Healthcare Improvement Scotland

Review of Cancer Quality Performance Indicators

Head and Neck Cancers

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1 Executive summary

During spring 2020, the Scottish Government asked Healthcare Improvement Scotland (HIS) to carry out an external review of the Cancer Quality Performance Indicators (CQPIs) to provide national comparability and highlight areas of concern and unwarranted variation across Scotland. This will help support the aims and ambitions of the Scottish Government cancer recovery plan. Please click on the link below to access the Recovery and redesign: cancer services – action plan.

Recovery and redesign: cancer services – action plan

The HIS CQPI team (the review team) developed a rolling programme of reviews beginning with melanoma. In 2021, head and neck cancers were the fifth most common cancer registered in Scotland for men and the tenth most common for women. There were 1,400 new cases of head and neck cancers (956 males and 444 females) with 519 deaths registered in 2021 with a significant increase (of 6%) in head and neck cancer mortality among men over the last 10 years.

Using the head and neck data for 2019/2020 from the Scottish Cancer Registry and Intelligence Service (SCRIS) dashboard, the review team identified where performance across the three regional cancer networks and 14 territorial NHS boards differed significantly from the QPI target or Scotland average. At the time this work was carried out, the 2019/2020 data was the most up to date available.

The analysed data covers the pre COVID-19 period and the initial stages of COVID-19 period and it has impacted on both the review processes and the delivery of cancer care. The review team acknowledge this in the report where this has been taken into account.

Following the data analysis, Key Lines of Enquiry (KLoE) were developed and shared with the regional cancer networks in advance of the review meetings. Review meetings were held with representatives from the regional cancer networks and NHS boards to scrutinise and seek further clarification regarding the QPI performance issues.

While the review team included all head and neck QPIs from the SCRIS dashboard as part of our analysis, the focus of the review was to identify unwarranted variation and areas of concern. There is an explanation of unwarranted variation on page 9 of this report.

Analysis showed no evidence of unwarranted variation for the following five head and neck QPIs. Performance for these QPIs were judged to be 'in control' and therefore not included in the report:

- QPI 3: Multi-disciplinary Team
- QPI 11: 30 and 90 Day Mortality
- QPI 13: 30 Day Mortality following Systemic Anti-Cancer Therapy (SACT)
- QPI 14: Time form Surgery to Adjuvant Radiotherapy/Chemoradiotherapy, and
- QPI 15: PD-L1 Combined Proportion Score (CPS) for Decision Making.

Unwarranted variation was identified in the performance of the following eight QPIs:

- QPI 1(i): Pathological Diagnosis of Head and Neck Cancer
- QPI 2(i): Imaging
- QPI 4: Smoking Cessation
- QPI 5 (i): Oral and Dental Rehabilitation Plan
- QPI 5 (ii): Oral and Dental Rehabilitation Plan
- QPI 6: Nutritional Screening
- QPI 7: Specialist Speech and Language Therapist Access, and
- QPI 8: Surgical Margins - presented by hospital of surgery.

Some of the issues the review team have identified are specific to individual boards, while others apply nationally.

Overall, three head and neck QPIs were challenging for NHS boards across Scotland; QPI 4: Smoking Cessation, QPI 6: Nutritional Screening and QPI 7: Specialist Speech and Language Therapy Access. The problems vary by NHS board, but difficulties in establishing robust data collection systems and the recording of smoking cessation referrals was a common issue for NHS boards not meeting the QPI 4: Smoking Cessation target. Capacity issues and limited financial resources were recurrent themes for NHS boards not meeting the targets for QPI 6: Nutritional Screening and QPI 7: Specialist Speech Language Therapy Access.

During the HIS review there was a formal review of head and neck QPIs which was carried out by the NHS Scotland Head and Neck Cancer Formal Review Group. This resulted in a change in definition of some QPIs to ensure the QPI remains up to date with clinical practice. However, even under the refined QPI definitions, not all NHS boards will meet these targets.

While the regional cancer networks facilitate NHS boards to collaborate and work to improve the quality of cancer care across their regions, performance against the QPIs and the required improvement action remains the responsibility of the individual NHS boards. The review team will follow up on progress made against the recommendations within 12 months of publication of this report.

2 Introduction

2.1 Cancer quality performance indicators

The National Cancer Quality Programme CEL 06 [2012] describes a national governance process and improvement framework for cancer care.

https://www.sehd.scot.nhs.uk/mels/cel2012_06.pdf

The CEL 06 [2012] states that HIS will undertake national external quality assurance by reviewing CQPIs. The HIS CQPI team have previously carried out reviews of CQPIs in 2012-2017 and 2019.

CQPIs are small sets of outcome and process focused evidence-based indicators. They relate to key points in the cancer patient pathway deemed critical in providing good quality care. Currently, there are 19 specific tumour type sets of indicators.

The QPIs were developed collaboratively by expert groups of clinicians from the three regional cancer networks, NHS National Services Scotland's Information Services Division (now Public Health Scotland Data and Intelligence) and HIS.

The overarching aim of the QPIs is to make sure that activity at NHS board level is focused on the key areas:

- To improve survival rates whilst reducing variance, and
- to ensure safe, effective and compassionate person-centred cancer care.

Each QPI is designed to be clear and measure indicated target performance across Scotland. The QPIs are measured and analysed by a numerator and denominator.

Numerator: Actual number of patients who receive appropriate pathway of care and treatment specific to their tumour group

Denominator: Total number of patients eligible for appropriate pathway of care and treatment specific to their tumour group.

Please click below for further information on QPIs.

Cancer quality performance indicators (QPIs)

The three regional cancer networks operating in NHS Scotland are:

- The West of Scotland Cancer Network (WoSCAN), made up of NHS Ayrshire & Arran, NHS Greater Glasgow & Clyde, NHS Forth Valley and NHS Lanarkshire.
- The South East Scotland Cancer Network (SCAN), made up of NHS Borders, NHS Dumfries & Galloway, NHS Fife and NHS Lothian.
- The North Cancer Alliance (NCA), made up of NHS Grampian, NHS Highland, NHS Shetland, NHS Tayside, NHS Orkney and NHS Western Isles.

The regional cancer networks act as a conduit between Scottish Government and the NHS boards for co-ordination of and to ensure key stakeholder representation on the national groups. These are aligned with the National Cancer Recovery Plan, where the support and expertise of the networks is required. The regional cancer networks are also responsible for the regional collation and reporting on a range of data including QPI data to support service improvement; helping ensure cancer services are delivered to a high standard regionally and nationally.

NHS boards remain responsible for the delivery of cancer services and for individual NHS board performance against each tumour specific group (TSG) suite of QPIs. When an NHS board does not meet the QPI target, the NHS board is required to produce an action plan with details of improvement work that will be undertaken. This should include:

- Details of the required improvement actions and who is responsible for implementation
- Timescales for completion of the improvement actions
- The planned approach to measure progress, and
- Details of the required additional funding or development of a business case.

Action plans are collated regionally and form part of the individual TSG regional cancer network audit report and are provided to the network's respective boards.

In the event where all NHS boards in a region fail to meet the target for particular QPIs, the regional cancer network will work with all the NHS boards to support the improvement work at a regional level. However, the responsibility and accountability for implementing and driving forward the required improvement firmly rests with the individual NHS boards.

During Spring 2020, the Scottish Government asked HIS to carry out an external review of CQPIs to provide national comparability and highlight areas of concern and/or unwarranted variation on a national scale.

With input from an expert review team, HIS will provide external quality assurance of the CQPI process and will seek to:

- Identify national challenges and unwarranted variation in performance against CQPIs
- Document underlying issues and explanations pertaining to challenges and variation
- Review the action plans developed to improve performance at NHS board level
- Evaluate the impact of action plan implementation
- Highlight concerns and themes for universal learning and reviews, and
- Be informed by triangulating local, regional and national CQPI intelligence to add value and avoid duplication.

NHS Scotland has experienced an unprecedented level of pressure during 2020/2021 due to the COVID-19 pandemic. The Scottish Government published a new recovery action plan for cancer services in December 2020 that reviews the circumstances in which cancer services operate and

introduces a wide range of new actions and areas of focus for cancer services. These actions will both redesign cancer services to benefit patients and increase services' resilience to future rises in COVID-19.

One of the key aims of the Cancer Recovery Plan is to adopt 'A Once For Scotland` approach where appropriate to cancer services. This will see that the same prioritisation and delivery of services is adopted across Scotland, helping to ensure patients across Scotland receive equitable access to care and treatment.

By identifying and highlighting unwarranted variation and areas of concern across Scotland, the review process will support the aims and ambitions of the Cancer Recovery Plan.

2.2 Head and neck cancers in Scotland

In Scotland, more than 30,000 people are diagnosed with cancer each year. Head and neck cancers include cancers in:

- the mouth (oral cavity or oral cancers)
- the tongue
- part of the throat (cancers of the larynx, oropharynx, nasopharynx and hypopharynx)
- the nose or sinuses (nasal and sinus cancer)
- the salivary glands, and
- the middle ear.

Head and neck cancers are also described based on the type of cell the cancer started in.

- Squamous cell carcinoma

  The most common type of head and neck cancer is squamous cell carcinoma (squamous cell cancer). Ninety percent of head and neck cancers start in squamous cells. Squamous cells line the mouth, nose and throat.

The exact cause of and individual head and neck cancer is usually unknown but common risk factors are:

- tobacco
- alcohol
- Human Papilloma Virus infection, and
- recreational drug use.

It is thought that about 75% of head and neck cancers are linked to tobacco or alcohol use.

Many cancers at the back of the tongue and in the tonsils (cancers of the oropharynx) are linked to infection with a type of virus called human papilloma virus (HPV) which also causes cancer of the cervix.[1]

In Scotland in 2021, there were 1,400 new cases of head and neck cancers (956 males and 444 females) with 519 deaths registered in 2021 with a significant increase (of 6%) in head and neck cancer mortality among men over the last 10 years. [2]

Head and neck cancer incidence was higher than expected in females based on pre-Covid incidence rates from 2010-2019 with an age-adjusted increase of 8% in the rate in 2021 compared with 2019, reversing a declining trend in the previous decade. One third of head and neck cancers were Stage IV at diagnosis with a significantly higher proportion for people in the highest deprivation quintile.[3]

In 2013-2017, net survival from head and neck cancer at 1 and 5 years since diagnosis was:

- 75.1% and 56.2% for men
- 74.5% and 56.5% for women[4]

3 Methodology

3.1 Overview

3.1.1 Principles

HIS adheres to the following core principles for all our assurance work:

- User-focused – we put people who use services at the heart of our approach.
- Transparent and mutually supportive, yet independent – we promote and support a complementary approach to robust self-evaluation for improvement with independent validation, challenge and intervention as required.
- Intelligence-led and risk-based – we take a proportionate approach to inspection and review which is informed by intelligence and robust self-evaluation.
- Integrated and co-ordinated – we draw on the collective participation of relevant scrutiny bodies and other partners to share intelligence and minimise duplication of effort.
- Improvement-focused – we support continuous and sustained quality improvement through our quality assurance work.

3.1.2 In scope

The following are considered in scope for the review process:

- Review and analysis of SCRIS dashboard data
- Review of relevant NHS board, regional cancer network and national audit reports
- Review and analysis of information from regional cancer networks and NHS boards
- Discussions at the review meetings with cancer clinicians and regional regional cancer network staff, and
- Other publicly available information including net and cause specific survival where available.

3.1.3 Out of scope

The following are out of scope for the review process:

- Assessing the accuracy of the SCRIS dashboard data
- Consideration of the methods of collecting and calculating the QPIs
- Reviewing the selection and definition of QPIs, and
- Reviewing waiting time targets.

Following the formal review process in 2021 QPI 9: Intensity Modulated Radiotherapy (IMRT) and QPI 10: Post Operative Chemoradiotherapy have been archived. In addition, QPI 12: Clinical Trials and Research Study Access is currently under review at a national level and to avoid work that would be irrelevant after a review of the QPIs, these were not included in this review.

3.1.4 Limitations of the review process

The review process relies on data from the SCRIS dashboard, information provided by the regional cancer networks, NHS boards and other publicly available information. The data analysis and reviewing of action plans is limited to that particular timeframe. Many important aspects of the quality of head and neck cancer care lie outside the scope of the review because the suite of QPIs does not address them. The nature of the data available makes it possible to compare geographical entities in Scotland, but not to assess gender or socio-economic disparities in service delivery. In addition, it is recognised that reviewing head and neck cancer in isolation from other tumour groups does not enable any cross-cutting themes to be identified.

3.2 Data analysis

The primary source of data was 2017/2020 head and neck QPI data from the SCRIS dashboard. Further analysis of this data was carried out by the review team to provide a deeper understanding of unwarranted variation across regional cancer networks and boards (Appendix 1). In addition to the dashboard data, we analysed publicly available intelligence, such as audit reports and other documentation provided by the regional cancer networks.

During this HIS review, there was a formal review of head and neck CQPIs, resulting in changes to definitions of some of the QPIs. The changes have been added to the relevant QPIs.

Unwarranted variation is when poorer performance cannot be explained by chance variation in data (particularly evident in smaller groups) or by factors that cannot be changed (such as the geographic and demographic situation). We identified unwarranted variation using funnel plots, which highlight when an NHS board's performance is significantly different from expected variation around the QPI target or Scotland average, to account for chance variations in smaller groups. In addition, when this analysis highlighted more variation than expected across all areas, we assumed this to be due to unchangeable factors and adjusted for this, ensuring that our focus remained on unwarranted variation. By understanding unwarranted variation, we have focused on more meaningful differences rather than potentially temporary fluctuations in data, or differences due to factors that cannot be changed by healthcare, such as age and gender.

3.3 Key lines of enquiry development

The review team scrutinised the data and intelligence, with a focus on unwarranted variation and clinical concerns – for example, trends highlighting a decline in performance. Following this analysis, the review team developed KLoE for each regional cancer network and NHS board. The KLoE formed the basis of discussions for the review meetings.

3.4 Review meetings

The review meetings provided the opportunity for the review team to scrutinise and seek further clarification on the QPI performance issues. It also allowed the clinicians and managers to have open and honest discussions on the core issues which affect QPI performance across the regional cancer networks and NHS boards.

It is for the NHS boards to decide who can provide best representation at the review meetings.

4 QPI Review Findings

4.1 QPI 1 Pathological Diagnosis of Head and Neck Cancer

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.

Rationale and Evidence: A definitive diagnosis is valuable in helping inform patients and carers about the nature of the disease, the likely prognosis and treatment choice.

Exclusions = (a) Patients who die before first treatment; (b) Patients who decline treatment.

Target: 95%

Changes to QPI
Tolerance statement updated – removed statement about patients in whom treatment is performed at diagnosis i.e. the diagnostic procedure is also therapeutic as these patients do meet the QPI.

National summary

Overall, performance for this QPI is good across Scotland. However, data analysis indicated NHS Tayside was the only NHS board to show unwarranted variation. The performance of NHS Tayside was between 2 and 3 standard deviations below the overall Scottish performance. This is an important QPI for patients as a definitive diagnosis helps inform patients and carers about the nature of the disease, the likely prognosis and treatment choice.

NCA

Performance based on 2020-2021 data

- **NCA result: 94.6% (211/223)**
- NHS Grampian: 100% (90/90)
- NHS Highland: 94.1% (32/34)
- NHS Orkney: ††
- NHS Shetland: ††
- NHS Tayside: 88.6% (78/88) †
- NHS Western Isles: 100% (8/8)

† 2 - 3 standard deviations below the overall Scottish performance

†† Indicates values that have been redacted where there is a risk that individuals could be identified

Comparative regional cancer network performance and the overall Scottish performance

- SCAN: 97% (276/286)
- WoSCAN: 95% (608/641)
- Scotland 95% (1,095/1,150)

Identified issues

Data analysis of QPI 1 identified NHS Tayside as the only NHS board to evidence un-warranted variation across all NCA boards for 2020/2021. NHS Tayside achieved 88.6% against a target of 95%, which was between 2 and 3 standard deviations below the overall Scottish performance. This is significantly below NHS Tayside's performance for the previous six years 2014/2015 to 2019/2020 when the NHS board achieved between 97%- 100% for this QPI.

The review team enquired about the main reasons for non-compliance with this QPI:

- NHS Tayside explained their performance was partly due to the tumours being removed in the absence of a cytological or histological diagnosis as the tumours were initially thought to be benign. Following the excision of the tumours and a pathological analysis, the tumours turned out to be malignant and therefore did not meet the QPI.
- Due to the pandemic, a higher proportion of patients had a delayed diagnosis of head and neck cancer, presented with advanced disease and therefore treated before a cytological or histological diagnosis could be made.

Ongoing challenges

It is not clear what the longer-term impact of COVID-19 might be in terms of the proportion of patients who will present with advanced disease and limited treatment options.

Improvement action

NHS Tayside presented no action plans in the NCA Head and Neck 2020 audit report.

Our assessment

Following discussions at the review meeting, it is not clear to the review team why NHS Tayside's performance in 2019/2020 has dropped so dramatically in comparison to their previous performances in 2014/2015. The pandemic did present challenges, but this would have been the same for all NHS boards not just NHS Tayside. The review team recommend NHS Tayside carry out an audit to fully investigate the reasons for their performance in 2020/2021.

Recommendation

The review team recommend NHS Tayside carry out an audit of their 2020/2021 data (and previous years to offer a basis for comparison) to better understand the reasons for the lower performance in 2020/2021 and develop an improvement action plan to meet the target in the future.

4.2 QPI 2 Imaging

Specification (i)

Numerator: 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 the initiation of treatment.

Denominator: All patients with head and neck cancer.

Rationale and Evidence: Radiological staging should be carried out before treatment. This will allow the multi-disciplinary team (MDT) team to determine an accurate stage. Accurate staging is important to ensure appropriate treatment is delivered to patients with head and neck cancer.

Exclusions: (a) Patients who undergo diagnostic excision biopsy as the definitive surgery; (b) Patients who die before first treatment; (c) Patients who decline treatment

Target: 95%

National summary

Overall, performance for this QPI is good across Scotland. However, data analysis indicated the performance of NHS Tayside was lower than the other NHS boards and has failed to meet the targets in 2017/2018, 2019/2020 and 2020/2021. This is an important QPI for patients to ensure they receive the appropriate imaging to determine the stage of the cancer. Accurate staging enables the MDT team to discuss and plan the most effective treatment for patients with head and neck cancer.

NCA

Performance based on 2020-2021 data

- **NCA result: 94.6%** (211/223)
- NHS Grampian: 96.7% (87/90)
- NHS Highland: 100% (34/34)
- NHS Orkney: ††
- NHS Shetland: ††
- NHS Tayside: 90.7% (78/86)
- NHS Western Isles: 100% (8/8)

†† Indicates values that have been redacted where there is a risk that individuals could be identified

Comparative regional cancer network performance and the overall Scottish performance

- SCAN: 96% (268/278)
- WoSCAN 96% (609/634)
- Scotland: 96% (1086/1133)

Identified issues

Data analysis highlighted NHS Tayside has failed to meet this QPI target in 2017/2018, 2019/2020 and in 2020/2021 when it achieved 91% against a target of 95%.

The review team enquired about the main reasons for non-compliance with this QPI:

- NHS Tayside informed the review team that capacity issues in the audit team meant the NHS board has not been able to fully investigate the reasons for this low performance. NHS Tayside suggested it was not clear if all the excluded cases had been removed which may have led to an incorrect low figure. Although this was impossible to confirm in the absence of audit data.
- The review team heard that during COVID-19, some patients with Stage 4 disease may have had chemotherapy before receiving imaging due to the COVID-19-related capacity issues across diagnostic services.

Improvement action

The review team heard NHS Tayside has recruited more audit staff and now have sufficient audit capacity. This will ensure the audit team can now verify the reported data is accurate and be able to investigate the reasons for their low performance.

Our assessment

In the absence of an audit, it is difficult for the review team to understand the reasons for NHS Tayside's low performance for this QPI. The review team recommend NHS Tayside carry out an audit to investigate the reasons for their performance in 2020/2021. The challenges presented by the pandemic would have been the same for all NHS boards not just NHS Tayside.

Recommendation

The review team recommend NHS Tayside should carry out an audit to check for accuracy of the 2020/2021 data and to understand the reasons for their low performance in comparison to other NHS boards in Scotland and develop an improvement action plan to ensure that the target is met in future.

4.3 QPI 4 Smoking Cessation

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 (no exclusions).

Rationale and Evidence: A smoker is a person who is actively smoking at the time of referral to the head and neck services leading to a diagnosis of head and neck cancer. Evidence shows that patients who are active smokers should be referred to smoking cessation without delay. 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 and decrease the effectiveness of treatment.

Target: 95%

Changes to QPI

Exclusion category added to QPI for patients undergoing best supportive care.

National summary

The smoking cessation QPI for head and neck cancers has been a challenging QPI for NHS boards in Scotland in 2020/2021. Data analysis indicates only NHS Fife met the target in 2020/2021 with the overall performance for Scotland more than 3 standard deviations below the target. However, since this QPI was first introduced three years ago, performance across Scotland has steadily improved. NHS Fife has demonstrated that with dedicated effort it is possible to meet this target.

This is an important QPI for patients as evidence shows that patients with a head and neck cancer diagnosis who are active smokers should be referred to smoking cessation immediately. 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 and decrease the effectiveness of treatment.

WoSCAN

Performance based on 2020/2021 data

- **WoSCAN: 63.3% (179/283)**
- NHS Ayrshire & Arran: 65.2% (15/23)
- NHS Forth Valley: 68.2% (15/22)
- NHS Greater Glasgow and Clyde: 74.7% (133/178)
- NHS Lanarkshire: 26.7% (16/60) †

† 2 - 3 standard deviations below the overall Scottish performance

Comparative regional cancer network performance and the overall Scottish performance

- SCAN: 79.2% (80/101)
- NCA: 58% (42/73)
- Scotland 66% (301/457)

Identified issues

Data analysis indicated no WoSCAN NHS board met the target in 2020/2021 with NHS Lanarkshire's performance between 2 and 3 standard deviations below the overall performance for Scotland. In addition, NHS Lanarkshire was the only WoSCAN NHS board, which did not show improvement from 2019/2020 to 2020/2021 in QPI data.

The review team enquired about the reasons for the low performance of the WoSCAN NHS boards and in particular NHS Lanarkshire:

- NHS Lanarkshire explained the low performance is due to poor documentation, with a lack of evidence to show that patients have been offered referral to smoking cessation services.
- In NHS Ayrshire & Arran, during COVID-19, the 'Quit your Way' staff who offer smoking cessation services to patients were redeployed which affected the performance of this QPI.

Improvement actions

- The WoSCAN Head and Neck Cancer 2020 audit report provides details of an action, which requires all WoSCAN NHS boards to improve the recording of the smoking cessation referrals.
- In order to improve performance, NHS Lanarkshire has developed a pro forma to record the referrals to smoking cessation services. Clinical nurse specialists and speech and language therapists hold a joint clinic and ensure all the documentation is complete.
- NHS Ayrshire & Arran has appointed a lead responsible for the performance of this QPI and established a process to document referrals to smoking cessation services.
- The QPI definition has been changed to allow the exclusion of patients who are receiving best supportive care, which should improve performance levels across WoSCAN NHS boards.

Ongoing challenges

The review team heard that in NHS Lanarkshire, staff in some cases are not completing the pro forma to record the smoking status. Staff shortages and the impact of COVID-19 in NHS Lanarkshire have delayed efforts to improve the recording issues relating to the smoking status and referral to the smoking cessation service.

Our assessment

The team acknowledge NHS Lanarkshire's use of the pro forma to address the documentation issues and the establishment of the process to document the referrals to smoking cessation services. However, the review team recommend all WoSCAN NHS boards, in particular NHS Lanarkshire, closely monitor their performance to ensure the improvements are effective and driving forward change. The review team also note the change in the definition of the QPI to allow the exclusion of patients who are receiving best supportive care. This change should lead to some improvement across all WoSCAN NHS boards in the future, however it is unlikely that this will be sufficient for all the NHS boards to meet the target.

Recommendation

The review team recommend all WOSCAN NHS boards develop a formal action plan to meet this target. The NHS boards' senior management teams must fully endorse this plan to ensure the NHS boards implement the relevant improvement actions to drive forward the changes to ensure that patients who smoke and are diagnosed with a head and neck cancer get the smoking cessation support they need.

SCAN

Performance based on 2020/2021 data

- **SCAN: 79.2% (80/101)**
- NHS Borders: 83.3% (5/6)
- NHS Dumfries & Galloway: 61.5% (8/13)
- NHS Fife: 100% (25/25)
- NHS Lothian: 73.7% (42/57)

Comparative regional cancer network performance and the overall Scottish performance

- NCA: 58% (42/73)
- WoSCAN: 63.3% (179/283)
- Scotland 66% (301/457)

Identified issues

Data analysis confirmed the performance of all SCAN NHS boards had improved between 2018/2019 and 2019/2020. However, the performance of the SCAN NHS boards had declined from achieving 86% in 2019/2020 to 79% in 2020/2021. Only NHS Fife met the target for this QPI in 2020/2021.

The review team enquired about the reasons for the performance across all SCAN NHS Boards:

- The NHS boards explained about the difficulties in achieving sustained smoking cessation in patients and the need for better systems to record the offer of referral to smoking cessation services.
- NHS Lothian noted in some cases treatment can commence quickly, therefore patients are being referred for smoking cessation support after their first treatment and do not meet the QPI.
- NHS Dumfries & Galloway suggested that it is possibly a recording issue and patients are being offered a referral but this is not being recorded in their clinical notes.

Improvement actions

- The SCAN Head and Neck Cancer 2020 audit report recommended all SCAN NHS boards to consider adopting the Fife model for smoking cessation referrals. In addition, to consider changing the wording to standardise the MDT referral forms across all SCAN NHS boards. It also recommended SCAN NHS boards explore the possibility of recording smoking cessation referral letters on TRAK (an electronic patient record) with the patient also receiving a copy.
- The review team heard that NHS Borders have made changes to the pro forma, which they believe should improve performance and enable the NHS board to meet the target in the next reporting period.
- NHS Dumfries & Galloway plan to add a template to the clinic letter but do not expect to meet the target until 2022/2023.

Our assessment

The review team feels SCAN NHS boards have lost some momentum in their efforts to improve performance. However, NHS Fife demonstrates meeting the target of 95% is achievable and all other NHS boards should seek to learn more about the Fife model as an example of best practice.

Recommendation

The review team recommend NHS Dumfries & Galloway, NHS Borders and NHS Lothian develop a formal action plan to meet this target. The NHS boards' senior management teams must fully endorse this plan to ensure the NHS boards implement the relevant improvement actions to drive forward the changes to ensure that patients who smoke and are diagnosed with a head and neck cancer get the smoking cessation support they need.

NCA

Performance based on 2020/2021 data

- **NCA 58% (42/73)**
- NHS Grampian: 26.7% (8/30)
- NHS Highland: 88.2% (15/17)
- NHS Orkney: ††
- NHS Shetland: ††
- NHS Tayside: 81% (17/21)
- NHS Western Isles: N/A

†† Indicates values that have been redacted where there is a risk that individuals could be identified.

Comparative regional cancer network performance and the overall Scottish performance

- SCAN: 79.2% (80/101)
- WoSCAN: 63.3% (179/283)
- Scotland: 66% (301/457)

Identified issues

Data analysis identified NCA NHS boards had recorded the lowest performance in Scotland achieving 58% in 2020/2021. NHS Grampian achieved 26% against a target of 95%, which is of concern to the review team.

The review team enquired about the performance of all NCA NHS boards in particular NHS Grampian:

- NHS Grampian has reviewed the data and identified recording issues, particularly in primary care, as the reason for their low performance. This was further impacted by the absence of key staff redeployed due to the COVID 19 emergency response.

Improvement actions

- The 2021 NCA Head and Neck Cancer Audit Report reported NHS Highland's success in recording smoking cessation referrals was due to the introduction of a proforma stored with patient notes.
- NHS Grampian has recently started to record smoking cessation referral data live at the MDT meetings.

Our assessment

The review team feels the NCA NHS boards have lost some momentum in their efforts to improve performance of this QPI. During the review meeting discussions, it was clear to the review team that no individual had ownership for this QPI.

Recommendation

The review team recommend NHS Grampian develop a formal action plan to meet the smoking cessation target. NHS Grampian's senior management team must fully endorse this plan to ensure the NHS board implement the relevant improvement actions to drive forward the changes to ensure that patients who smoke and are diagnosed with a head and neck cancer get the smoking cessation support they need.

4.4 QPI 5 Oral and Dental Rehabilitation Plan

Specification (i)

Numerator: Number 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.

Denominator: All patients with head and neck cancer undergoing active treatment.

Rationale and Evidence: Head and neck cancer treatments impacts on oral and facial function and appearance. A restorative dentist should be included as a core member of the head and neck cancer MDT.

Exclusions: Patients with T1/T2/N0 cancer

Target: 95%

Specification (ii)

Numerator: 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: All patients with head and neck cancer who are identified by all relevant members of the MDT as requiring dental assessment.

Rationale and Evidence: Head and neck cancer treatments impacts on oral and facial function and appearance. A restorative dentist should be included as a core member of the head and neck cancer MDT.

Exclusions: Patients with T1/T2/N0 Cancer

Target: 95%

Changes to QPI 5

Specification (i) – denominator changed from all those undergoing active treatment to all those undergoing treatment with curative intent (as agreed with MDT).

Specifications (ii) and (iii) – exclusion of patients with T1, T2/N0 larynx cancer been removed from both specifications.

National summary

Data analysis indicated the overall Scottish performance in 2020/2021 for QPI 5(i) was 91%. All WoSCAN NHS boards, NHS Orkney, NHS Shetland, and NHS Western Isles achieved 100% for this QPI. However, no SCAN NHS board met the target with NHS Lothian achieving 70%, which is between 2 and 3 standard deviations below the overall Scottish performance. NHS Grampian and NHS Highland also failed to meet the target, achieving 88% and 60% respectively.

This is an important QPI for patients as head and neck cancer treatments impacts on oral and facial function and appearance. It is important a restorative dentist is included as a core member of the head and neck cancer MDT.

QPI 5 (ii) is aligned to QPI 5(i) as issues affect both specifications of this QPI.

SCAN

Performance based on 2020/2021 data

Specification (i)

- **SCAN: 77.4% (161/208)**
- NHS Borders: 85.7% (12/14)
- NHS Dumfries & Galloway: 92.6% (25/27)
- NHS Fife: 87.5% (35/40)
- NHS Lothian: 70.1% (89/127) †

† 2 - 3 standard deviations below the overall Scottish performance

Specification (ii)

- **SCAN: 89.9% (133/148)**
- NHS Borders: 81.8% (9/11)
- NHS Dumfries & Galloway: 81.8% (18/22)
- NHS Fife: 87.5% (28/32)
- NHS Lothian: 94% (78/83)

Comparative regional cancer network performance and the overall Scottish performance

Specification (i)

- NCA: 87% (167/192)
- WoSCAN: 100% (411/411)
- Scotland: 91% (739/811)

Specification (ii)

- NCA: 83% (106/128)
- WoSCAN: 95% (243/257)
- Scotland : 90% (482/533)

Identified issues

Data analysis showed the performance of all SCAN NHS boards for QPI 5 (i) has declined since 2018/2019 with a marked decline in performance in NHS Lothian from 2018/2019 (99%) to 2020/2021 (70%) which is 2 to 3 standard deviations below the overall Scottish performance. Smaller downward trends were also evident in NHS Borders 2018/2019 (100%) to 2020/2021 (86%) and NHS Dumfries & Galloway 2018/2019 (100%) to 2020/2021 (93%).

The team enquired about the reasons for the performance across the SCAN NHS boards:

- In NHS Lothian, coordination issues between the MDT and the restorative dental team prevented timely recording of decision-making.
- In NHS Dumfries & Galloway the joint decision-making process is complicated by the fact that ear, nose and throat (ENT) patients receive treatment in Edinburgh and maxillofacial patients receive treatment in NHS Greater Glasgow & Clyde.

Improvement actions

NHS Lothian have changed their recording processes to ensure patients who require restorative dental surgeon assessment are identified after the MDT and the information is transferred to the audit team. NHS Lothian expect this change will enable the NHS board to meet the target in the 2022/2023 reporting period.

Our assessment

Although no SCAN NHS board met the target, it is the decline in performance of NHS Lothian which was the main issue. NHS Lothian also provides restorative dental surgical services to NHS Borders. However, the review team are now satisfied NHS Lothian has identified the problems and implemented the relevant improvement actions.

NCA

Performance based on 2020/2021 data

Specification (i)

- **NCA: 87% (167/192)**
- NHS Grampian: 87.5% (70/80)
- NHS Highland: 60% (18/30)
- NHS Orkney: N/A
- NHS Shetland: N/A
- NHS Tayside: 83.3% (68/71)
- NHS Western Isles: 100% (8/8)

Specification (ii)

- **NCA: 82.8% (106/128)**
- NHS Grampian: 87.7% (50/57)
- NHS Highland: 80% (12/15)
- NHS Orkney: N/A
- NHS Shetland: N/A
- NHS Tayside: 83.3% (40/48)
- NHS Western Isles: ††

†† Indicates values that have been redacted where there is a risk that individuals could be identified.

N/A indicates no cases.

Comparative regional cancer network performance and the overall Scottish performance

Specification (i)

- SCAN: 77.4% (161/208)
- WoSCAN: 100% (411/411)
- Scotland: 91% (739/811)

Specification (ii)

- SCAN: 90% (133/148)
- WoSCAN: 95% (243/257)
- Scotland: 90% (482/533)

Identified issues

In 2020/2021 NHS Highland, NHS Grampian and NHS Tayside did not meet the target for QPI 5 (i). NHS Tayside, NHS Highland and NHS Grampian have not met QPI 5 (ii) for the last three years. The 2021 NCA Head and Neck Cancer Audit Report made little comment on this other than to note: "There is variable input from restorative dentistry into MDT decision-making".

The review team enquired about the reasons for the low performance across NCA NHS boards:

- NHS Highland explained there is only one restorative dentist in the NHS board who is required to attend the MDT to discuss head and neck surgery, prior to treatment. Competing demands of this role means the restorative dentist is unable to attend the MDT.
- NHS Grampian has encountered workforce challenges with reduced capacity in the restorative dentistry team.
- The review team heard restorative dentistry was suspended across NCA NHS boards due to the COVID-19 related restrictions on aerosol generating procedures.

Improvement actions

- NHS Grampian has successfully recruited a new restorative dentist and the NHS board is confident they will meet the target in the next reporting period.
- NHS Highland still only have one restorative dentist and will therefore be unable to implement any improvement action across the NHS board.

Our assessment

In NHS Highland, one restorative dentist in an NHS board places unrealistic demands on an individual and is not a sustainable position, however, the review team do accept that it is difficult to recruit to such a specialist role in Scotland. NHS Grampian faced a similar problem but have managed to recruit

another restorative dentist, which has improved performance. The additional capacity means NHS Grampian expect to meet the target in 2021/2022.

Recommendation

The review team recommend NCA and NHS Highland continue to make efforts to appoint a second restorative dentist. This will increase capacity and resilience in the restorative dentistry team and enable them to fully participate in the head and neck MDT meetings, thus improving patient outcomes and performance across the NHS board.

4.5 QPI 6 Nutritional Screening

Numerator: Number of patients with head and neck cancer who undergo nutritional screening with the Malnutrition Universal Screening Tool (MUST) before first treatment.

Denominator: All patients with head and neck cancer (No exclusions).

Rationale and Evidence: Malnutrition is prevalent in patients with head and neck cancer and is recognised that it negatively effects treatment outcomes. Those with significant weight loss are more likely to suffer major postoperative complications, less tolerance to radiotherapy with more interruptions to treatment, decreased response to chemotherapy with increased toxicity and shortened survival times.

Target: 95%

Changes to QPI

Specification (ii) – added to capture assessment of those patients at risk of malnutrition (MUST score of 2 or more).

Specification (iii) – added to capture assessment of further patients that are likely to be at risk of malnutrition following curative treatment.

National summary

QPI 6 Nutritional Screening has been a challenging QPI for all NHS boards with no marked improvement over the last 5 years. In 2020/2021, overall Scottish performance was 76%. SCAN NHS boards achieved 91% with only NHS Fife showing unwarranted variation and WoSCAN NHS boards achieved 90% with only NHS Greater Glasgow & Clyde showing unwarranted variation.

However, in comparison, NCA NHS boards achieved 20%, which is of concern to the team. Unwarranted variation was evident in NHS Tayside (6.7%) and NHS Grampian (1.1%) who were more than 2 and 3 standard deviations below the overall Scottish performance.

Malnutrition is prevalent in patients with head and neck cancer and it is recognised that it negatively effects treatment outcomes. It is therefore of fundamental importance patients are screened at the time of diagnosis to ensure they receive the appropriate care and support.

WoSCAN

Performance based on 2020/2021 data

- **WoSCAN: 89.9% (586/652)**
- NHS Ayrshire & Arran: 98.7% (78/79)
- NHS Forth Valley: 93.4% (57/61)
- NHS Greater Glasgow & Clyde: 84.4% (319/378)
- NHS Lanarkshire: 98.5% (132/134)

Comparative regional cancer network performance and the overall Scottish performance

- SCAN: 91.2% (270/296)
- NCA: 19.6% (45/230)
- Scotland: 76% (901/1,178)

Identified issues

Across WoSCAN NHS boards only NHS Greater Glasgow & Clyde was notably below the target achieving 84% against a target of 95%.

The team enquired about the performance of NHS Greater Glasgow & Clyde:

- The WoSCAN Head and Neck Cancer 2020 audit report noted that the failures to comply with the QPI were a mix of cases with no MUST record (n=32) and cases where the assessment was not carried out prior to first treatment (n=27).
- NHS Greater Glasgow & Clyde had carried out a further review of the data to reveal that some patient data had been missed although the patients had received a MUST assessment. This was due to the audit team being unable to locate the correct information.

Improvement actions

- NHS Greater Glasgow & Clyde have developed an action plan to monitor progress of recording MUST assessment on all MDT referrals.
- The action plan also states that NHS Greater Glasgow & Clyde should consider making the MUST assessment a mandatory field on the referral form on the new MDT system to further improve performance.

Ongoing challenges

NHS Greater Glasgow & Clyde advised that performance has risen to 93% in preliminary 2021/2022 data. A review of the data has indicated that in the cases who did not meet the QPI, the MUST was recorded but not by the due date.

Our assessment

The review team is encouraged to learn about the improved performance across NHS Greater Glasgow & Clyde evident in the preliminary 2021/2022 data. The review team are satisfied that the NHS board is working hard to ensure that the NHS board will meet the target the 2022/2023 reporting period.

SCAN

Performance based on 2020/2021 data

- **SCAN: 91.2% (270/296)**
- NHS Borders: 100% (16/16)
- NHS Dumfries & Galloway: 93.3% (42/45)
- NHS Fife: 81.7% (49/60)
- NHS Lothian: 93.1% (163/175)

Comparative regional cancer network performance and the overall Scottish performance

- NCA: 19.6% (45/230)
- WoSCAN: 90% (586/652)
- Scotland: 76% (901/1178)

Identified issues

Analysis identified the performance of NHS Fife was the only SCAN NHS board significantly below the target, achieving 81.7%.

The review team asked about the reasons for the low performance of NHS Fife:

- Discussions at the review meeting highlighted incompatibilities between the IT systems used in NHS Fife and in NHS Tayside; (patients for maxillofacial surgery are assessed and treated in NHS Tayside).

Improvement actions

- An action plan included as part of the 2019/2020 SCAN Head and Neck audit report stated: "Consideration of the addition of a second part to this QPI which assesses if appropriate referral is being made, is required at formal review".
- No specific actions relating to NHS Fife were included in the action plan.
- NHS Lothian and NHS Borders are now recording the MUST score electronically on TRAK.

Our assessment

In 2015/2016, NHS Fife met the target for this QPI however, since then their performance has been variable and consistently below 90%, despite the recruitment of an additional dietician in 2020. The review team were provided with limited information and therefore unable to determine how significant the IT incompatibilities are as a contributing factor to non-compliance with this QPI.

Recommendation

The review team recommend NHS Fife carry out an investigation to explore the IT incompatibilities with a view to resolving the issues. This work should identify if the IT issues are the only reason for the NHS board not meeting the target or if other underlying issues exist.

NCA

Performance based on 2017/2020 data

- **NCA: 20% (45/230)**
- NHS Grampian: 1.1% (1/93) †
- NHS Highland: 86.5% (32/37)
- NHS Orkney: ††
- NHS Shetland: ††
- NHS Tayside: 6.7% (6/89) †
- NHS Western Isles: 62.5% (5/8)

† 2 - 3 standard deviations below the overall Scottish performance

†† Indicates values that have been redacted where there is a risk that individuals could be identified.

Comparative regional cancer network performance and the overall Scottish performance

- SCAN: 91.2% (270/296)
- WoSCAN: 89.9% (586/652)
- Scotland: 76% (901/1,178)

Identified issues

Data analysis confirmed NCA NHS boards had by far the lowest 2020/2021 performance across all NHS boards for this QPI, achieving 20% against a target of 95%. NCA NHS boards have seen a marked decline in performance from 67% (2018/2019) to 53% (2019/2020) to 20% (2020/2021). The main reason for this decline was the performance of NHS Grampian who achieved 1% and NHS Tayside who achieved 7%.

The review team enquired about the reasons for the low performance across NHS Grampian and NHS Tayside:

- NHS Grampian explained the low performance was due to the redeployment of dietitians to help with the impact of COVID-19.
- NHS Grampian and NHS Tayside identified capacity issues in the workforce as major contributing factors for the low performance across both NHS boards.

- NHS Grampian and NHS Tayside explained due to clinical pressures, the MUST assessment may be carried out but is not recorded in the electronic record system accessible to audit staff.

Improvement actions

NHS Grampian and NHS Tayside had not developed action plans and therefore not included as part of the 2020 NCA Head and Neck audit report.

Ongoing challenges

Discussions during the review meeting highlighted the difficulty in achieving adequate staffing levels in dietetic services across the NCA NHS boards. This included the challenges in recruitment to the service.

Our assessment

The review team are concerned with the sharp decline in NHS Grampian and NHS Tayside's performance in 2020/2021. It is not clear to the review team whether the low performance across the two NHS boards is entirely due to the redeployment of staff during the COVID-19 pandemic or due to the fact audit staff are unable to locate evidence that the MUST assessment has been carried out. If no evidence is available, it is impossible to establish if the MUST assessment has been completed. However, NHS Tayside and NHS Grampian have failed to meet this target in the last seven years.

The review team note the absence of any action plans which indicates NHS Tayside and NHS Grampian have not prioritised any improvement actions. Malnutrition is prevalent in patients with head and neck cancer and it is recognised that it negatively effects treatment outcomes as those with significant weight loss are more likely to experience the following:

- Suffer major postoperative complications
- Less tolerance to radiotherapy with increased interruptions to treatment
- Decreased response to chemotherapy with increased toxicity, and
- Shortened survival times.

It is important that a qualified dietician screen patients at the time of diagnosis to ensure they receive the appropriate care and support. For these reasons, the review team strongly advise NHS Grampian and NHS Tayside to prioritise this QPI and ensure performance levels improve.

Recommendation

The review team recommend NHS Grampian and NHS Tayside conduct an audit to establish the reasons for the failure to perform, record or locate evidence to indicate the nutritional assessment with the MUST tool has been carried out in head and neck cancer patients.

The review team also recommend NHS Grampian and NHS Tayside develop a detailed action plan with clear accountable actions and timescales. NHS Grampian and NHS Tayside should closely monitor their performance to ensure the improvement actions are implemented and effective in driving forward change to help improve the outcomes of patients with head and neck cancer.

4.6 QPI 7 Specialist Speech and Language Therapist Access

Numerator: Number of patients with oral, pharyngeal or laryngeal cancer undergoing treatment with curative intent who are seen by a specialist speech and language therapist (SLT) before treatment.

Denominator: All patients with oral, pharyngeal or laryngeal cancer undergoing treatment with curative intent.

Rationale and Evidence: An SLT who specialises in head and neck cancer should be available to work with every patient whose primary treatment disrupts the ability to speak, eat or swallow. These patients should receive appropriate assessment of communication and swallowing before treatment. Continued SLT input is important in maintaining voice and safe and effective swallow function following head and neck cancer treatments.

Exclusions: Patients who refuse assessment.

Target: 90%

Changes to QPI

Footnote statement added to QPI that assessment by SLT may also include virtual consultation.

National summary

QPI 7: Specialist Speech and Language Therapy (SLT) Access was introduced in 2018 and since then no NHS board had met the target of 90%. However, the performance across WoSCAN NHS boards and SCAN NHS boards has improved achieving 54% in 2019/2020 to 79% 2020/2021 and from 58% in 2019/2020 to 75% in 2020/2021 respectively. Across NCA NHS boards, performance has declined from 56% in 2019/2020 to 31.8% in 2020/2021.

NHS Lanarkshire and NHS Dumfries & Galloway were the only two NHS boards to meet the target in 2020/2021.

Analysis of the 2020/2021 data indicated no NHS board was a significant outlier, however several NHS boards had very low performance, including NHS Borders (8%), NHS Western Isles (14%), NHS Grampian (22%), NHS Forth Valley (31%) and NHS Tayside (35.6%).

SLT is an important part of the patient journey for head and neck cancer patients as primary treatment can disrupt the ability to speak, eat or swallow. It is fundamentally important for a SLT who specialises in head and neck cancer to be available to work with patients to provide the necessary care and support and help improve patient outcomes.

WoSCAN

Performance based on 2017/2020 data

- **WoSCAN: 78.7% (289/367)**
- NHS Ayrshire & Arran: 84.6% (44/52)
- NHS Forth Valley: 30.6% (11/36)
- NHS Greater Glasgow & Clyde: 81.5% (167/205)
- NHS Lanarkshire: 90.5% (67/74)

Comparative regional cancer network performance and the overall Scottish performance

- NCA: 31.8% (48/151)
- SCAN: 75.3% (122/162)
- Scotland: 68% (459/680)

Identified issues

Analysis showed marked improvement across all WoSCAN NHS boards between 2019/2020 and 2020/2021 with the exception of NHS Forth Valley. NHS Forth Valley had been unable to provide a specialist SLT service for head and neck cancer patients due to staff shortages so patients were receiving treatment at the maxillofacial service in NHS Lanarkshire and only at the weekend.

Improvement actions

NHS Forth Valley have recruited a new specialist SLT and patients currently seen at NHS Lanarkshire will now receive treatment at NHS Forth Valley head and neck clinic.

Our assessment

The review team are satisfied with the improvements made across the WoSCAN NHS boards and the planned improvement actions to address the low performance in NHS Forth Valley. The review team believe the performance of all WoSCAN NHS boards should improve over the next reporting period.

SCAN

Performance based on 2017/2020 data

- **SCAN: 75.3% (122/162)**
- NHS Borders: ††
- NHS Dumfries & Galloway: 95.7% (22/23)
- NHS Fife: 80.6% (25/31)
- NHS Lothian: 77.1% (74/96)

†† Indicates values that have been redacted where there is a risk that individuals could be identified.

Comparative regional cancer network performance and the overall Scottish performance

- NCA 31.8% (48/151)
- WoSCAN 78.7% (122/162)
- Scotland 68% (459/680)

Identified issues

QPI 7: Specialist SLT Access was introduced in 2018 and since then no SCAN NHS board had met the target of 90%. However, in 2020/2021 SCAN NHS boards' performance has improved except in the case of NHS Borders who has repeatedly achieved below 10% over the last three years.

The review team enquired about the performance of the SCAN NHS boards in particular NHS Borders. It was explained that capacity limitations in the small team of specialist SLT services was the main factor contributing to low performance.

Improvement actions

- A new approach, approved in principle by the NHS Lothian and NHS Borders leads, would enable NHS Borders patients to be assessed in NHS Lothian thus ensuring the patients have increased access to specialist SLT services.
- NHS Fife has introduced a joint SLT/dietetics clinic, which means head and neck cancer patients, will have access to both specialised services at the same appointment.
- NHS Lothian has recruited a new speech and language therapist, which will improve capacity in the service.

Our assessment

The review team acknowledge the marked improvement across NHS SCAN boards in 2020/2021 and if the planned actions are effective NHS Fife and NHS Lothian should meet the target in 2021/2022.

The continued low performance of NHS Borders over the last three years is a concern to the review team. Over the last few years, head and neck cancer patients in NHS Borders have had unequal access to specialist SLT services, which could mean reduced patient outcomes, in comparison to other parts

of Scotland. This situation is unacceptable and it is imperative that NHS Borders and NHS Lothian work together to improve patient outcomes across NHS Borders.

Recommendation

The review team recommend NHS Borders explore a formal service level agreement with another NHS board to ensure patients across NHS Borders have equitable and consistent access to the same specialist SLT services as in other parts of Scotland.

NCA

Performance based on 2020/2021 data

- **NCA: 31.8% (48/151)**
- NHS Grampian: 22% (13/58)
- NHS Highland: 52% (13/25)
- NHS Orkney: ††
- NHS Shetland: N/A
- NHS Tayside: 35.6% (21/59)
- NHS Western Isles: ††

N/A indicates no cases.

†† Indicates values that have been redacted where there is a risk that individuals could be identified.

Comparative regional cancer network performance and the overall Scottish performance

- SCAN: 75% (122/162)
- WoSCAN: 79% (289/367)
- Scotland: 68% (459/680)

Identified issues

Data analysis shows the performance of the NCA NHS boards is significantly below that of SCAN NHS boards and WoSCAN NHS boards. NHS Grampian is showing a downward trend from 73% in 2019/2020 to 22% in 2020/2021. Performance in NHS Tayside has also been on a downward trend going from achieving 55% in 2019/2020 to 36% in 2020/2021. However, NHS Highland has been steadily improving over the last three years and recorded the highest performance of NCA boards achieving 52% in 2021.

The review team enquired about the reasons for the low performance across NHS Grampian and NHS Tayside:

- NHS Grampian and NHS Tayside explained that the low performance was due to workforce challenges mainly problems in recruiting specialist SLT staff and issues with available funding for these posts.
- The NCA Head and Neck 2020 audit report highlighted workforce pressures as a reason for the low performance across NHS Grampian and NHS Tayside. However, the NHS boards have not developed any action plans to address this problem.

Improvement actions

NHS Highland has introduced changes to the pathway and has recruited two additional specialist speech and language therapists, which the NHS board believes to be sufficient capacity for the NHS board.

Our assessment

During the review meeting discussions, the review team acknowledge that workforce issues across NHS Grampian and NHS Tayside are responsible for their low performance given the difficulties in recruiting staff to the specialist SLT posts. However, this downward trend in performance could have a negative impact on patient outcomes with head and neck cancer patients across NHS Grampian and NHS Tayside having limited access to specialist SLT services. This means these patients may not receive the same level of specialist care and support as other head and neck cancer patients across other parts of Scotland.

Recommendation

The review team recommend NHS Grampian and NHS Tayside continue their efforts to recruit to the specialist SLT posts. This will ensure head and neck cancer patients across NHS Grampian and NHS Tayside have equitable and consistent access as other patients across Scotland, to the specialist care and support they need as part of their cancer patient journey.

4.7 QPI 8 Surgical Margins – presented by hospital of surgery

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.

Rationale and Evidence: Achieving clear margins is associated with improved local and regional control and disease specific and overall survival. A distance from invasive carcinoma to surgical margin of less than 1mm is considered risky.

Margin status is an important predictor of patient outcome. Evidence has shown that tumours with positive surgical margins have a high risk of recurrence. If tumour-free margins are unachievable then surgery is unlikely to be curative.

This target for this QPI has been set at less than 10%. Margins less than 1mm allows for a minority of cases where wider margins are simply not surgically feasible but where surgery is considered appropriate.

Exclusions: Patients with naso-pharyngeal cancer, posterior pharyngeal wall cancer and upper oesophageal cancer.

Target: < 10%

National summary

This QPI is measuring the proportion of patients who undergo surgery where the tumour has not been completely excised therefore a less than 10% of patients target has been set. The overall performance for Scotland was 10.1%. Only NHS Tayside failed to meet this target with a result of 17.9% of patients with a surgical margin of less than 1mm.

This is an important QPI as free margin status is an important predictor of patient outcomes and are associated with local and regional disease control and survival.

NCA

Performance based on 2020/2021 data

- **NCA: 15.7% (8/51)**
- NHS Grampian: ††
- NHS Highland: N/A
- NHS Orkney: N/A
- NHS Shetland: N/A
- NHS Tayside: 17.9% (7/39)
- NHS Western Isles: N/A

†† Indicates values that have been redacted where there is a risk that individuals could be identified.

N/A indicates no cases

Comparative regional cancer network performance and the overall Scottish performance

- SCAN: ††
- WoSCAN: 9% (16/179)
- Scotland: 10% (27/267)

†† Indicates values that have been redacted where there is a risk that individuals could be identified.

Identified issues

The NHS Tayside (Ninewells Hospital was the hospital of surgery) result of 17.9 % showed a marked increase in 2020/2021 after being less than 5% in 2017/2018, 2018/2019 and 2019/2020. The review team explored possible explanations for the sharp drop in performance:

- The review team asked if there had been any changes in the surgical team. NHS Tayside confirmed there had been a change in surgical staff but observed no difference in the quality of surgery.
- The review team asked if the surgical team noticed any variation in the types of patients referred for surgery. NHS Tayside explained anecdotally there has been an increase in the number of patients with advanced disease since the onset of the COVID-19 pandemic and a higher proportion of maxillary tumours.
- The review team also asked if the surgical team observed any differences in clinical practice (for example the possibility of a greater willingness to take on more challenging cases). NHS Tayside had not observed any changes in clinical practice.

However, despite discussing possible explanations, NHS Tayside could not provide a definitive reason for the drop in performance.

Our assessment

The NHS Tayside result was not a statistically significant deviation from the target of < 10% and this result could be due to random variation. The review team note the QPI previously stated a margin of less than 5mm, however following the 2018 QPI formal review had been reduced to less than 1mm as a marker for quality. Despite discussing several possible explanations at the review meeting, it was not clear to the review team the reason for NHS Tayside's performance. The review team will review the 2021/2022 data to ensure performance levels have returned to < 10%.

Recommendation

The review team recommend NHS Tayside inform the review team of the performance levels of surgical margins in the next reporting period to provide assurance that performance has returned to within the target.

5 Conclusion

Analysis showed no evidence of unwarranted variation for the following five head and neck QPIs. Performance for these QPIs were judged to be 'in control' and therefore not included in the report:

- QPI 3: MDT
- QPI 11: 30 and 90 Day Mortality
- QPI 13: 30 Day Mortality following Systemic Anti-Cancer Therapy (SACT)
- QPI 14: Time form Surgery to Adjuvant Radiotherapy/Chemoradiotherapy, and
- QPI 15: PD-L1 Combined Proportion Score (CPS) for Decision Making.

Unwarranted variation was identified in the performance of the following eight QPIs:

- QPI 1(i): Pathological Diagnosis of Head and Neck Cancer
- QPI 2(i): Imaging
- QPI 4: Smoking Cessation
- QPI 5 (i): Oral and Dental Rehabilitation Plan
- QPI 5 (ii): Oral and Dental Rehabilitation Plan
- QPI 6: Nutritional Screening
- QPI 7: Specialist Speech and Language Therapist Access, and
- QPI 8: Surgical Margins - presented by hospital of surgery.

Overall, three head and neck QPIs were challenging for NHS boards across Scotland; QPI 4: Smoking Cessation, QPI 6: Nutritional Screening and QPI 7: Specialist Speech and Language Therapist Access. Performance across Scotland was low for QPI 4 Smoking Cessation in 2020/2021 and more than 3 standard deviations below the target. Although overall performance across Scotland has steadily increased since this QPI was first introduced three years ago, NHS Fife remains the only NHS board to meet the target in 2020/2021. The lowest performance was evident across NHS Lanarkshire, NHS Dumfries & Galloway and NHS Grampian. This is an important QPI for patients as evidence shows that patients with a head and neck cancer diagnosis who are active smokers should be referred to smoking cessation immediately.

Performance across the WoSCAN NHS boards and SCAN NHS boards is improving for QPI 6: Nutritional Screening, however, the performance of NCA NHS boards has seen a sharp decline in 2020/2021. The review team are particularly concerned with the performance of NHS Tayside and NHS Grampian who achieved 6.7% and 1.1% respectively against a target of 95%, which is the lowest performance across Scotland. Head and neck cancer patients across NHS Tayside and NHS Grampian may be at risk of not receiving the appropriate care and support due to limited access to dietetic services.

QPI 7: Specialist Speech and Language Therapist Access was introduced in 2018 and until 2020/2021, no NHS board had met the target. However, with consistent efforts, NHS Lanarkshire and NHS Dumfries & Galloway were the only two NHS boards to meet the target in 2020/2021. Performance across the WoSCAN NHS boards and SCAN NHS boards is improving but the performance of NCA NHS boards is declining. The review team found issues in NHS Forth Valley, NHS Borders, NHS Grampian, NHS Tayside and NHS Western Isles. Head and neck cancer patients across these NHS boards may have poorer outcomes due to the lack of available SLT to provide the necessary care and support.

Of the remaining 3 out of 4 QPIs, QPI 1 (i): Pathological Diagnosis of Head and Neck Cancer, QPI 2(i): Imaging and QPI 8: Surgical Margins NHS Tayside had unwarranted variation in all of them. This means that for patients in NHS Tayside with head and neck cancer, there is a risk that the quality of care received may be lower than that of patients in other NHS boards. It is important that NHS Tayside address the recommendations in the report to improve the delivery of cancer care as measured by the QPI.

While the regional cancer networks allow NHS boards to collaborate and work to improve the quality of cancer care across their regions, performance against the QPIs and the required improvement action remains the responsibility of the individual NHS boards. The review team will review progress made against the recommendations within 12 months of publication of this report.

6 Recommendations

QPI 1

The review team recommend NHS Tayside carry out an audit of their 2020/2021 data (and previous years to offer a basis for comparison) to better understand the reasons for the lower performance in 2020/2021 and develop an improvement action plan to meet the target in the future.

QPI 2(i)

The review team recommend NHS Tayside should carry out an audit to check for accuracy of the 2020/2021 data and to understand the reasons for their low performance in comparison to other NHS boards in Scotland and develop an improvement action plan to ensure that the target is met in the future.

QPI 4

The review team recommend all WOSCAN NHS boards develop a formal action plan to meet this target. The NHS boards' senior management teams must fully endorse this plan to ensure the NHS boards implement the relevant improvement actions to drive forward the changes to ensure that patients who smoke and are diagnosed with a head and neck cancer get the smoking cessation support they need.

The review team recommend NHS Dumfries & Galloway, NHS Borders and NHS Lothian develop a formal action plan to meet this target. The NHS boards' senior management teams must fully endorse this plan to ensure the NHS boards implement the relevant improvement actions to drive forward the changes to ensure that patients who smoke and are diagnosed with a head and neck cancer get the smoking cessation support they need.

The review team recommend NHS Grampian develop a formal action plan to meet the smoking cessation target. NHS Grampian's senior management team must fully endorse this plan to ensure the NHS board implement the relevant improvement actions to drive forward the changes to ensure that patients who smoke and are diagnosed with a head and neck cancer get the smoking cessation support they need.

QPI 5 (i) and QPI 5 (ii)

The review team recommend NCA and NHS Highland continue to make efforts to appoint a second restorative dentist. This will increase capacity and resilience in the restorative dentistry team and enable them to fully participate in the head and neck MDT meetings, thus, improving patient outcomes and performance across the NHS board.

QPI 6

The review team recommend NHS Fife carry out an investigation to explore the IT incompatibilities with a view to resolving the issues. This work should identify if the IT issues are the only reason for the NHS board not meeting the target or if other underlying issues exist.

The review team recommend NHS Grampian and NHS Tayside conduct an audit to establish the reasons for the failure to perform, record or locate evidence to indicate the nutritional assessment with the MUST tool has been carried out in head and neck cancer patients.

The review team also recommend NHS Grampian and NHS Tayside develop a detailed action plan with clear accountable actions and timescales. Going forward, NHS Grampian and NHS Tayside should closely monitor their performance to ensure the improvement actions are implemented and effective in driving forward change to help improve the outcomes of patients with head and neck cancer.

QPI 7

The review team recommend NHS Borders explore a formal service level agreement with another NHS board to ensure patients across NHS Borders have equitable and consistent access to the same specialist SLT services as in other parts of Scotland.

The review team recommend NHS Grampian and NHS Tayside continue their efforts to recruit to the specialist SLT posts. This will ensure head and neck cancer patients across NHS Grampian and NHS Tayside have equitable and consistent access as other patients across Scotland, to the specialist care and support they need as part of their cancer patient journey.

QPI 8

The review team recommend NHS Tayside inform the review team of the performance levels of surgical margins in the next reporting period to provide assurance that performance has returned to within the target.

7 Acknowledgement

This review has been conducted during COVID-19 and HIS would like to thank all those involved for their support and commitment to the review process during such an unprecedented and extremely challenging period for NHS Scotland.

8 Engagement with the third sector

In order to include the patient perspective into our review process the review team has been working with the HIS Community Engagement Directorate and the Scottish Medicines Consortium to identify relevant charities for each TSGs. For head and neck cancer, Ochre and Swallows charities were identified. However, at the time of the review, the charities were unfortunately unable to participate. The review team however do acknowledge other head and neck charities exist in Scotland providing excellent support to head and neck cancer patients and their families.

9 Reference list

1. https://www.macmillan.org.uk/cancer-information-and-support/head-and-neck-cancer
2. Public Health Scotland (2023). Cancer Incidence and Prevalence in Scotland: To December 2021.
3. Public Health Scotland (2022). Cancer Mortality in Scotland: Annual Update to 2021.
4. Public Health Scotland (2021). Cancer survival in Scotland (2013-2017).

10 The review team

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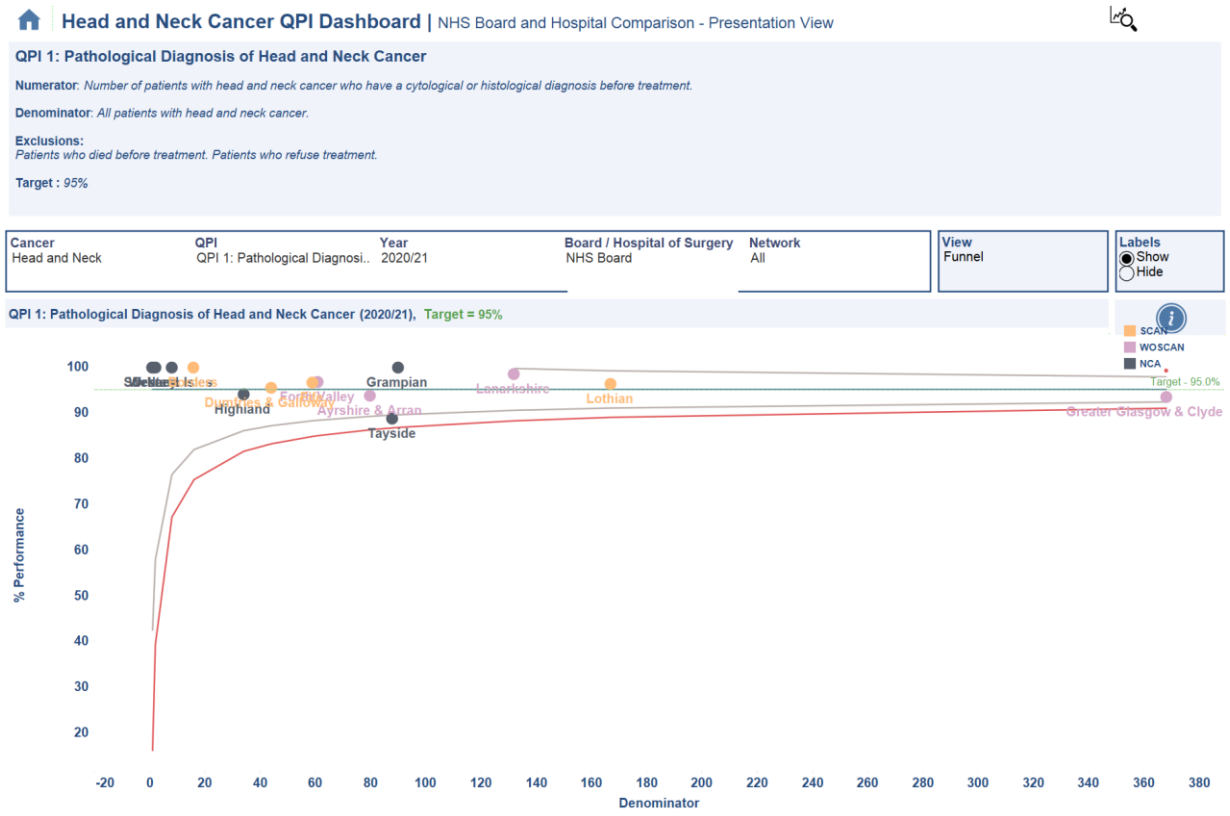
11 Appendices

11.1 Appendix 1:



Head and Neck Cancer QPI Dashboard | NHS Board and Hospital Comparison - Presentation View

QPI 2(i): Imaging

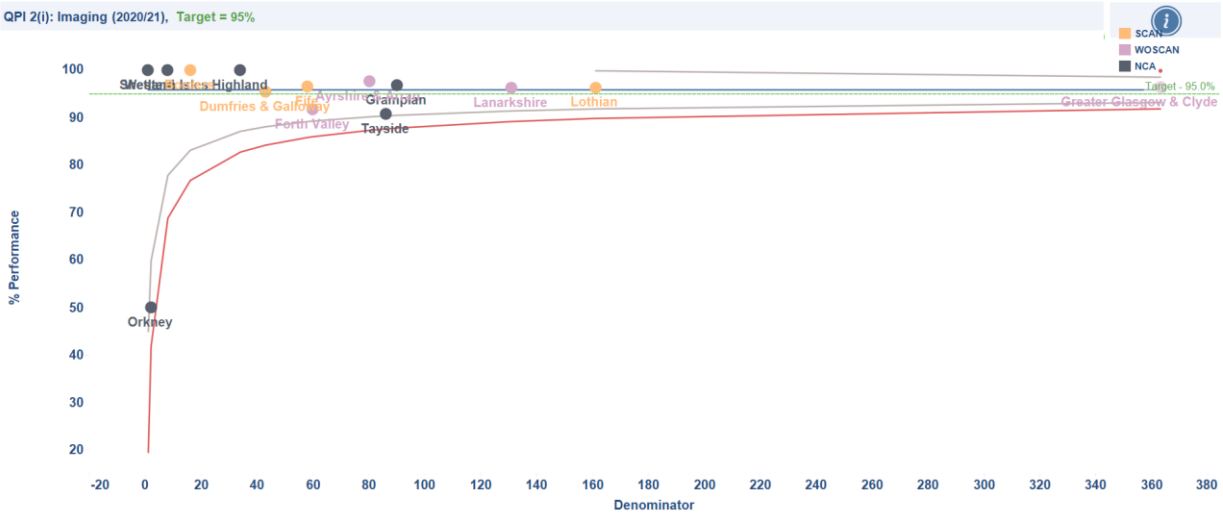
Numerator: *Number of patients with head and neck cancer who undergo CT and/or MRI of the primary site and draining lymph nodes with CT of the chest before the initiation of treatment.*

Denominator: *All patients with head and neck cancer.*

Exclusions:
Patients who undergo diagnostic excision biopsy as the definitive surgery. Patients who died before treatment. Patients who refuse treatment.

Target : *95%*

Cancer	QPI	Year	Board / Hospital of Surgery	Network	View	Labels
Head and Neck	QPI 2(i): Imaging	2020/21	NHS Board	All	Funnel	Show / Hide



Head and Neck Cancer QPI Dashboard | NHS Board and Hospital Comparison - Presentation View

QPI 4: Smoking Cessation

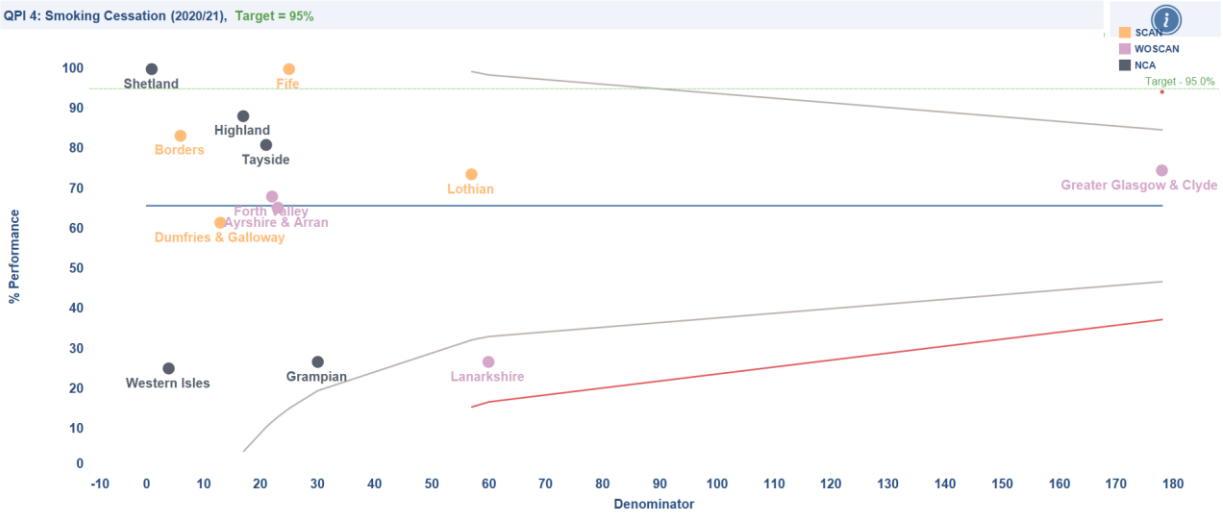
Numerator: *Number of patients with head and neck cancer who smoke who are offered referral to smoking cessation before first treatment.*

Denominator: *All patients with head and neck cancer who smoke.*

Exclusions:
No exclusions.

Target : *95%*

Cancer	QPI	Year	Board / Hospital of Surgery	Network	View	Labels
Head and Neck	QPI 4: Smoking Cessation	2020/21	NHS Board	All	Funnel	Show / Hide



Head and Neck Cancer QPI Dashboard | NHS Board and Hospital Comparison - Presentation View

QPI 5(i): Oral and Dental Rehabilitation Plan. Pre-treatment assessment decision made jointly by consultants in restorative dentistry and the MDT

Numerator: *Number 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 Dentiistry and the MDT.*

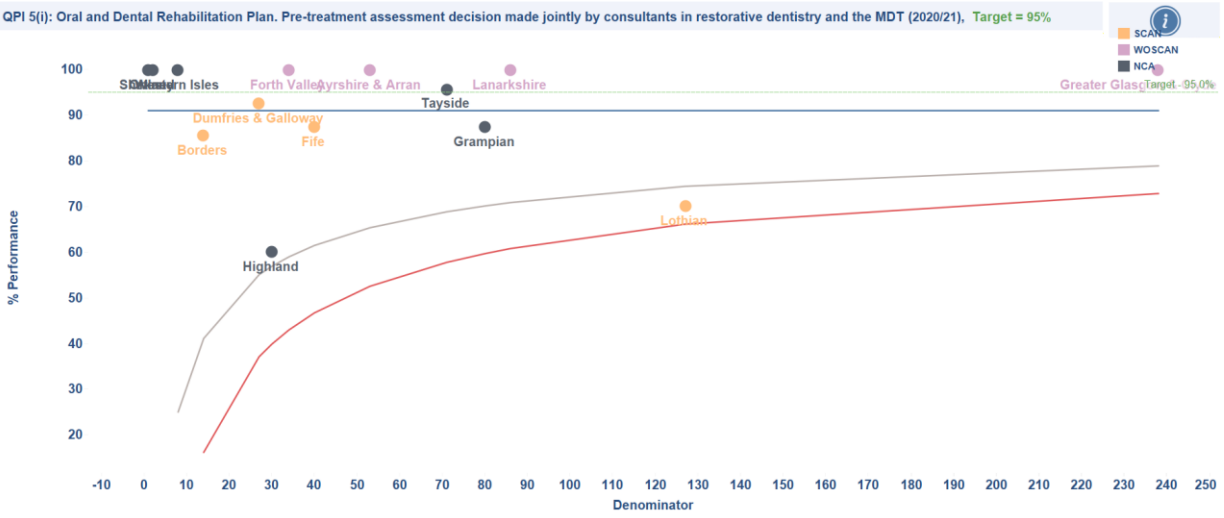
Denominator: *All patients with head and neck cancer undergoing active treatment.*

Exclusions:
Patients who have T1/T2/N0 Larynx Cancer. Patients undergoing no active treatmenta as part of their primary therapy.

Target : *95%*

Cancer	QPI	Year	Board / Hospital of Surgery	Network	View	Labels
Head and Neck	QPI 5(i): Oral and Dental Re..	2020/21	NHS Board	All	Funnel	Show / Hide

QPI 5(i): Oral and Dental Rehabilitation Plan. Pre-treatment assessment decision made jointly by consultants in restorative dentistry and the MDT (2020/21), Target = 95%



Head and Neck Cancer QPI Dashboard | NHS Board and Hospital Comparison - Presentation View

QPI 6: Nutritional Screening

Numerator: *Number of patients with head and neck cancer who undergo nutritional screening with the Malnutrition Universal Screening Tool (MUST) before first treatment.*

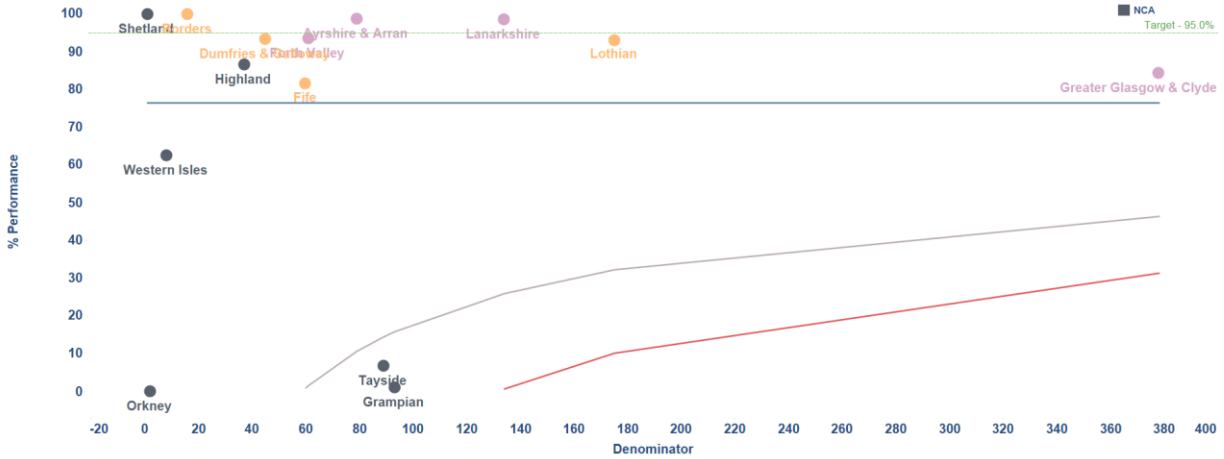
Denominator: *All patients with head and neck cancer.*

Exclusions:
No exclusions.

Target : *95%*

Cancer	QPI	Year	Board / Hospital of Surgery	Network	View	Labels
Head and Neck	QPI 6: Nutritional Screening	2020/21	NHS Board	All	Funnel	Show / Hide

QPI 6: Nutritional Screening (2020/21), Target = 95%



Head and Neck Cancer QPI Dashboard | NHS Board and Hospital Comparison - Presentation View

QPI 7: Specialist Speech and Language Therapist Access

Numerator: *Number of patients with oral, pharyngeal or laryngeal cancer who are seen by a Specialist SLT before treatment.*

Denominator: *All patients with oral, pharyngeal or laryngeal cancer.*

Exclusions:
Patients who refuse assessment.

Target : *90%*

Cancer	QPI	Year	Board / Hospital of Surgery	Network	View	Labels
Head and Neck	QPI 7: Specialist Speech an..	2020/21	NHS Board	All	Funnel	Show / Hide

QPI 7: Specialist Speech and Language Therapist Access (2020/21), Target = 90%

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