with curative intent were reviewed by a Speech and Language Therapist (SLT) before treatment – significantly lower than the target of 90% and considerably lower than last year's result (78.7%). In NHS Lanarkshire, the combined MDT/SLT clinic has had a significant impact on improving performance with the Board meeting the target for the third year running.

NHS Ayrshire & Arran commented that all patients were offered an appointment and noted that they will ensure patients are seen before treatment, if they accept the appointment offer before treatment.

NHS Forth Valley reviewed the 34 cases not meeting the target. In 14 cases there was no reason documented for patients not being seen by SLT; 10 cases were not appropriate for SLT as agreed by the MDT, 9 cases were seen after first treatment and the final case received surgery within NHS GGC and therefore documentation on SALT input was not available within NHS Forth Valley in time for the data analysis. The Board noted that a new SALT team has been established within the Board and improvements are anticipated going forward.

NHSGGC highlighted that the Board experienced significant challenges in terms of availability of SALT during the COVID-19 pandemic and that some of these challenges remain.

Actions:

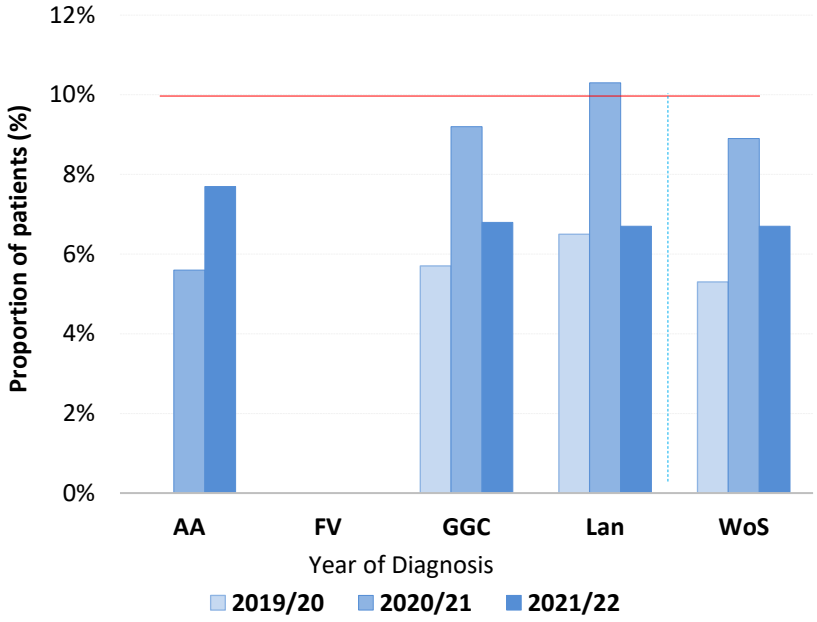
- NHS Forth Valley SALT team to develop processes to ensure all appropriate patients are referred and registered for SALT input.
- NHSGGC to develop an action plan to address known issues with availability of SALT resource.

QPI 8: Surgical Margins

Margin status is an important predictor of patient outcome. Where distance from invasive carcinoma to surgical margins is less than 1mm this would be considered involved[1]. This QPI is measuring the proportion of patients who undergo surgery where the tumour has not been completely excised, therefore a 'less than' target level has been set.

QPI 8:	Patients with head and neck cancer undergoing open surgical resection with curative intent should have their tumour adequately excised.
Numerator:	Number of patients with squamous cell carcinoma of the oral cavity, larynx or pharynx who undergo open surgical resection with curative intent with final excision margins of less than 1mm (on pathology report).
Denominator:	All patients with squamous cell carcinoma of the oral cavity, larynx or pharynx who undergo open surgical resection with curative intent.
Exclusions:	Patients with nasopharyngeal cancer and patients with posterior pharyngeal wall cancer.
Target:	**<10%**

Fig 17: Proportion of patients with final excision margins of less than 1mm after open surgical resection with curative intent, 2019/20 – 2021/22.



		2019/20	2020/21	2021/22
AA	N	0	1	1
	D	12	18	13
	%	0.0%	5.6%	7.7%
FV	N	-	-	0
	D	-	-	6
	%	-	-	0.0%
GGC	N	6	12	10
	D	105	130	146
	%	5.7%	9.2%	6.8%
Lan	N	2	3	2
	D	31	29	30
	%	6.5%	10.3%	6.7%
WoS	N	8	16	13
	D	139	179	195
	%	5.3%	8.9%	6.7%

Overall in the WoS the <10% target for QPI 8 was achieved in Year 8, with 6.7% of cases having final excision margins of less than 1mm (on pathology report). All Boards met the QPI target.

QPI 11: 30 and 90 Day Mortality

Treatment related mortality is a marker of the quality and safety of the whole service provided by the Multi-Disciplinary Team (MDT).

QPI 11:	30 and 90 day mortality after curative treatment for head and neck cancer.
Numerator:	Number of patients with head and neck cancer who undergo curative treatment who die within 30 or 90 days of treatment.
Denominator:	All patients with head and neck cancer who undergo curative treatment. i) Surgery ii) Radical Radiotherapy iii) Chemoradiotherapy
Exclusions:	No exclusions.
Target:	**<5%**

Table 2: Proportion of patients who undergo Surgery with curative intent who die within 30/90 days of treatment, 2019/20 – 2021/22.

		Surgery					
		30-Days mortality			90-Days mortality		
		2019/20	2020/21	2021/22	2019/20	2020/21	2021/22
AA	N	0	1	0	0	1	0
	D	14	21	24	14	21	24
	%	0.0%	4.8%	0.0%	0.0%	4.8%	0.0%
FV	N	0	-	0	0	-	1
	D	5	-	9	5	-	9
	%	0.0%	-	0.0%	0.0%	-	11.1%
GGC	N	0	2	1	1	4	4
	D	172	164	187	172	164	187
	%	0.0%	1.2%	0.5%	0.6%	2.4%	0.5%
Lan	N	1	0	0	4	1	1
	D	38	43	43	38	43	43
	%	2.6%	0.0%	0.0%	10.5%	2.3%	2.3%
WoS	N	1	3	1	5	6	6
	D	229	231	263	229	225	263
	%	0.4%	1.3%	0.4%	2.2%	2.6%	2.3%

(-) Data is not shown; denominator less than 5. (*) denotes a zero.

Across the WoS, there was 1 death within 30 days and 6 deaths within 90 days of curative surgery in patients diagnosed with head and neck cancer in Year 8. This represents mortality rates of 0.4% and 2.3% for patients receiving curative surgery and is within the QPI target of less than 5%.

Boards reviewed the deaths and provided detailed clinical reasons for the cause of death in each case.

Table 3: Proportion of patients who undergo Radical radiotherapy with curative intent who die within 30/90 days of treatment, 2019/20 – 2021/22.

		Radical radiotherapy					
		30-Days mortality			90-Days mortality		
		2019/20	2020/21	2021/22	2019/20	2020/21	2021/22
AA	N	0	0	0	0	1	0
	D	14	24	24	14	23	24
	%	0.0%	0.0%	0.0%	0.0%	4.3%	0.0%
FV	N	1	1	0	1	1	0
	D	14	9	8	14	8	8
	%	7.1%	11.1%	0.0%	7.1%	12.5%	0.0%
GGC	N	0	1	0	0	1	0
	D	58	63	53	58	63	52
	%	0.0%	1.6%	0.0%	0.0%	1.6%	0.0%
Lan	N	1	0	0	1	0	0
	D	18	18	11	18	18	11
	%	5.6%	0.0%	0.0%	5.6%	0.0%	0.0%
WoS	N	2	2	0	2	3	0
	D	104	114	96	104	112	95
	%	1.9%	1.8%	0.0%	1.9%	2.7%	0.0%

(-) Data is not shown; denominator less than 5. (*) denotes a zero.

There were no deaths within 30 days or 90 days of radical radiotherapy in patients diagnosed with head and neck cancer within Year 8, meeting the QPI target of less than 5%.

Table 4: Proportion of patients who undergo Chemoradiotherapy with curative intent who die within 30/90 days of treatment, 2019/20 – 2021/22.

		Chemoradiotherapy					
		30-Days mortality			90-Days mortality		
		2019/20	2020/21	2021/22	2019/20	2020/21	2021/22
AA	N	0	-	-	0	-	-
	D	6	-	-	6	-	-
	%	0.0%	-	-	0.0%	-	-
FV	N	0	0	0	0	0	0
	D	13	13	16	13	13	14
	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GGC	N	0	1	1	1	1	1
	D	51	52	61	51	51	59
	%	0.0%	1.9%	1.6%	2.0%	2.0%	1.7%
Lan	N	2	0	0	2	0	0
	D	26	24	21	26	24	21
	%	7.7%	0.0%	0.0%	7.7%	0.0%	0.0%
WoS	N	2	1	1	3	1	1
	D	96	93	100	96	92	96
	%	2.1%	1.1%	1.0%	3.1%	1.1%	1.0%

(-) Data is not shown; denominator less than 5. (*) denotes a zero

Across the WoS, there was one death within 30 days and 90 days of chemoradiotherapy (single death overall) in patients diagnosed with head and neck cancer in Year 8. This represents 1.0% of patients in each time period receiving chemoradiotherapy and is within the QPI target of less than 5%.

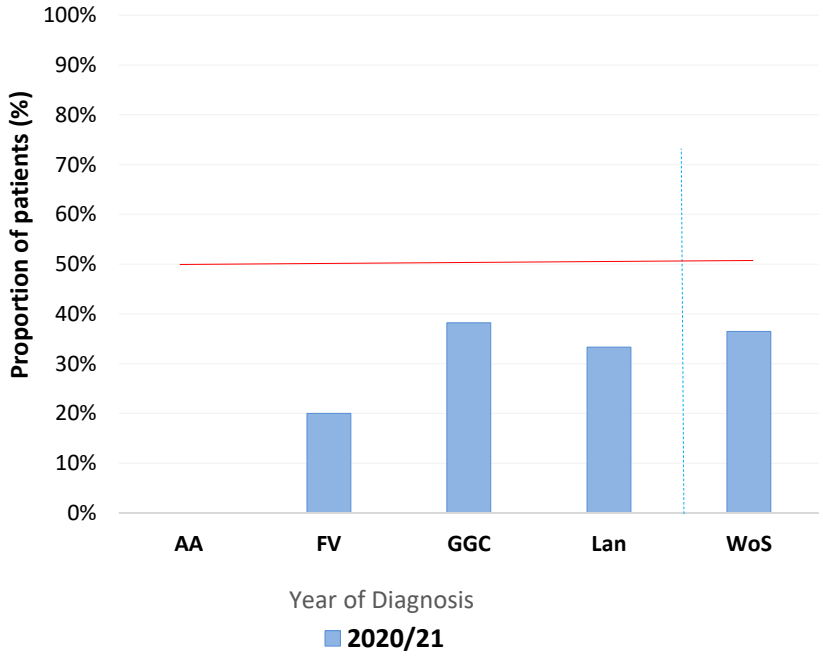
As with previous QPIs, the number of patients included within the denominator is low and can have a considerable effect on overall proportions; therefore percentages should be viewed with caution.

QPI 14: Time from Surgery to Adjuvant Radiotherapy / Chemoradiotherapy

In order to improve survival, multidisciplinary teams should focus on shortening the time from surgery to adjuvant radiotherapy/chemoradiotherapy. Post-operative radiotherapy within 6–7 weeks is associated with a survival advantage, even when adjusted for other confounding factors. There is no additional benefit in initiating treatment earlier than this, however increasing the duration beyond this timeframe is associated with a progressive reduction in overall survival.

QPI 14:	Patients with squamous cell carcinoma of the oral cavity, pharynx or larynx who undergo adjuvant treatment should commence this within 7 weeks of surgical resection.
Numerator:	Number of patients with squamous cell carcinoma of the oral cavity, pharynx or larynx who undergo adjuvant radiotherapy or chemoradiotherapy who commence this within 7 weeks of definitive surgical resection.
Denominator:	All patients with squamous cell carcinoma of the oral cavity, pharynx or larynx who undergo definitive surgical resection followed by adjuvant radiotherapy or chemoradiotherapy.
Exclusions:	No exclusions
Target:	**50%**

Fig 18: Proportion of patients with squamous cell carcinoma of the oral cavity, pharynx or larynx who undergo adjuvant radiotherapy or chemoradiotherapy and commence this within 7 weeks of definitive surgical resection.



		2021/22
AA	N	-
	D	-
	%	-
FV	N	1
	D	5
	%	20.0%
GGC	N	13
	D	34
	%	38.2%
Lan	N	3
	D	9
	%	33.3%
WoS	N	19
	D	52
	%	36.5%

(-) Data is not shown; denominator less than 5.

As this is a new QPI, this is the first year performance against the QPI is reported.

Overall in the WoS, 36.5% of patients with squamous cell carcinoma of the oral cavity, pharynx or larynx who undergo adjuvant treatment commenced this within 7 weeks of definitive surgical resection, which is below the 50% QPI target.

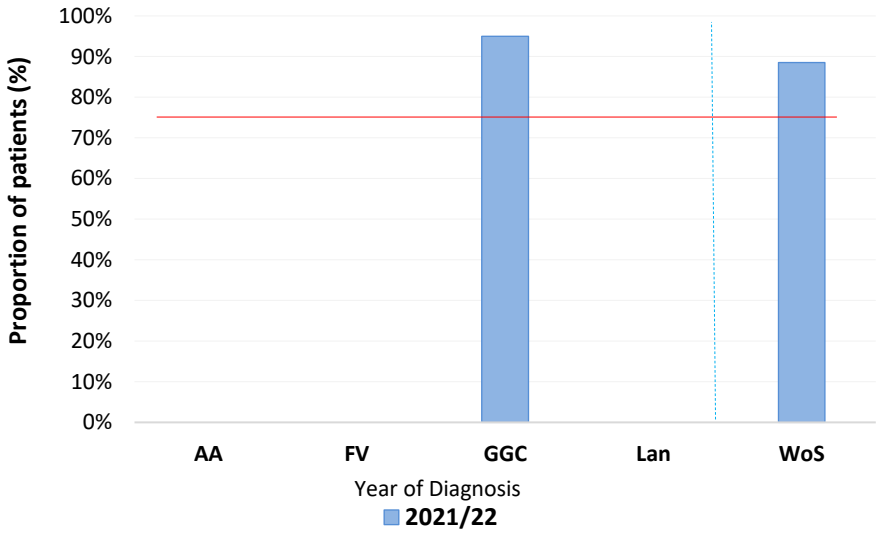
NHS Forth Valley, NHSGGC and NHS Lanarkshire reviewed cases not meeting the QPI. In the main patients were found to have had complex post op recovery, delays in pathology and post-operative imaging reporting or were receiving treatment for synchronous tumours. Additionally NHSGGC noted that logistics around repeated MDT discussion also impacted upon treatment timelines whilst NHS Lanarkshire highlighted that actions are in place to improve radiology staffing capacity.

QPI 15: PD-L1 Combined Proportion Score (CPS) for Decision Making

PD-L1 expression is an important prognostic indicator for patients with head and neck cancer. Pembrolizumab is recommended as monotherapy or in combination with chemotherapy for first line treatment of metastatic head and neck squamous cell carcinoma in adults whose tumours express programmed cell death ligand-1 (PD-L1) with a combined positive score (CPS) ≥1. It is important to ensure the availability of PD-L1 status to inform treatment decision making. Delay in the availability of a PD-L1 result may lead to a delay in appropriate therapy.

QPI 15:	Patients with squamous cell head and neck cancer undergoing first line palliative SACT for whom PD-L1 CPS is reported within 14 days of MDT request.
Numerator:	Number of patients with squamous cell head and neck cancer undergoing first line palliative SACT for whom PD-L1 CPS is reported within 14 days of MDT request.
Denominator:	All patients with squamous cell head and neck cancer undergoing first line palliative SACT.
Exclusions:	Patients with nasopharyngeal cancer
Target:	**75%**

Fig 19: Proportion of patients with squamous cell head and neck cancer undergoing first line palliative SACT for whom PD-L1 CPS is reported within 14 days of MDT request.



		2021/22
AA	N	-
	D	-
	%	-
FV	N	-
	D	-
	%	-
GGC	N	19
	D	20
	%	95.0%
Lan	N	-
	D	-
	%	-
WoS	N	23
	D	26
	%	88.5%

(-) Data is not shown; denominator less than 5.

This is a new QPI therefore no data are available for previous years.

Overall in the WoS, 88.5% of patients with squamous cell head and neck cancer undergoing first line palliative SACT had PD-L1 CPS reported within 14 days of MDT request, meeting the 75% target. NHSGGC and NHS Lanarkshire achieved the target.

Boards reviewed cases that failed and commented that the cases did have PD-L1 reported, however they failed to meet the QPI because the 14 day timescale was not achieved, or the PD-L1 report request date was not documented on the MDT outcome sheet. NHS Forth Valley noted that improvement is anticipated going forward as PD-L1 request date is now routinely captured on MDT outcome sheets.

5. Next Steps

The MCN will actively take forward regional actions identified and NHS Boards are asked to develop local Action/Improvement Plans in response to the findings presented in the report. A summary of actions for each NHS Board has been included within the Action Plan templates in Appendix 3.

Acknowledgement

This report has been prepared using clinical audit data provided by the following NHS Boards in the WoSCAN area:

NHS Ayrshire & Arran
NHS Forth Valley
NHS Greater Glasgow and Clyde
NHS Lanarkshire

We would like to thank all members and active participants in the cancer network for their continued support of the MCN, and the many hospitals that are committed to making the audit succeed. We also acknowledge the efforts of the clinical effectiveness staff, nurses, and other service users for their work in ensuring the data are available to enable analysis to take place each year. Without their considerable efforts this level of progress would not be possible.

Abbreviations

ACaDMe	Acute Cancer Deaths and Mental Health
CT	Computerised Tomography
eCASE	Electronic Cancer Audit Support Environment
HIS	Healthcare Improvement Scotland
HPV	Human Papilloma Virus
IMRT	Intensity Modulated Radiotherapy
ISD	Information Services Division
MCN	Managed Clinical Network
MDT	Multidisciplinary Team
M&M	Mortality and Morbidity
MRI	Magnetic Resonance Imaging
MUST	Malnutrition Universal Screening Tool
NCQSG	National Cancer Quality Steering Group
NCRI	National Cancer Research Institute
NHSGGC	NHS Greater Glasgow and Clyde
OPT	Orthopantomogram
QPIs	Quality Performance Indicators
RCAG	Regional Cancer Advisory Board
SCRN	Scottish Cancer Research Network
SIMD	Scottish Index of Multiple Deprivation
SLT	Speech and Language Therapy
WoS	West of Scotland
WoSCAN	West of Scotland Cancer Network

References

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2. Information Services Division. Head and Neck Cancer: Data Definitions, Measurability and Data Validations. Available at: http://www.isdscotland.org/Health-Topics/Cancer/Cancer-Audit/

3. Information Services Division. Cancer in Scotland. June 2004 [updated October 2016] Available at: https://beta.isdscotland.org/find-publications-and-data/conditions-and-diseases/cancer/cancer-incidence-in-scotland/

4. ISD, NHS National Services Scotland. Summary Statistics for Oesophageal Cancer. Available at: http://www.isdscotland.org/Health-Topics/Cancer/Cancer-Statistics/Head-and-Neck/

5. Cancer Research Statistics by Cancer Type. Available at http://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/oral-cancer/incidence#heading-Zero

6. Social Disadvantage Research Centre, Oxford University, 2003. Available at: https://www.hpi.org.uk/

7. Health inequalities in Scotland. Available at: www.audit-scotland.gov.uk/docs/health/2012/nr_121213_health_inequalities.pdf

8. Cancer Research Statistics by Cancer Type. Available at : http://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/head-and- neck-cancers/incidence#heading-Two

Copyright

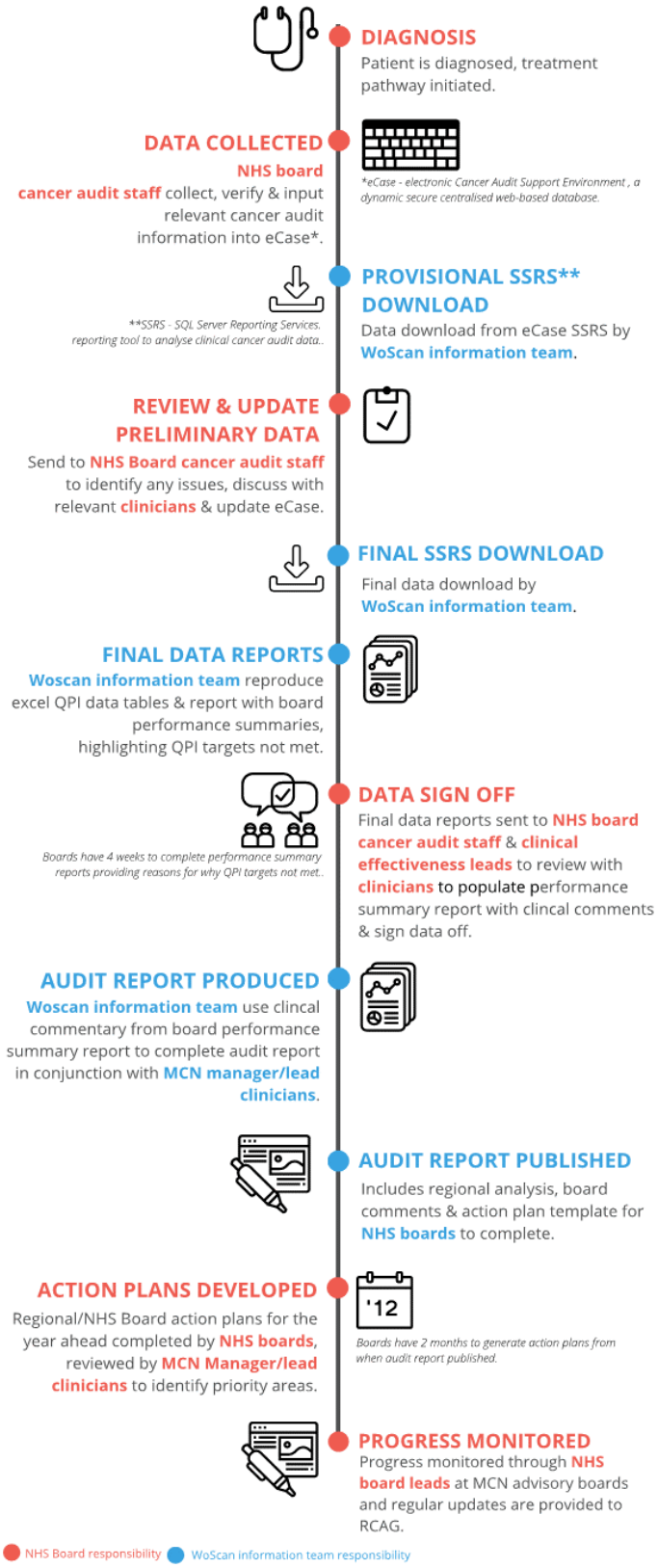
Appendix 1: Metadata

<table>
<tr><td>Report Title</td><td>Cancer Audit Report: Head and Neck Cancer Quality Performance Indicators</td></tr>
<tr><td>Time Period</td><td>Patients diagnosed between 1st April 2021 - 31st March 2022</td></tr>
<tr><td>Data Source</td><td>Cancer Audit Support Environment (eCASE). A secure centralised web-based database which holds cancer audit information in Scotland.</td></tr>
<tr><td>Data extraction date</td><td>10/10/2022</td></tr>
<tr><td>Methodology</td><td>Analysis was performed centrally for the region by the WoSCAN Information Team. The timescales agreed took into account the patient pathway to ensure that a complete treatment record was available for the majority of patients.

Initial results were provided to Boards to check for inaccuracies, inconsistencies or obvious gaps and a subsequent download taken upon which final analysis was carried out.

The final data analysis was disseminated for NHS Board verification in line with the regional audit governance process to ensure that the data was an accurate representation of service in each area. Please see info graphic in appendix 2 for a more detailed look at the reporting process.</td></tr>
<tr><td>Data Quality</td><td>Audit data completeness can be assessed by estimating the proportion of expected patients that have been identified through audit compared to the number reported by the National Cancer registry (provided by ISD, National Services Division), this is known as case ascertainment. Figures should only be used as a guide as it is not possible to compare the same exact cohort from each data source. Note that a 5 year average is taken for cancer registry cases to take account of annual fluctuations in incidence within NHS Boards.

<table>
<tr><th></th><th>Ayrshire & Arran</th><th>Forth Valley</th><th>GGC</th><th>Lanarkshire</th><th>WoS</th></tr>
<tr><td>2021/22 Audit</td><td>88</td><td>74</td><td>402</td><td>14</td><td>678</td></tr>
<tr><td>Cancer Reg 2016-20*</td><td>98</td><td>70</td><td>381</td><td>143</td><td>692</td></tr>
<tr><td>Case Ascertainment</td><td>89.8%</td><td>105.7%</td><td>105.5%</td><td>79.7%</td><td>98.0%</td></tr>
</table>
</td></tr>
</table>


DIAGNOSIS
Patient is diagnosed, treatment pathway initiated.
DATA COLLECTED
NHS board cancer audit staff collect, verify & input relevant cancer audit information into eCase*.
*eCase - electronic Cancer Audit Support Environment , a dynamic secure centralised web-based database.
PROVISIONAL SSRS** DOWNLOAD
Data download from eCase SSRS by WoScan information team.
**SSRS - SQL Server Reporting Services. reporting tool to analyse clinical cancer audit data..
REVIEW & UPDATE PRELIMINARY DATA
Send to NHS Board cancer audit staff to identify any issues, discuss with relevant clinicians & update eCase.
FINAL SSRS DOWNLOAD
Final data download by WoScan information team.
FINAL DATA REPORTS
Woscan information team reproduce excel QPI data tables & report with board performance summaries, highlighting QPI targets not met.
DATA SIGN OFF
Final data reports sent to NHS board cancer audit staff & clinical effectiveness leads to review with clinicians to populate performance summary report with clincal comments & sign data off.
Boards have 4 weeks to complete performance summary reports providing reasons for why QPI targets not met..
AUDIT REPORT PRODUCED
Woscan information team use clincal commentary from board performance summary report to complete audit report in conjunction with MCN manager/lead clinicians.
AUDIT REPORT PUBLISHED
Includes regional analysis, board comments & action plan template for NHS boards to complete.
ACTION PLANS DEVELOPED
Regional/NHS Board action plans for the year ahead completed by NHS boards, reviewed by MCN Manager/lead clinicians to identify priority areas.
'12
Boards have 2 months to generate action plans from when audit report published.
PROGRESS MONITORED
Progress monitored through NHS board leads at MCN advisory boards and regular updates are provided to RCAG.
NHS Board responsibility
WoScan information team responsibility

Appendix 3: NHS Board Action Plans Head & Neck QPIs

A summary of actions for each NHS Board has been included within the following Action Plan templates. Completed Action Plans should be returned to WoSCAN within two months of publication of this report.

Action / Improvement Plan

Area:	NHS Ayrshire & Arran
Action Plan Lead:	
Date:	

KEY (Status)	
1	**Action fully implemented**
2	**Action agreed but not yet implemented**
3	**No action taken (please state reason)**

QPI	**Action Required**	**Health Board Action Taken**	**Timescales**		**Lead**	**Progress/Action Status**	**Status (see Key)**
			Start	**End**			
	Ensure actions mirror those detailed in Audit Report.	*Detail specific actions that will be taken by the NHS Board.*	*Insert date*	*Insert date*	*Insert name of responsible lead for each specific action.*	*Provide detail of action in progress, change in practices, problems encountered or reasons why no action taken.*	*Insert No. from key above.*
QPI 2ii: Imaging	To review reasons for delays in CT reporting and agree local action to ensure CT reports are available within 2 weeks of CT/ MRI.						
QPI 6(i, ii, ii): Nutritional Screening	NHS Ayrshire & Arran to confirm what improvement action has been taken locally to ensure MUST scores are recorded at MDT going forward.						

Action / Improvement Plan

Area:	NHS Forth Valley
Action Plan Lead:	
Date:	

KEY (Status)	
1	**Action fully implemented**
2	**Action agreed but not yet implemented**
3	**No action taken (please state reason)**

QPI	**Action Required**	**Health Board Action Taken**	**Timescales**		**Lead**	**Progress/Action Status**	**Status (see Key)**
			Start	**End**			
	Ensure actions mirror those detailed in Audit Report.	*Detail specific actions that will be taken by the NHS Board.*	*Insert date*	*Insert date*	*Insert name of responsible lead for each specific action.*	*Provide detail of action in progress, change in practices, problems encountered or reasons why no action taken.*	*Insert No. from key above*.
QPI 7: Specialist Speech and Language Therapist Access	NHS Forth Valley SALT team to develop processes to ensure all appropriate patients are referred and registered for SALT input.						

Action / Improvement Plan

Area:	NHS Greater Glasgow and Clyde
Action Plan Lead:	
Date:	

KEY (Status)	
1	**Action fully implemented**
2	**Action agreed but not yet implemented**
3	**No action taken (please state reason)**

QPI	**Action Required**	**Health Board Action Taken**	**Timescales**		**Lead**	**Progress/Action Status**	**Status (see Key)**
			Start	**End**			
	Ensure actions mirror those detailed in Audit Report.	*Detail specific actions that will be taken by the NHS Board.*	*Insert date*	*Insert date*	*Insert name of responsible lead for each specific action.*	*Provide detail of action in progress, change in practices, problems encountered or reasons why no action taken.*	*Insert No. from key above*.
QPI 4: Smoking Cessation	NHSGGC to devise robust mechanism to ensure the offer of a referral to smoking cessation services is formally documented in systems that are accessible to local audit teams.						
QPI 7: Specialist Speech and Language Therapist Access	NHSGGC to develop an action plan to address known issues with availability of SALT resource.						

Action / Improvement Plan

Area:	NHS Lanarkshire
Action Plan Lead:	
Date:	

KEY (Status)	
1	**Action fully implemented**
2	**Action agreed but not yet implemented**
3	**No action taken (please state reason)**

QPI	**Action Required**	**Health Board Action Taken**	**Timescales**		**Lead**	**Progress/Action Status**	**Status (see Key)**
			Start	**End**			
	Ensure actions mirror those detailed in Audit Report.	*Detail specific actions that will be taken by the NHS Board.*	*Insert date*	*Insert date*	*Insert name of responsible lead for each specific action.*	*Provide detail of action in progress, change in practices, problems encountered or reasons why no action taken.*	*Insert No. from key above*.
QPI 4: Smoking Cessation	NHS Lanarkshire to devise robust mechanism to ensure the offer of a referral to smoking cessation services is formally documented in systems that are accessible to local audit teams.						
QPI 6iii: Nutritional Screening	NHS Lanarkshire to confirm the improvement action agreed locally to ensure compliance going forward.						