SCAN
South East Scotland Cancer Network

NHS SCOTLAND

Working regionally to improve cancer services

SOUTH EAST SCOTLAND CANCER NETWORK (SCAN)
PROSPECTIVE CANCER AUDIT

Bladder Cancer 2022-23 Comparative Audit Report

Patients diagnosed 1st April 2022 to 31st March 2023

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Document History

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1	SCAN leads sign off meeting	12/03/2024	Agree actions and comments
2	SCAN Lead	18/04/2024	For confirmation of actions and comments. For insertion of clinical Lead's commentary
3	SCAN Urology Group	23/04/2024	For final approval / comments
4	SCAN Clinical Governance Framework, Action Plan Leads and SCAN Urology Group	10/05/2024	Checked for disclosive data for website version
4w	Report assessed for disclosive data, completed action plans to be added and report to be added to SCAN Website	June 2024	

Lead clinician summary

This is year 9 of the Scottish national Bladder Cancer QPIs and I am pleased to note the audit findings from SCAN – we have now completed 5 years since incorporating changes to QPIs and measurability criteria recommended at the 1st national formal review meeting in 2018 and this is the 1st report since the 2nd formal review of 2021. The key implementation has been the introduction of the new QPI measuring recurrence at first check cystoscopy and residual cancer and re-TURBT.

SCAN data and clinicians have been vital to the *Scot BC Quality OPS* clinical project [https://pubmed.ncbi.nlm.nih.gov/34419380/]. Upon completion of analyses of long term outcomes from the cohort of patients diagnosed between April 2014 – March 2017, the second paper in the series, is now available online: https://pubmed.ncbi.nlm.nih.gov/38296735/, showing significant improvement in recurrence and progression in NMIBC when benchmarks are met. We are extremely proud of the attention the Scottish QPI programme is getting from the global bladder cancer community, and particularly proud to note that Quality Indicators have now been included in the European Association of Urology NMIBC guidelines of 2024, citing Scotland's programme [https://uroweb.org/guidelines/non-muscle-invasive-bladder-cancer]. All these elements will undoubtedly inform the 3rd formal review in spring/ summer of 2024.

The case attainment for the Bladder Cancer QPIs continues to be extremely good and I continue to be impressed by the high quality and diligence practiced by the audit personnel within the region. Regular, necessary dialogue between audit and clinical staff ensures data accuracy. I am confident that the audit data reflects real world clinical experience across the SCAN region and will continue to influence patient care and reduce variability.

The action points and recommendations following the 2021-22 audit and comparative report have also been explored in my comments below, along with the SCAN group's suggested changes to be considered at the next formal review.

QPI 1– SCAN continues to perform well with this QPI - every new cancer patient has had a multi-disciplinary team oversight. SCAN have suggested that this QPI should be archived in favour of introducing a new QPI.

QPI 2(i) – Good Quality and comprehensive documentation of tumour characteristics are essential to the management of bladder cancer. The target has now increased to 95%.

SCAN had a shortfall of only 5%. The emphasis continues to be the utilisation of the standard operation proforma - the electronic TRAKcare version (developed by and currently being used in Lothian) is expected to facilitate improved compliance across SCAN and Scotland. The technical programming elements of this electronic operation note/ audit tool has been passed on to Intersystems and we await the rollout across Scotland. We have noted that D&G do not use TRAKcare, and therefore will continue to use the paper proforma and a process of monitoring is in place to assess compliance.

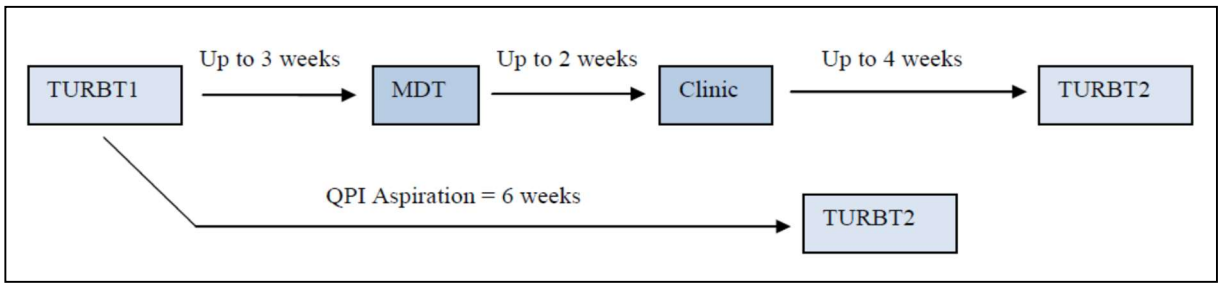
QPI 2(ii) – The 95% target has been met by SCAN. D&G's shortfall will hopefully be met with regular use of the proforma.

QPI 2(iii) – This QPI now measures sampling detrusor muscle in patients with **high grade cancer** with a target of 90%. SCAN have missed the target by 10% (an improvement from last year), while Lothian and Fife had shortfalls of 20% and 5% respectively. As it is critical to achieve this benchmark, training in performing TURBT effectively and to a high standard is vital to ensuring excellent outcomes as well as reducing the requirement for re-TURBT. As in previous years, I will continue emphasising this at the Live surgical workshop as well as the Scottish Bladder Cancer Symposium (scheduled for the 30th and 31st of May 2024, respectively). Lothian continue to emphasise the need to protect capacity in dedicated bladder cancer surgeons' lists to carry out TURBTs – there are still competing demands for the limited theatre capacity. The pre-TURBT triage process in Lothian can sometimes be impeded by lack of timely information from the diagnostic cystoscopy – this will continue to be emphasised locally. I will also share presented and published data with colleagues to highlight the importance of achieving this QPI and improving the overall clinical pathway.

QPI 3 - SCAN had a shortfall of 4%. The recent publication in the European Urology Oncology Journal [https://pubmed.ncbi.nlm.nih.gov/38296735/] will hopefully encourage and inform compliance to this very important QPI.

QPI 4 (i), (ii), (iii) – SCAN and each constituent health board have failed to meet the target of carrying out re-TURBT (in selected patients) within 42 days of the initial TURBT. It must be noted that the significant shortfall is mainly the result of not meeting the timing, as opposed to actually performing the re-TURBT when indicated.
Despite best intention and attempting to ring-fence spaces on theatre lists (as in NHS Lothian) for the early re-TURBT (or GA cystoscopy) within 42 days of the initial TURBT, there has been a significant shortfall in being able to meet this target in the SCAN region for a variety of reasons (some have been described in my summaries over the previous 3 years):
(a) Capacity - There was a shortfall in capacity, despite taking up extra lists to accommodate patients with bladder cancer. In NHS Lothian, the main reason for the capacity shortfall is the specific loss of lists to support bladder cancer service. Appointment of a second consultant and a process to secure the ring fenced lists in Lothian is expected to help. Some health boards in SCAN, BGH for example, do not have regular lists and therefore cannot ringfence.
(b) Some of the patients with high grade cancer were deemed un-fit to undergo re-TURBT – consideration should be made to include such patients in the 'tolerance' to the QPI target.
(c) MDM recommendation for BCG instead of re-TURBT in these patients. This also reflects the overall need to be more nuanced in performing re-TURBT.
(d) Delays in pathology reporting and MDM, especially for D&G and BGH, have resulted in delays in the pathway to re-TURBT.
(e) Timing - based on the timeline below it is close to impossible to achieve this QPI in SCAN, given the current capacity and processes. Ring fenced theatre capacity (Lothian have now planned for a specific monthly dedicated list for re-TURBT) and innovative approaches to efficiently secure this capacity is much needed and should help:

2022/23 Re-TURBT (QPI 4) practice in Lothian v QPI aspiration:



However, reassuringly, from our clinical study in 92% of Scotland's patients (where SCAN centres and clinicians have contributed data), the risk of under-staging with the initial TURBT (the main reason for performing re-TURBT) in high risk NMIBC is very low (2.9%) [https://pubmed.ncbi.nlm.nih.gov/32690321/]. Clinicians are therefore reassured that consequent to a better quality TURBT at the outset, the need for repeat TURBT within 42 days has reduced and that we can be even more selective. However, the first TURBT has to be performed to a high standard and therefore meeting QPI 2(iii) has a direct consequence to the requirement for QPI 4. Selection of patients for re-TURBT must therefore be more nuanced and the yet to be published data supports this. Additionally, we have demonstrated (presented at BAUS 2022 and EAU 2023) that within the QPI 'environment' there doesn't seem to be a disadvantage if the re-TURBT is performed beyond 42 days – perhaps once this data is published, it might help us modify QPI 4 at the 3rd formal review. We should consider altering the starting point of the timeline for this QPI to pathology or MDT date – this has been put forth for discussion at the formal review.

QPI 6 – SCAN has had a shortfall of 30%, with Lothian and Fife meeting the 95% target in 71% and 43% patients, respectively. It is still being recommended that Fife surgeon(s) consider using the same standardised operative template from NHS Lothian, where description of the lymphadenectomy template is specified. Some patients who were included in the denominator were not surgically suitable to undergo extended pelvic lymphadenectomy (for example scarring and fibrosis in the pelvis from previous surgery). Whilst the much needed survival outcomes in the MIBC patients from *Scot BC Quality OPS* is awaited (and we would have the necessary granularity to determine if the LN count determines rates of cure), we recommend splitting this QPI into 2 sections: template and lymph node count (with a smaller target). In addition, following the SWOG S1011 Phase III trial, there does not appear to be a survival advantage in patients undergoing extended pelvic lymph node clearance compared with standard lymph node clearance (see Journal of Clinical Oncology, Genitourinary Cancer - Kidney and Bladder [https://ascopubs.org/doi/10.1200/JCO.2023.41.16_suppl.4508]). These will be raised for discussion at the 3rd formal review in 2024.

QPI 7(i) – This is the first report incorporating the new target of 42 days (halved from the previous target of 90 days) for radical treatment. SCAN had a shortfall of 70% for this highly ambitious target. Small denominator numbers contribute to large apparent shortfalls. This is a vital QPI, however, should be re-evaluated at the 3rd formal review in 2024 – perhaps the starting point of the timeline should change from the current date of MIBC pathological diagnosis to the MDT date. It must also be noted that time is required to counsel and prepare patients for radical treatment.

QPI 7(ii) – The data review suggests that the shortfall between time from NAC to radical treatment is felt to be contributed by concerns with patient fitness and also patient-induced delays.

QPI 8 – This is the 5th year using the new target for the hospital of 20 cystectomies per year. Radical surgery for SCAN is only carried out in Lothian and Fife and the case ascertainment has been accurate. SCAN met the targets for hospital and surgeon volume. However, Fife had a significant shortfall of 14 cystectomies for the hospital volume target and by 4 cystectomies

for the surgeon volume - it has been recommended that this is reviewed at the Fife health board level.

QPI 9 – As in the previous 8 years, this continues to be a difficult QPI to meet for SCAN – the shortfall is 16% with a significant reduction in compliance compared with last years'. The vast majority of patients not meeting this QPI are noted to have a specific surgical option recommended at the MDM, i.e., there was no oncology option – oncologists from SCAN were satisfied that patients in this cohort received appropriate treatment without the potential delays that comes with an additional (oncology) clinic appointment. SCAN oncologists agreed that this QPI should be considered for revision at the next formal review in 2024 - the suggested option is: changing the denominator to include only patients suitable for all radical treatment options or possibly removing this QPI while retaining QPI 1.

QPI 10 – There was a significant shortfall for this QPI in SCAN. The overall feeling from our oncology colleagues in SCAN is that the target of 50% might not be realistic as some patients would not be fit enough to receive the radio-sensitizer. This QPI should be reviewed at the 3rd formal review meeting in 2024 in light of the continued failure to meet this QPI over the past 9 years.

QPI 11 – Of 56 patients who underwent radical treatment with curative intent for muscle invasive bladder cancer in SCAN, there was one death within 30 days of radical surgery and one death following radiotherapy. Two further deaths occurred within 90 days of radical surgery and radical radiotherapy, respectively (from rapidly progressing cancer). All 4 occurred in Lothian. The 30-day mortality have been discussed at the Urology morbidity and mortality (M&M) meeting deemed that this mortality, whilst unfortunate, was within the accepted risk in patients with higher risk undergoing major surgery and did not necessitate any practice change. The small denominators meant that SCAN and Lothian failed to meet this QPI. It was felt during the previous formal review, as the denominators are small, that performance against this QPI will be analysed/ reviewed in 5-year cycles to allow for more accurate interpretation of trends. In addition, as QPIs need to reflect and measure quality of care as opposed to cancer biology, perhaps the definitions and measurability criteria should be altered to only measure 30 and 90 day mortality consequent to causes un-related to the Bladder Cancer – something for discussion at the 3rd formal review in 2024.

QPI 13(i) – I am pleased to see the first reporting of this QPI that are essentially the best reflections of a high quality and effective TURBT as well as utilisation of the single instillation of chemotherapy. Lothian have performed well with a recurrence rate at first check cystoscopy of 8%. SCAN had a shortfall of only 0.2%.

QPI 13(ii) – The target was missed significantly in SCAN with a shortfall of 20%. Whilst this target in high grade T1 patients could be considered ambitious, I feel it is an excellent marker of resection quality and by extension, cancer patient care. We will strive to improve the outcomes.

QPI 13(iii) - There was a significant shortfall with this QPI as well, with 10% of patients in SCAN and 15% patients in Lothian being found to have MIBC on re-TURBT. We will emphasise training and raising awareness around the performance of TURBT in high grade cancer.

Professor Param Mariappan
April 2024.

Clinical Recommendation Summary from 2022-23

QPI	Action required	Lead	Date for update
2i & 2ii	D&G - At a management meeting on 11/03/2024 they agreed to thorough monitoring in the next 6 months for all the actions identified for the Urology service.	Martin Keith / Miss Maria Bews-Hair	August 2024
2iii	Triage is very important to identify clinically high grade cases. At cystoscopy small tumours may be perceived as low grade. We recommend that consultants perform base of tumour resections in cases of trainee operations.	Mr Thomas / D&G Surgeons / Mr Mitchell / Prof Mariappan	August 2024
3	Expect further improvement in 2023-24 following training during 2023 year with short stay staff post-op around administration of mitomycin. Mitomycin checkbox also now included on bladder proforma. With dedicated specialist TURBT lists agreed, we can expect improved performance in 2023-24.	Martin Keith / Miss Maria Bews-Hair / Mr Mitchell	August 2024
4i	This is an important aspect of patient care (particularly in high grade disease cases) This is an NHS-centric issue with competing priorities of the endoscopic and surgical services. Where the 42 day target was narrowly missed, it indicates clear capacity issues with no evidence of any survival disadvantage.	NHS Management SCAN region	August 2024
4ii & 4iii	This is an important aspect of patient care (particularly in high grade disease cases) This is an NHS-centric issue with competing priorities of the endoscopic and surgical services. Where the 42 day target was narrowly missed, it indicates clear capacity issues with no evidence of any survival disadvantage. Ring-fence theatre slots to try and accommodate repeat resections.	NHS Management SCAN region / SCAN Surgeons	August 2024

Clinical Recommendation Summary from 2021-22

QPI	Action required	Progress
2i	Audit staff are monitoring the use of the Bladder proforma in theatres throughout the year.	**D&G –** Achieved some progress. This action is ongoing. At a management meeting on 11/03/2024 they agreed thorough monitoring in the next 6 months for all the actions identified for the Urology service.
2ii	With the new data option of adding “unsure” field to future analysis, improvement should be achieved.	SCAN / Formal Review. Completed templates with comments to be returned by Friday 29/03/2024.
2iii	Clinically deemed high grade or high-risk procedures should be booked in for dedicated Bladder cancer surgeons only to perform. Initial clinical triage will be required.	**D&G –** Dedicated lists are in place and will be monitored. **Fife –** Action plans with Mr Mitchell. A business case to introduce PDD at TURBT will allow for dedicated lists and improvement in performance. **Lothian –** This action has been implemented in Lothian. ** Small tumours may be missed for these lists. This will be due to cystoscopy limitations.
4i – 4iii	Borders will attempt more timely repeat procedures as soon as capacity returns to normal. D&G are triaging and booking procedures post MDM. Lothian has ring-fenced theatre slots to try and accommodate repeat resections. QPI steering group – Consider	Mr Thomas / Martin Keith / Mr Mitchell / Prof Mariappan / Awaiting Formal Review.

QPI	Action required	Progress
	QPI revision to base re-resection decisions on MDM recommendations post TURBT1.	
6	Fife service need to update or be clearer in operation notes on what procedure has been performed. QPI steering group – Need to consider revision of QPI to either, include exclusion criteria or increase tolerance to ensure this QPI truly reflect service quality.	**Fife –** Mr Mitchell to update on this action. Template in Fife has been adjusted to include the lymph node level. ***Awaiting formal review. The QPI is likely to change as evidence suggest that extended lymph node dissection does not alter survival.
9	QPI Steering Group – To amend the measurement of this QPI. Only include cases where the MDT recommend both surgical and oncology appointments for patients. Currently the MDT recommend most appropriate options to ensure that best treatments are delivered in a timely manner.	Awaiting Formal Review.

Bladder Cancer QPI Attainment Summary 2022-23		Target%	Borders		D&G		Fife		Lothian		SCAN	
QPI 1: MDT Discussion	Before definitive treatment (MIBC)	95	N 7 / D 7	100%	N 13 / D 13	100%	N 30 / D 30	100%	N 74 / D 74	100%	N 124 / D 124	100%
	NMIBC discussed at the MDT after histological confirmation of NMIBC	95	N 25 / D 25	100%	N 33 / D 33	100%	N 70 / D 71	98.6%	N 129 / D 129	100%	N 257 / D 258	99.6%
QPI 2: Quality of TURBT at initial resection	Detailed description with tumour location, size, number, appearance	95	N 28 / D 31	90.3%	N 20 / D 43	46.5%	N 84 / D 85	98.8%	N 184 / D 193	95.3%	N 316 / D 352	89.8%
	Resection is documented as complete or not	95	N 31 / D 31	100%	N 29 / D 38	76.3%	N 85 / D 85	100%	N 181 / D 184	98.4%	N 326 / D 338	96.4%
	High Grade NMIBC with detrusor muscle included at initial TURBT	90	N 8 / D 8	100%	N 13 / D 13	100%	N 24 / D 28	85.7%	N 43 / D 62	69.4%	N 88 / D 111	79.3%
QPI 3: Low Grade Ta NMIBC - Mitomycin C following TURBT		80	N 11 / D 13	84.6%	N 7 / D 15	46.7%	N 27 / D 36	75.0%	N 55 / D 67	82.1%	N 100 / D 131	76.3%
QPI 4: Early TURBT Re-TURBT within 42 days of initial TURBT	T1 or select Ta NMIBC	80	N 0 / D 9	0%	N 2 / D 15	13.3%	N 1 / D 26	3.8%	N 6 / D 46	13.0%	N 9 / D 96	9.4%
	HG NMIBC - no detrusor muscle at TURBT1	80	N 0 / D 0	N/A	N 0 / D 0	N/A	N 0 / D 4	0%	N 2 / D 17	11.8%	N 2 / D 21	9.5%
	NMIBC - incomplete resection at TURBT1	80	N 0 / D 1	0%	N 0 / D 2	0%	N 0 / D 7	0%	N 0 / D 4	0%	N 0 / D 14	0%
QPI 6: Lymph Node Yield. Pelvic lymph node dissection to at least level 2 undertaken and ≥10 lymph nodes taken at radical cystectomy		95	Presented by board of treatment				N 3 / D 7	42.9%	N 20 / D 28	71.4%	N 23 / D 35	65.7%
QPI 7: Time to Treatment (MIBC)	Radical treatment within 6 weeks of diagnosis of MIBC	90	N 0 / D 1	0%	N 1 / D 3	33.3%	N 1 / D 6	16.7%	N 5 / D 25	20.0%	N 7 / D 35	20.0%
	Cystectomy or radiotherapy within 8 weeks from neoadjuvant chemo	90	N 1 / D 1	100%	N 2 / D 3	66.7%	N 2 / D 2	100%	N 4 / D 6	66.7%	N 9 / D 12	75.0%
QPI 8: Volume of Cases / Surgeon: Radical surgery ≥10 per surgeon and ≥20 per centre over a 1-year period		≥20	2 Surgeons met the QPI criteria. 1 Health Board met the QPI criteria.									
QPI 9: Oncological Discussion: MIBC patients who met with an oncologist prior to radical surgery		60	N 0 / D 0	N/A	N 1 / D 3	33.3%	N 1 / D 3	33.3%	N 8 / D 17	47.1%	N 10 / D 23	43.5%
QPI 10 Patients with stageT2-T4 undergoing radical radiotherapy who receive concomitant radiosensitiser		50	N 0 / D 0	N/A	N 0 / D 2	0%	N 0 / D 4	0%	N 2 / D 13	15.4%	N 2 / D 19	10.5%
QPI 11: 30 Day Mortality	Radical Surgery	<3	Presented by board of treatment				N 0 / D 7	0%	N 1 / D 28	3.6%	N 1 / D 35	2.9%
	Radiotherapy	<3	N 0 / D 1	0%	N 0 / D 3	0%	N 0 / D 5	0%	N 1 / D 12	8.3%	N 1 / D 21	4.8%
QPI 11: 90 Day Mortality	Radical Surgery	<5	Presented by board of treatment				N 0 / D 7	0%	N 3 / D 25	12.0%	N 3 / D 32	9.4%
	Radiotherapy	<5	N 0 / D 2	0%	N 0 / D 3	0%	N 0 / D 5	0%	N 1 / D 11	9.1%	N 1 / D 21	4.8%
QPI 13: Early Recurrence for NMIBC	Recurrence first follow-up cystoscopy for low grade pTa	<10	N 3 / D 13	23.1%	N 2 / D 14	14.3%	N 3 / D 34	8.8%	N 5 / D 66	7.6%	N 13 / D 127	10.2%
	Residual cancer at re-TURBT in patients with pT1	<20	N 3 / D 5	60.0%	N 2 / D 8	25.0%	N 2 / D 6	33.3%	N 11 / D 25	44.0%	N 18 / D 44	40.9%
	Pathological MIBC (pT2) at re-TURBT in patients with pT1	<1	N 0 / D 5	0%	N 0 / D 8	0%	N 1 / D 12	8.3%	N 4 / D 26	15.4%	N 5 / D 51	9.8%

Introduction and Methods

Cohort

This report covers patients newly diagnosed with bladder cancer in SCAN between 01/04/2022 and 31/03/2023.The results contained within this report have been presented by NHS board of diagnosis. Where the QPI relates to surgical outcomes the results are presented by hospital of surgery.

Dataset and Definitions

The QPIs have been developed collaboratively with the three Regional Cancer Networks, Public Health Scotland (PHS), and Healthcare Improvement Scotland. It is intended that QPIs will be kept under regular review and be responsive to changes in clinical practice and emerging evidence.

The overarching aim of the cancer quality work programme is to ensure that activity at NHS board level is focused on areas most important in terms of improving survival and patient experience, whilst reducing variance and ensuring safe, effective and person-centred cancer care.

Following a period of development, public engagement and finalisation, each set of QPIs is published by Healthcare Improvement Scotland.

Accompanying datasets and measurability criteria for QPIs are published on the PHS website link. NHS boards are required to report against QPIs as part of a mandatory, publicly reported, programme at a national level.

The QPI dataset for bladder cancer was implemented from 01/04/2014, and this is the ninth publication of QPI results for bladder cancer within SCAN.

The Bladder QPIs were subject to a second formal review and revised documents for data collection were published in June 2022. The table below encompasses most of the changes made at formal review.

The following QPIs were updated:

QPI	Change	Year for reporting
2	Specification (i): Removed exclusion of patients with very small tumours (≤5mm). Specification (iii): Denominator changed from all bladder cancer to high grade NMIBC. This group of patients would benefit the most from resecting detrusor muscle and will allow for the avoidance of over resection in lower grade tumours. Target increased from 80% to 90%	Year 8 (2021-22)
2	Total number of patients with complete / incomplete resection for QPI 2i to QPI 2iii.	Year 9 (2022-23)
3	QPI updated to include 'other alternative chemotherapy agents' as well as Mitomycin C. Denominator changed from 'all NMIBC' to low grade Ta NMIBC who benefit most from a single dose of Mitomycin C. Increase in target from 60% to 80% to accommodate this more focussed group of patients.	Year 9 (2022-23)
4	Specification (ii) – Low grade G2 tumours removed for NMIBC patients who have undergone TURBT where detrusor muscle is absent from specimen. Specification (iii) – An additional code has been added to 'Complete resection at TURBT' for 'unsure' (previously recorded as No).	Year 8 (2021-22)
6	QPI has been updated to include number of nodes (≥10) as well as the extent of dissection. Target increased from 90% to 95%	Year 8 (2021-22)

QPI	Change	Year for reporting
7	Specification (i) – Timeframe changed from 3 months to 6 weeks from the time between diagnosis to radical cystectomy. Specification (ii) – Wording changed from 'chemoradiation' to 'radiotherapy' to account for change in terminology from chemoradiotherapy to radiotherapy in combination with a radiosensitiser	Year 9 (2022-23)
10	QPI changed from radiotherapy with chemotherapy to radiotherapy with a concomitant radiosensitiser.	Year 9 (2022-23)
11	Chemotherapy been removed as a treatment option from the measurement of this QPI.This will now be measured via the national SACT Data Group using Chemocare data to include all patients receiving SACT rather than just newly diagnosed patients as per audit.	Year 8 (2021-22)
13	New QPI – looking at residual disease at 3 month follow up cystoscopy and at 2nd re-resection during initial treatment pathway.	Year 9 (2022-23)

QPI 5 has been archived – All regions have met and exceeded the 90% target over several years and consistent pathology reporting according to guidelines is now considered standard practice.

QPI 11 has been removed - Chemotherapy been removed as a treatment option from the measurement of this QPI. This will now be measured via the national SACT Data Group using Chemocare data to include all patients receiving SACT rather than just newly diagnosed patients as per audit.

QPI 12 Not being reported.

The standard QPI format is shown below:

QPI Title:	Short title of Quality Performance Indicator (for use in reports etc.)	
Description:	Full and clear description of the Quality Performance Indicator.	
Rationale and Evidence:	Description of the evidence base and rationale which underpins this indicator.	
Specifications:	Numerator:	Of all the patients included in the denominator those who meet the criteria set out in the indicator.
	Denominator:	All patients to be included in the measurement of this indicator.
	Exclusions:	Patients who should be excluded from measurement of this indicator.
	Not recorded for numerator	Include in the denominator for measurement against the target. Present as *not recorded* only if the patient cannot otherwise be identified as having met/not met the target
	Not recorded for exclusion	Include in the denominator for measurement against the target unless there is other definitive evidence that the record should be excluded. Present as *not recorded* only where the record cannot otherwise be definitively identified as an inclusion/exclusion for this standard.
	Not recorded for denominator	Exclude from the denominator for measurement against the target. Present as *not recorded* only where the patient cannot otherwise be definitively identified as an inclusion/exclusion for this standard
Target:	Statement of the level of performance to be achieved.	

[1] QPI documents are available at www.healthcareimprovementscotland.org
[2] Datasets and measurability documents are available at www.isdscotland.org

Audit Processes

Data was analysed by the audit facilitators in each NHS board according to the measurability document provided by PHS. SCAN data was collated by Adam Steenkamp, SCAN Cancer Information Analyst.
Data capture focuses around the process for the weekly multidisciplinary meetings (MDM), ensuring that information is collected through routine processes. Data is recorded in eCase for Borders, Dumfries & Galloway, Fife and Lothian.

Clinical Sign-Off: This report compares analysed data from Borders, D&G, Fife and Lothian and was signed off as accurate following review by the lead clinicians from each board. The collated SCAN results were reviewed jointly by the lead clinicians, including oncologists, to assess variances and provide comments on results.

Lead Clinicians and Audit Personnel

SCAN Region	Hospital	Lead Clinician	Audit Support
NHS Borders	Borders General Hospital	Mr Ben Thomas	Leanne Robinson
NHS Dumfries & Galloway	Dumfries & Galloway Royal Infirmary	Miss Maria Bews-Hair	Campbell Wallis
NHS Fife	Queen Margaret Hospital	Mr I Mitchell	Julie Whyte
SCAN & NHS Lothian	Western General Hospital and St John's Hospital	Prof P Mariappan Dr D Noble	Adam Steenkamp

Data Quality

Estimate of Case Ascertainment

An estimate of case ascertainment (the percentage of the population with bladder cancer recorded in the audit) is made through comparison with the Scottish Cancer Registry five-year average data from 2017 to 2021. High levels of case ascertainment provide confidence in the completeness of the audit recording and contribute to the reliability of results presented. Levels greater than 100% may be attributable to an increase in incidence. Allowance should be made when reviewing results where numbers are small and variation may be due to chance.

Number of cases recorded in audit: Patients diagnosed between 01/04/2022 and 31/03/2023.

	Borders	D&G	Fife	Lothian	SCAN
Bladder Cancer	32	49	110	242	433

Estimate of Case Ascertainment: Calculated using the average of the most recent available five years of Cancer Registry Data 2017 – 2021.

	Borders	D&G	Fife	Lothian	SCAN
Cases from Audit	32	49	110	242	433
Cancer Registry 5 Year Average	19	28	60	230	337
Case Ascertainment %	**168**	**175**	**183**	**105**	**128**

Note: Extract of data taken from PHS Cancer Registry data mart ACaDMe on 04/01/2024

Quality Assurance

All hospitals in the region participate in a Quality Assurance (QA) programme provided by Public Health Scotland (PHS). QA of the bladder cancer data has been carried out on year 1 QPI data. Performance was above 90% in each SCAN Health Board but numerous dataset changes and different interpretation by ISD mean that the performance is not a true reflection of audit practice in SCAN and around the country.

Clinical Sign-Off

This report compares data from reports prepared for individual hospitals and was signed off as accurate following review by the lead clinicians from each service. The collated SCAN results are reviewed jointly by the lead clinicians, to assess variances and provide comments on results:

- Individual health board results were reviewed and signed-off locally.
- Regional sign off meeting achieved remotely on 12/03/2024.

Present at regional sign off meeting.

Borders: Mr Ben Thomas.
Leanne Robinson.

D&G: No clinical representation.
Martin Keith.
Campbell Wallis.

Fife: No clinical representation.
Julie Whyte.

Lothian: Prof Mariappan.
Mr Rami Hasan.
Dr Martin Doak.
Dr Angus Killean.
Adam Steenkamp.

- Final report circulated to SCAN Urology Group and Clinical Governance Groups on 10/05/2024.

Actions for Improvement

After final sign off, the process is for the report to be sent to the Clinical Governance groups with action plans for completion at Health Board level which are returned to SCAN Audit and subsequently reported to the Regional Cancer Planning Group.

The final report is placed on the SCAN website, with completed action plans, once it has been fully signed-off and checked for any disclosive information.

QPI 1i - Multi-Disciplinary Team Meeting Discussion – Target = 95%

Title: Patients with bladder cancer should be discussed by a multidisciplinary team (MDT) prior to definitive treatment.

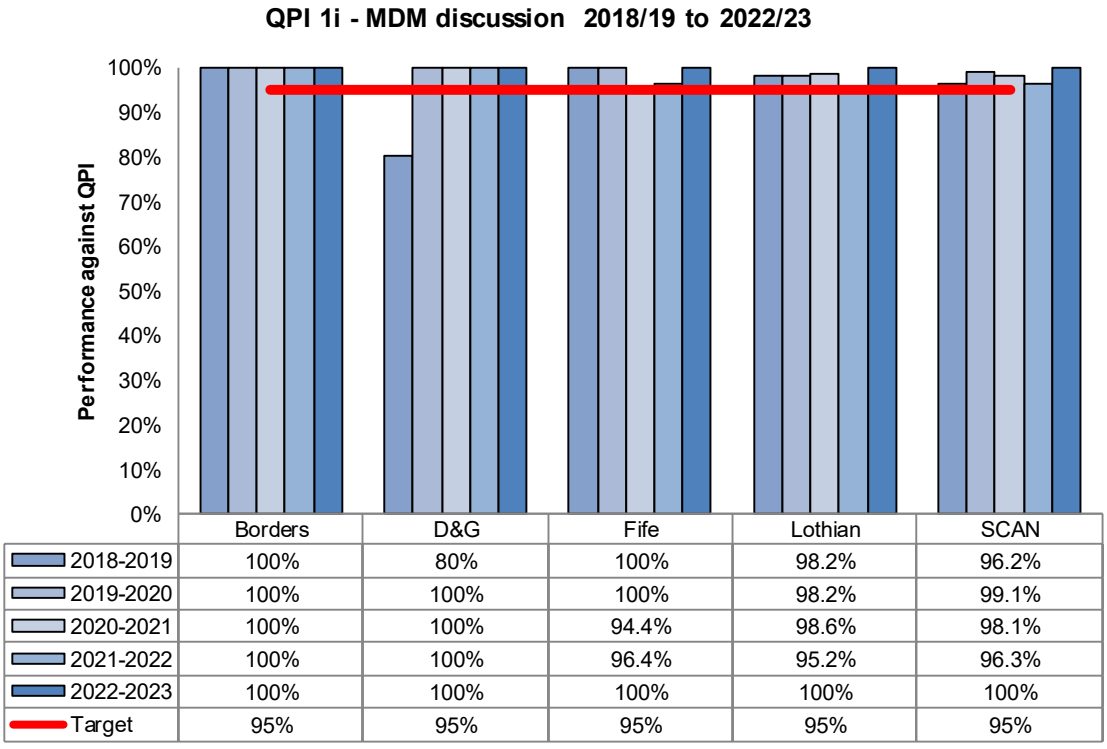
Numerator = Patients with muscle invasive bladder cancer (MIBC) discussed at the MDT before definitive treatment (this includes neo-adjuvant SACT, radical cystectomy, radiotherapy and supportive care only).

Denominator = All patients with MIBC, excluding patients who died before first treatment.

The tolerance within this target is designed to account for situations where patients require treatment urgently.

Presented by Board of Diagnosis

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2022-23 cohort	32	49	110	242	433
Ineligible for analysis	25	36	80	166	307
Excluded from analysis	0	0	0	2	2
Numerator	7	13	30	74	124
Not recorded for numerator	0	0	0	0	0
Denominator	7	13	30	74	124
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**100**	**100**	**100**	**100**	**100**



	Borders	D&G	Fife	Lothian	SCAN
2018-2019	100%	80%	100%	98.2%	96.2%
2019-2020	100%	100%	100%	98.2%	99.1%
2020-2021	100%	100%	94.4%	98.6%	98.1%
2021-2022	100%	100%	96.4%	95.2%	96.3%
2022-2023	100%	100%	100%	100%	100%
Target	95%	95%	95%	95%	95%

QPI 1ii - Multi-Disciplinary Team Meeting Discussion – Target = 95%

Title: Patients with bladder cancer should be discussed by a multidisciplinary team (MDT) prior to definitive treatment.

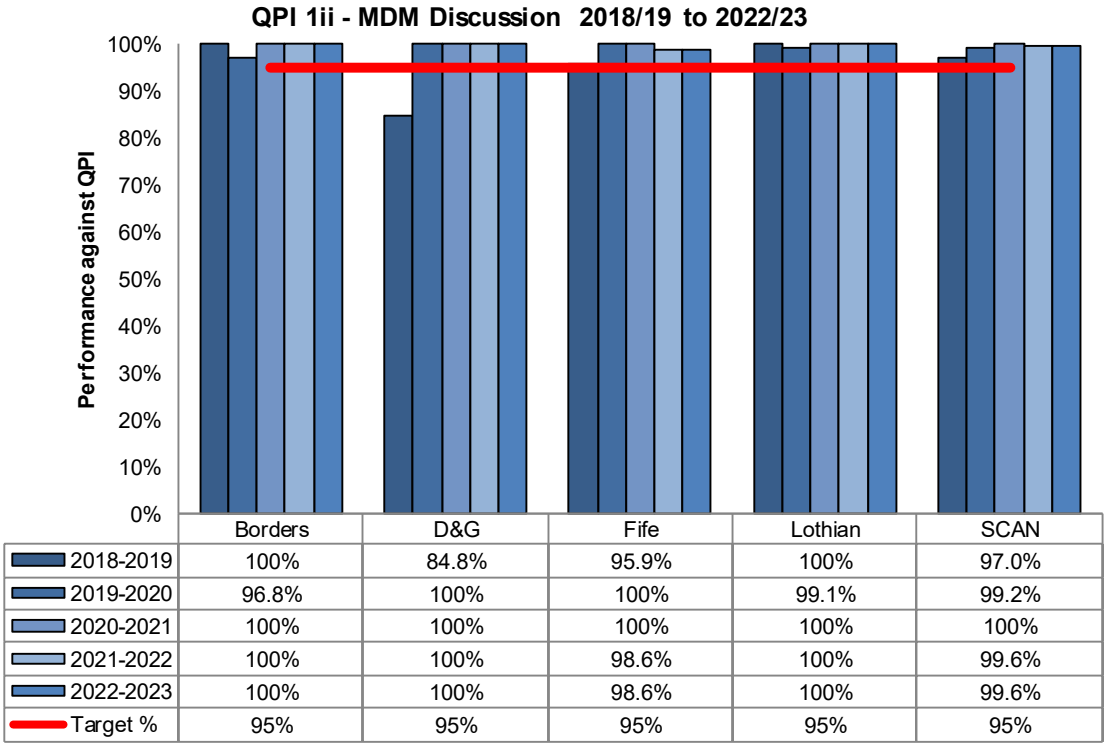
Numerator = Patients with NMIBC discussed at the MDT following histological confirmation of bladder cancer.

Denominator = All patients with NMIBC.

The tolerance within this target is designed to account for situations where patients require treatment urgently.

Presented by Board of Diagnosis

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2022-23 cohort	32	49	110	242	433
Ineligible for analysis	7	16	39	113	175
Excluded from analysis	0	0	0	0	0
Numerator	25	33	70	129	257
Not recorded for numerator	0	0	0	0	0
Denominator	25	33	71	129	258
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	1	0	0	1
% Performance	**100**	**100**	**98.6**	**100**	**99.6**



	Borders	D&G	Fife	Lothian	SCAN
2018-2019	100%	84.8%	95.9%	100%	97.0%
2019-2020	96.8%	100%	100%	99.1%	99.2%
2020-2021	100%	100%	100%	100%	100%
2021-2022	100%	100%	98.6%	100%	99.6%
2022-2023	100%	100%	98.6%	100%	99.6%
Target %	95%	95%	95%	95%	95%

QPI 2i - Quality of Transurethral Resection of Bladder Tumour – Target = 95%

Title: Transurethral resection of bladder tumour (TURBT) procedures undertaken should be of good quality.

Numerator = Patients with bladder cancer who undergo TURBT where a bladder diagram / detailed description with documentation of tumour location, size, number and appearance has been used at initial resection.

Denominator = All patients with bladder cancer who undergo TURBT.

Exclusions = Patients undergoing palliative resection or very small tumours (≤5mm).

The tolerance within this target level accounts for the fact that it is not always possible to include detrusor muscle within the specimen.

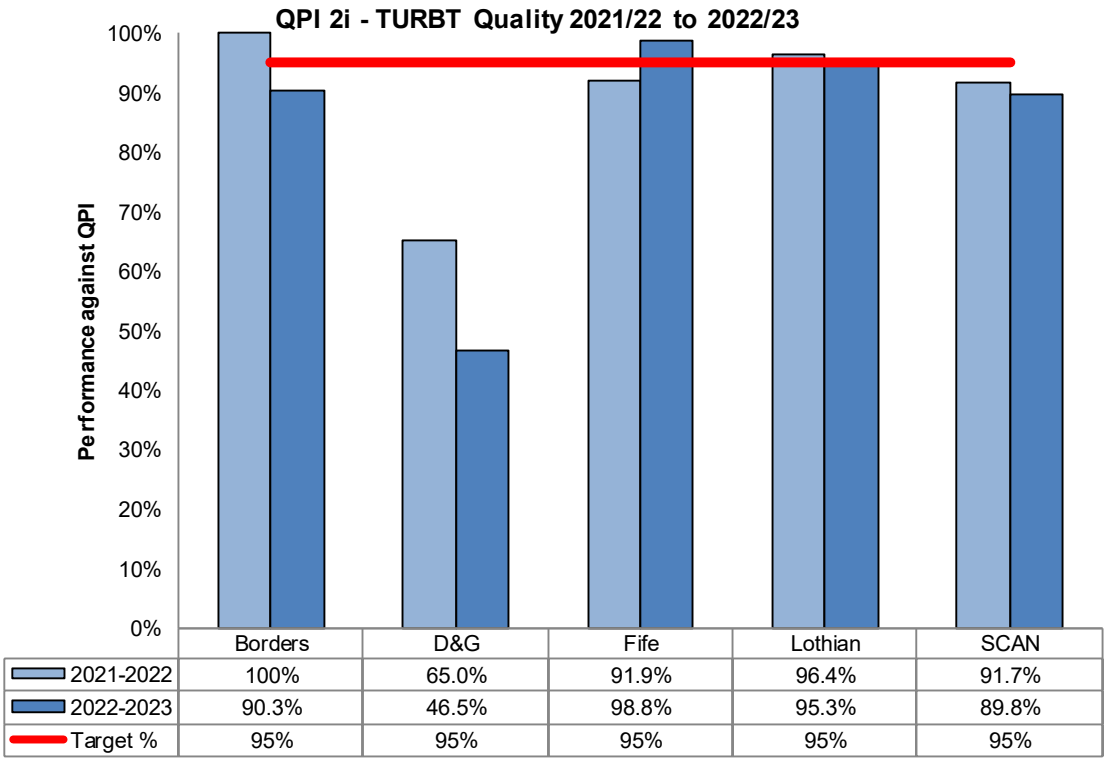
Target 95%	Borders	D&G	Fife	Lothian	SCAN
2022-23 cohort	32	49	110	242	433
Ineligible for analysis	1	6	11	43	61
Excluded from analysis	0	0	14	6	20
Numerator	28	20	84	184	316
Not recorded for numerator	0	0	0	0	0
Denominator	31	43	85	193	352
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**90.3**	**46.5**	**98.8**	**95.3**	**89.8**

Comment:

Borders: The QPI target was not met showing a shortfall of 4.7% (3 cases) 2 did not have tumour size recorded. 1 did not have a diagram completed.

D&G: The QPI target was not met showing a shortfall of 48.5% (23 cases) not all measured items were recorded. Use of the bladder proforma was much improved in the final quarter of 2023 cohort and it is hoped that an improvement will be seen next year as a more robust process is in place for its use despite ongoing changing of locums.

Action – D&G: At a management meeting on 11/03/2024 they agreed thorough monitoring in the next 6 months for all the actions identified for the Urology service.



	Borders	D&G	Fife	Lothian	SCAN
2021-2022	100%	65.0%	91.9%	96.4%	91.7%
2022-2023	90.3%	46.5%	98.8%	95.3%	89.8%
Target %	95%	95%	95%	95%	95%

QPI 2ii - Quality of Transurethral Resection of Bladder Tumour – Target = 95%

Title: Transurethral resection of bladder tumour (TURBT) procedures undertaken should be of good quality.

Numerator = Patients with bladder cancer who undergo TURBT where it is documented whether the resection was complete or not at initial resection.

Denominator = All patients with bladder cancer who undergo TURBT.

Exclusions = Patients undergoing palliative resection or with very small tumours (≤5mm).

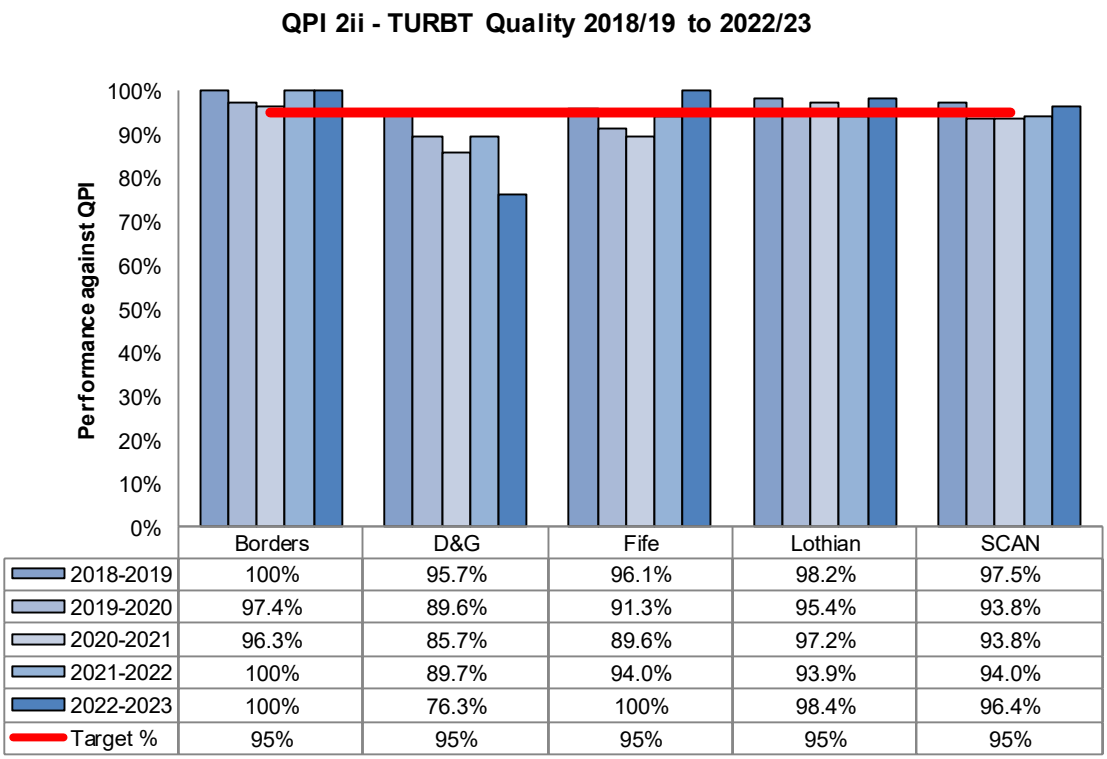
The tolerance within this target level accounts for the fact that it is not always possible to include detrusor muscle within the specimen.

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2022-23 cohort	32	49	110	242	433
Ineligible for analysis	1	6	11	43	61
Excluded from analysis	0	5	14	15	34
Numerator	31	29	85	181	326
Not recorded for numerator	0	0	0	0	0
Denominator	31	38	85	184	338
Not recorded for exclusion	2	12	1	5	20
Not recorded for denominator	0	0	0	0	0
% Performance	**100**	**76.3**	**100**	**98.4**	**96.4**

Comment:

D&G: The QPI target was not met showing a shortfall of 18.7% (9 cases) not specified if a resection was complete or incomplete.

Action: D&G – At a management meeting on 11/03/2024 they agreed thorough monitoring in the next 6 months for all the actions identified for the Urology service.



	Borders	D&G	Fife	Lothian	SCAN
2018-2019	100%	95.7%	96.1%	98.2%	97.5%
2019-2020	97.4%	89.6%	91.3%	95.4%	93.8%
2020-2021	96.3%	85.7%	89.6%	97.2%	93.8%
2021-2022	100%	89.7%	94.0%	93.9%	94.0%
2022-2023	100%	76.3%	100%	98.4%	96.4%
Target %	95%	95%	95%	95%	95%

QPI 2iii - Quality of Transurethral Resection of Bladder Tumour – Target = 90%

Title: Transurethral resection of bladder tumour (TURBT) procedures undertaken should be of good quality.

Numerator = Patients with high grade NMIBC who undergo TURBT where detrusor muscle is included in the specimen at initial resection.

Denominator = All patients with high grade NMIBC who undergo TURBT.

Exclusions = Patients undergoing palliative resection, with very small tumours (≤5mm) or patients with bladder diverticular tumours.

The tolerance within this target level accounts for the fact that it is not always possible to include detrusor muscle within the specimen.

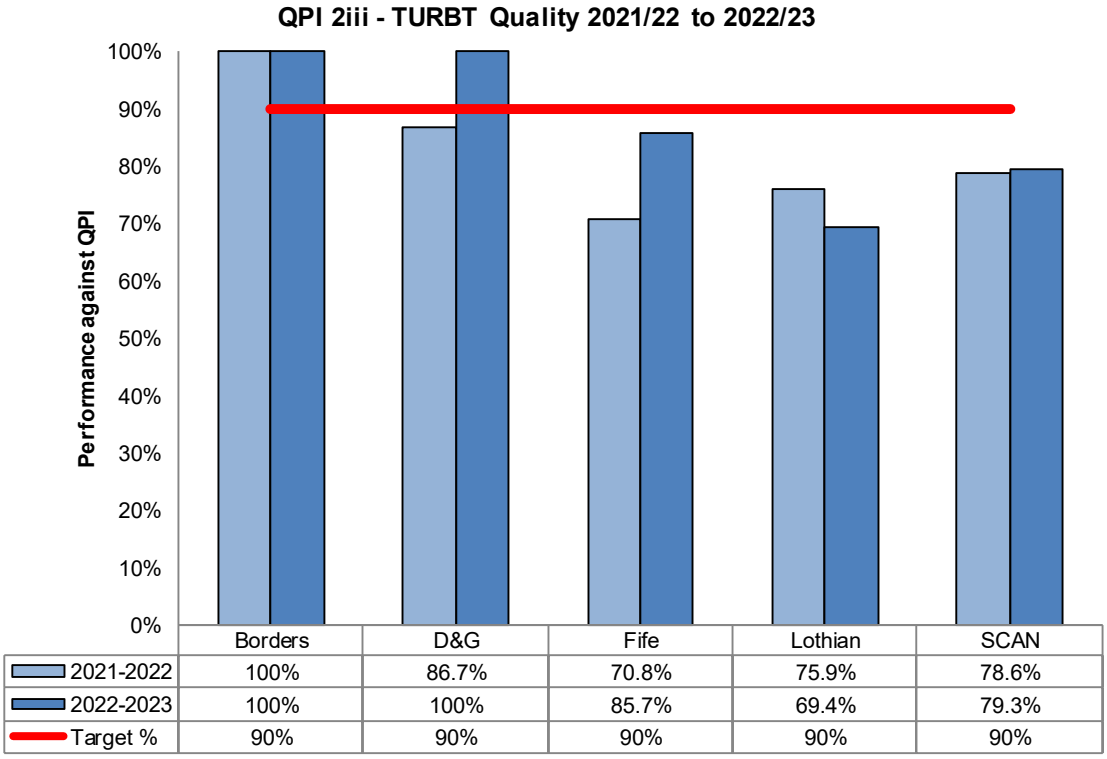
Target 90%	Borders	D&G	Fife	Lothian	SCAN
2022-23 cohort	32	49	110	242	433
Ineligible for analysis	24	30	76	157	287
Excluded from analysis	0	6	4	23	33
Numerator	8	13	24	43	88
Not recorded for numerator	0	0	0	0	0
Denominator	8	13	28	62	111
Not recorded for exclusion	0	2	0	0	2
Not recorded for denominator	0	3	2	1	6
% Performance	**100**	**100**	**85.7**	**69.4**	**79.3**

Comment:

Fife: The QPI target was not met showing a shortfall of 4.3% (2 cases) there has been an improvement on previous years. Most of these procedures were done by urology registrars. The 'not recorded exclude from denominator' had no TGRADE2004 recorded.

Lothian: The QPI target was not met showing a shortfall of 20.6% (19 cases) no detrusor muscle found in pathology specimens post endoscopic resection. The majority of the outlier operations were done as training operations by urology registrars.

Action: Triage is very important to identify clinically high grade cases. At cystoscopy small tumours may be perceived as low grade. We recommend that consultants perform base of tumour resections in cases of trainee operations.



	Borders	D&G	Fife	Lothian	SCAN
2021-2022	100%	86.7%	70.8%	75.9%	78.6%
2022-2023	100%	100%	85.7%	69.4%	79.3%
Target %	90%	90%	90%	90%	90%

QPI 2 (I, II, III) - TURBT complete / incomplete resection (count and %)

Title: patients with bladder cancer who undergo TURBT that have complete / incomplete resection (count and %)

Numerator = Number (and %) of patients with bladder cancer who undergo TURBT and have a complete resection / an incomplete resection / unsure whether complete or incomplete resection.

Denominator i = All patients with bladder cancer who undergo TURBT. (Excluding Patients undergoing palliative resection)

Denominator ii = All patients with bladder cancer who undergo TURBT. (Excluding patients undergoing palliative resection and patients with very small tumours (<5mm)

Denominator iii = All patients with high grade NMIBC who undergo TURBT. (Excluding Patients undergoing palliative resection, patients with very small tumours (≤5mm), and patients with bladder diverticular tumours).

		Borders			D&G			Fife			Lothian			SCAN		
Number and % of patients who undergo TURBT and have a complete, incomplete, unsure resection. **(Excluding palliative resection)**	Complete	N	23	88.5%	N	24	55.8%	N	71	83.5%	N	149	77.2%	N	267	76.9%
		D	26		D	43		D	85		D	193		D	347	
	Incomplete	N	2	7.7%	N	8	18.6%	N	13	15.3%	N	38	19.7%	N	61	17.6%
		D	26		D	43		D	85		D	193		D	347	
	Unsure	N	1	3.8%	N	1	2.3%	N	1	1.2%	N	6	3.1%	N	9	2.6%
		D	26		D	43		D	85		D	193		D	347	
Number and % of patients who undergo TURBT and have a complete, incomplete, unsure resection. **(Excluding palliative resection and <5mm tumours)**	Complete	N	23	88.5%	N	20	52.6%	N	71	83.5%	N	137	76.5%	N	251	76.5%
		D	26		D	38		D	85		D	179		D	328	
	Incomplete	N	2	7.7%	N	8	21.1%	N	13	15.3%	N	36	20.1%	N	59	18.0%
		D	26		D	38		D	85		D	179		D	328	
	Unsure	N	1	3.8%	N	1	2.6%	N	1	1.2%	N	6	3.4%	N	9	2.7%
		D	26		D	38		D	85		D	179		D	328	
Number and % of patients who undergo TURBT and have a complete, incomplete, unsure resection. **(Excluding palliative resection, <5mm tumours and bladder diverticular tumours)**	Complete	N	21	87.5%	N	9	69.2%	N	23	82.1%	N	74	68.5%	N	127	73.4%
		D	24		D	13		D	28		D	108		D	173	
	Incomplete	N	2	8.3%	N	1	7.7%	N	4	14.3%	N	29	26.9%	N	36	20.8%
		D	24		D	13		D	28		D	108		D	173	
	Unsure	N	1	4.2%	N	0	0%	N	1	3.6%	N	5	4.6%	N	7	4.0%
		D	24		D	13		D	28		D	108		D	173	

Comment: Please note that there are cases where one or more than one of these measurements were not recorded at time of the procedure, so the total % presented in this table may not be 100%

QPI 3 – Mitomycin C following TURBT – Target = 80%

Title: Patients with low grade Ta non muscle invasive bladder cancer (NMIBC) who undergo TURBT should receive a single instillation of mitomycin C (or other alternative chemotherapy agent) within 24 hours of resection, unless contraindicated.

Numerator = Number of patients with low grade Ta NMIBC who undergo TURBT who receive a single instillation of mitomycin C (or other alternative chemotherapy agent) within 1 day of initial TURBT.

Denominator = All patients with low grade Ta NMIBC who undergo initial TURBT.

Exclusion = None.

The tolerance within this target is designed to account for situations where patients have severe haematuria, which requires continuous irrigation or surgical intervention. It also accounts for those patients where there has been intra or extraperitoneal perforation, and those with high risk of extravasation. Additionally, at time of TURBT it is often difficult to identify if disease is superficial, invasive or high/low grade therefore in order to minimise over-treatment some patients with suspected muscle invasive bladder cancer may not receive mitomycin C (or another alternative chemotherapy agent).

Target 80%	Borders	D&G	Fife	Lothian	SCAN
2022-23 cohort	32	49	110	242	433
Ineligible for analysis	19	34	74	175	302
Excluded from analysis	0	0	0	0	0
Numerator	11	7	27	55	100
Not recorded for numerator	0	0	0	0	0
Denominator	13	15	36	67	131
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	1	0	0	1
% Performance	**84.6**	**46.7**	**75.0**	**82.1**	**76.3**

Comment:

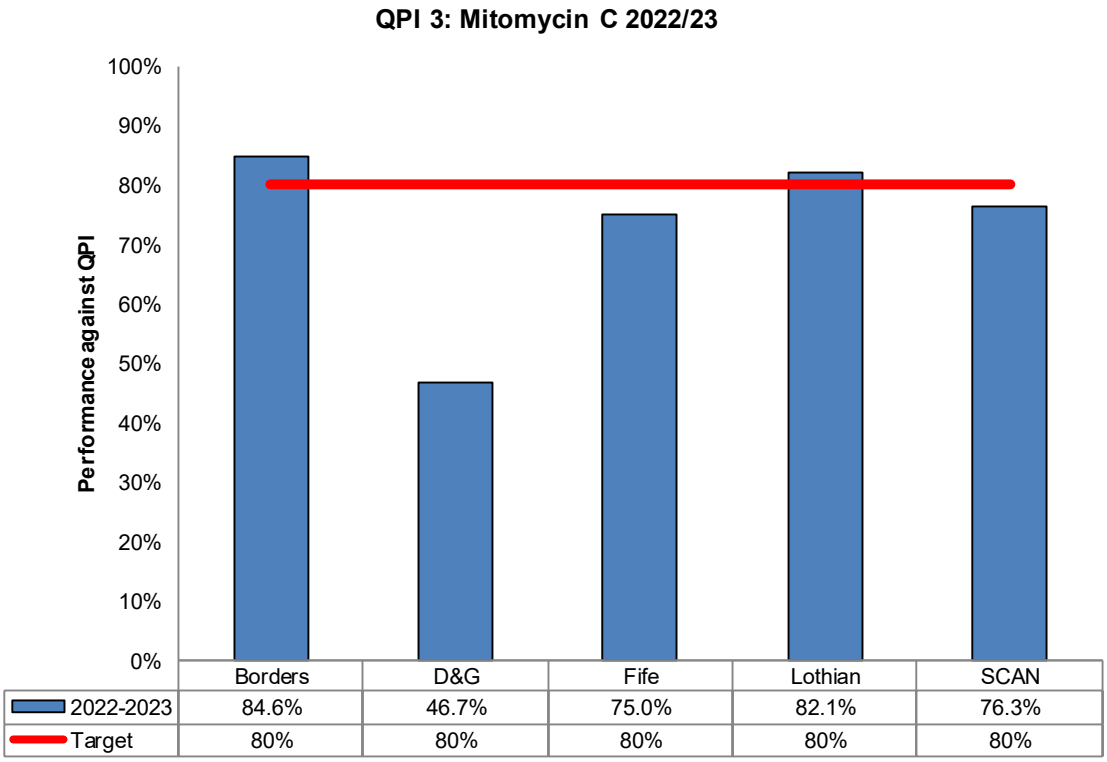
DGRI: The QPI target was not met showing a shortfall of 33.3% (8 cases) mitomycin was not given including some cases with post op bleeding. It is hoped that there should be further improvement in 2023-24 following training during 2023 year with short stay staff post-op around administration of mitomycin. Mitomycin checkbox also now included on bladder proforma.

Fife: The QPI target was not met showing a shortfall of 5% (9 cases) 6 had deep resections to obtain muscle.1 had ongoing haematuria post TURBT. 1 was suspected clinically of muscle invasive disease. 1 no reason could be determined.

Action:

D&G – Expect further improvement in 2023-24 following training during 2023 year with short stay staff post-op around administration of mitomycin. Mitomycin checkbox also now included on bladder proforma.

Fife – With dedicated specialist TURBT lists agreed, we can expect improved performance in 2023-24.



QPI 4i - Early TURBT – Target = 80%

Title: Patients who have undergone TURBT with high grade Ta (multifocal - more than 2 or large >3cm) and/ or T1 NMIBC, where detrusor muscle is absent from specimen or initial resection is incomplete, who have a second resection or early cystoscopy (± biopsy) within 6 weeks of initial TURBT.

Numerator = Patients with T1 (all grades) or select high grade Ta (multifocal - more than 2 or large >3cm) NMIBC who have undergone TURBT who have a second TURBT or early cystoscopy (± biopsy) within 6 weeks (42 days) of initial resection.

Denominator = All patients with T1 (all grades) or select high grade Ta NMIBC who have undergone TURBT.

Exclusion = Where TURBT has been carried out for palliation, undergone early cystectomy or where metastatic disease is confirmed.

The tolerance within this target is designed to account for situations where patients are not fit enough for a further operation, where patients are frail and a thin bladder wall is suspected and where there is imaging which suggests re-TURBT is not required or where PDD (photodynamic diagnosis) TURBT has been carried out. It also accounts for those patients where there has been intra or extraperitoneal perforation.

Target 80%	Borders	D&G	Fife	Lothian	SCAN
2022-23 cohort	32	49	110	242	433
Ineligible for analysis	17	34	78	176	305
Excluded from analysis	6	0	6	20	32
Numerator	0	2	1	6	9
Not recorded for numerator	0	0	1	0	1
Denominator	9	15	26	46	96
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	3	0	1	4
% Performance	**0**	**13.3**	**3.8**	**13.0**	**9.4**

Comment:

Borders: The QPI target was not met showing a shortfall of 80% (9 cases) Continued reduced theatre capacity for Urology.

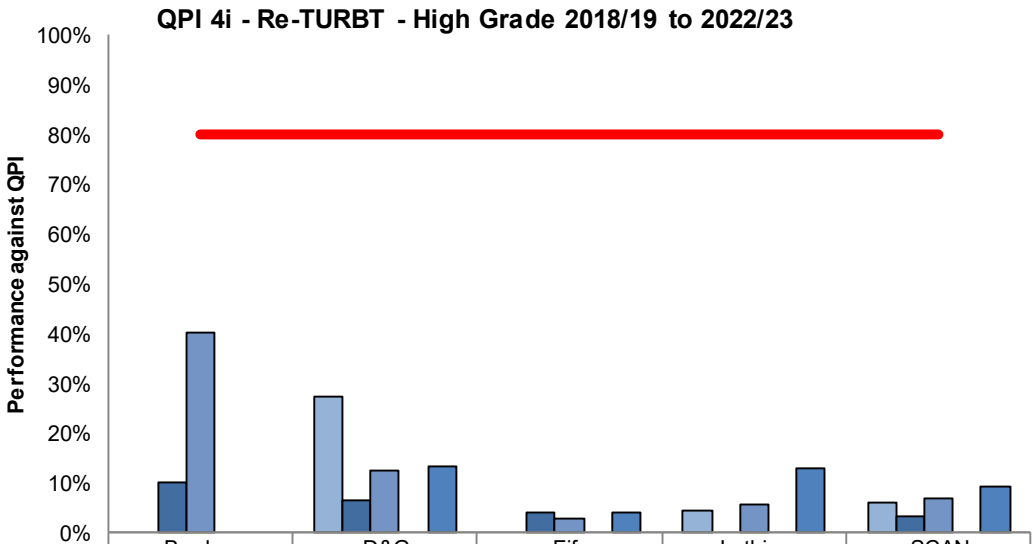
D&G: The QPI target was not met showing a shortfall of 66.7% (13 cases) 10 had repeat TURBT outside the 6-week timeframe (range 44-140 days) Pathway review indicated a delay in waiting list requests getting to patient focused booking although these are now getting completed at MDM so this should improve. Longest waits were where definitive decision for repeat TURBT was not made at MDM hence the delay. 3 did not have repeat TURBT (2 due to comorbidities and 1 due to social reasons).

Fife: The QPI target was not met showing a shortfall of 76.2% (25 cases) 9 were recommended 3 month follow up by MDM. 3 were delayed due to being assessed for early cystectomy. 1 was for BCG instillations following TURBT1. 1 had downstaging chemotherapy. 1 was pT1 on pathology (so included in measurability) but suspected MIBC. 10 waited more than 42 days for their second procedure. It should be noted that, as was the case last year, the failure of QPIs 4(i), 4(ii) + 4(iii) is mostly due to capacity issues in theatre. However, in 2 cases there was a delay to MDM which appears to have been a contributing factor. The 'not recorded for numerator' case would appear to have been lost to follow up as initial TURBT was performed in 2022 but to date, no second procedure has been arranged.

Lothian: The QPI target was not met showing a shortfall of 67.0% (40 cases) 14 had BCG recommended at MDM. 1 passed away shortly after post TURBT1. 2 deemed for best supportive care from MDM. 2 opted for surveillance only due to performance status and quality of life preservation. 21 did not have a second resection within 42 days of initial resection due to capacity and service related issues.

Action: This is an important aspect of patient care (particularly in high grade disease cases) This is an NHS-centric issue with competing priorities of the endoscopic and surgical services. Where the 42 day target was narrowly missed, it indicates clear capacity issues with no evidence of any survival disadvantage.

Comment: For Formal Review – QPI needs to remain to maintain the impetus of this QPI, reflecting good patient care and service improvement. Consider revising the timeline to start at MDT discussion.



	Borders	D&G	Fife	Lothian	SCAN
2018-2019	0%	27.3%	0%	4.3%	6.1%
2019-2020	10.0%	6.3%	4.2%	0%	3.2%
2020-2021	40.0%	12.5%	2.7%	5.7%	6.8%
2021-2022	0%	0%	0%	0%	0%
2022-2023	0%	13.3%	3.8%	13.0%	9.4%
Target %	80%	80%	80%	80%	80%

QPI 4ii - Early TURBT (detrusor muscle) – Target = 80%

Title: Patients who have undergone TURBT with high grade Ta* (multifocal - more than 2 or large >3cm) and/ or T1 NMIBC, where detrusor muscle is absent from specimen or initial resection is incomplete, who have a second resection or early cystoscopy (± biopsy) within 6 weeks of initial TURBT.

Numerator = Patients with high grade NMIBC who have undergone TURBT where detrusor muscle absent from specimen who have a second TURBT or early cystoscopy (± biopsy) within 6 weeks (42 days) of initial resection.

Denominator = All patients with high grade NMIBC who have undergone TURBT where detrusor muscle is absent from specimen.

Exclusion = Where TURBT has been carried out for palliation, undergone early cystectomy or where metastatic disease is confirmed.

The tolerance within this target is designed to account for situations where patients are not fit enough for a further operation, where patients are frail and a thin bladder wall is suspected and where there is imaging which suggests re-TURBT is not required or where PDD (photodynamic diagnosis) TURBT has been carried out. It also accounts for those patients where there has been intra or extraperitoneal perforation.

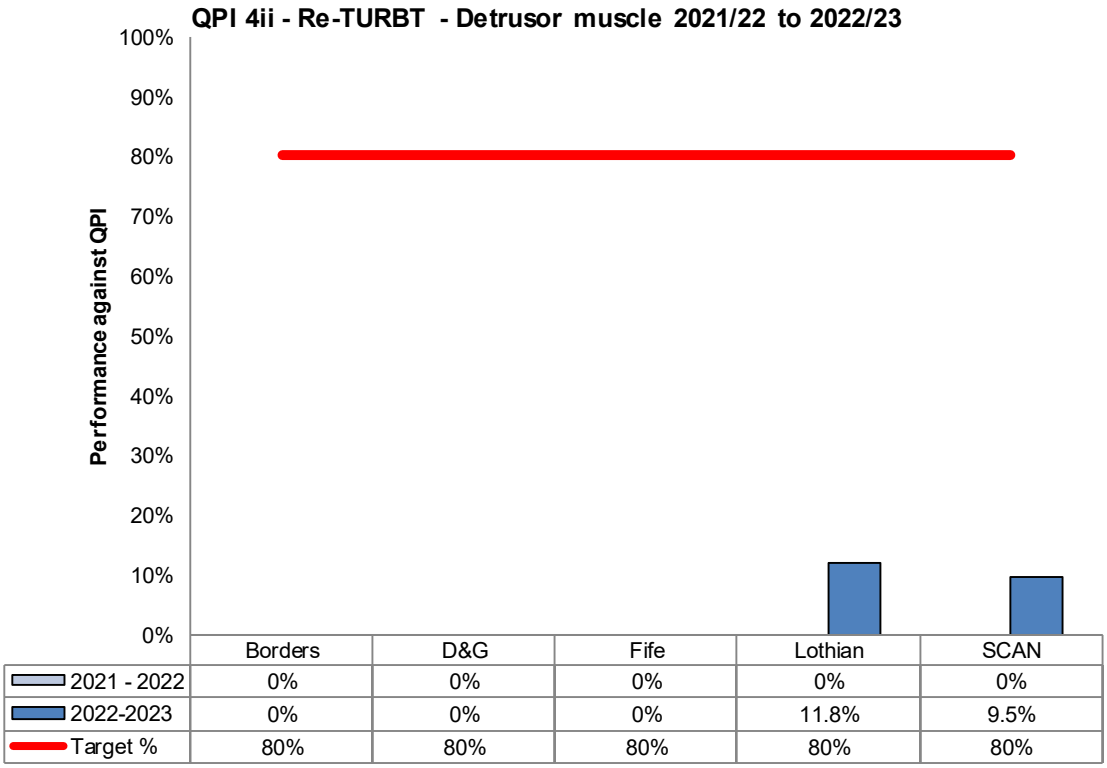
Target 80%	Borders	D&G	Fife	Lothian	SCAN
2022-23 cohort	32	49	110	242	433
Ineligible for analysis	25	49	105	205	384
Excluded from analysis	6	0	0	20	26
Numerator	0	0	0	2	2
Not recorded for numerator	0	0	0	0	0
Denominator	0	0	4	17	21
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	1	1	0	2
% Performance	**0**	**0**	**0**	**11.8**	**9.5**

Comment:

Fife: The QPI target was not met showing a shortfall of 80% (4 cases) 1 was recommended 3 month follow up by the MDM. 3 waited more than 42 days for their second procedure. It should be noted that, as was the case last year, the failure of QPIs 4(i), 4(ii) + 4(iii) is mostly due to capacity issues in theatre. The 'not recorded for / exclude from denominator case had no 2004 Tumour Grade classification recorded on the pathology report.

Lothian: The QPI target was not met showing a shortfall of 68.2% (15 cases) no detrusor muscle present at first endoscopic resection for all 15. 6 had BCG confirmed at MDM. 1 was recommended best supportive care by MDM. For 8 a second resection was not performed within 42 days.

Action: This is an important aspect of patient care (particularly in high grade disease cases) This is an NHS-centric issue with competing priorities of the endoscopic and surgical services. Where the 42 day target was narrowly missed, it indicates clear capacity issues with no evidence of any survival disadvantage. Ring-fence theatre slots to try and accommodate repeat resections.



	Borders	D&G	Fife	Lothian	SCAN
2021 - 2022	0%	0%	0%	0%	0%
2022-2023	0%	0%	0%	11.8%	9.5%
Target %	80%	80%	80%	80%	80%

QPI 4iii - Early TURBT (incomplete resection) – Target = 80%

Title: Patients who have undergone TURBT with high grade Ta* (multifocal - more than 2 or large >3cm) and/ or T1 NMIBC, where detrusor muscle is absent from specimen or initial resection is incomplete, who have a second resection or early cystoscopy (± biopsy) within 6 weeks of initial TURBT.

Numerator = Patients with NMIBC who have undergone TURBT where initial resection is incomplete who have a second TURBT or early cystoscopy (± biopsy) within 6 weeks (42 days) of initial resection.

Denominator = All patients with NMIBC who have undergone TURBT where initial resection is incomplete.

Exclusion = Where TURBT has been carried out for palliation, undergone early cystectomy or where metastatic disease is confirmed.

The tolerance within this target is designed to account for situations where patients are not fit enough for a further operation, where patients are frail and a thin bladder wall is suspected and where there is imaging which suggests re-TURBT is not required or where PDD (photodynamic diagnosis) TURBT has been carried out. It also accounts for those patients where there has been intra or extraperitoneal perforation.

Target 80%	Borders	D&G	Fife	Lothian	SCAN
2022-23 cohort	32	49	110	242	433
Ineligible for analysis	25	47	101	218	391
Excluded from analysis	6	0	2	20	28
Numerator	0	0	0	0	0
Not recorded for numerator	0	0	0	0	0
Denominator	1	2	7	4	14
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	9	0	1	10
% Performance	**0**	**0**	**0**	**0**	**0**

Comment:

Borders: The QPI target was not met showing a shortfall of 80% (1 case) Continued reduced theatre capacity for Urology.

D&G: The QPI target was not met showing a shortfall of 80% (2 cases) 1 did not have repeat TURBT. 1 had TURBT outside the timeframe (107 days).

Fife: The QPI target was not met showing a shortfall of 80% (7 cases) 1 was recommended 3 month follow up by MDM. 1 had synchronous investigations for another cancer, then BCG post TURBT1. 1 had no further procedure as went on to have n/a chemo post TURBT1. 4 waited more than 42 days for their second procedure. It should be noted that, as was the case last year, the failure of QPIs 4(i), 4(ii) + 4(iii) is mostly due to capacity issues in theatre.

Lothian: The QPI target was not met showing a shortfall of 80% (4 cases) 1 incomplete resection and 3 "unsure" resection status and did not have a repeat resection within 42 days. Small numbers in measurements create greater percentage change.

Action: This is an important aspect of patient care (particularly in high grade disease cases) This is an NHS-centric issue with competing priorities of the endoscopic and surgical services. Where the 42-day target was narrowly missed, it indicates clear capacity issues with no evidence of any survival disadvantage. Ring-fence theatre slots to try and accommodate repeat resections.

QPI 6 – Lymph Node Yield – Target = 95%

Title: Patients with bladder cancer that undergo primary radical cystectomy where ≥ 10 lymph nodes are resected and pathologically examined and at least level 2 pelvic lymph node dissection (to the middle of the common iliac artery or level of the crossing of the ureter) has been undertaken.

Numerator = Patients with bladder cancer who undergo primary radical cystectomy where ≥ 10 lymph nodes are resected and pathologically examined, and at least level 2 pelvic lymph node dissection (i.e., to the middle of the common iliac artery or level of the crossing of the ureter) has been undertaken.

Denominator = All patients with bladder cancer who undergo primary radical cystectomy.

Exclusions = Patients undergoing salvage cystectomy.

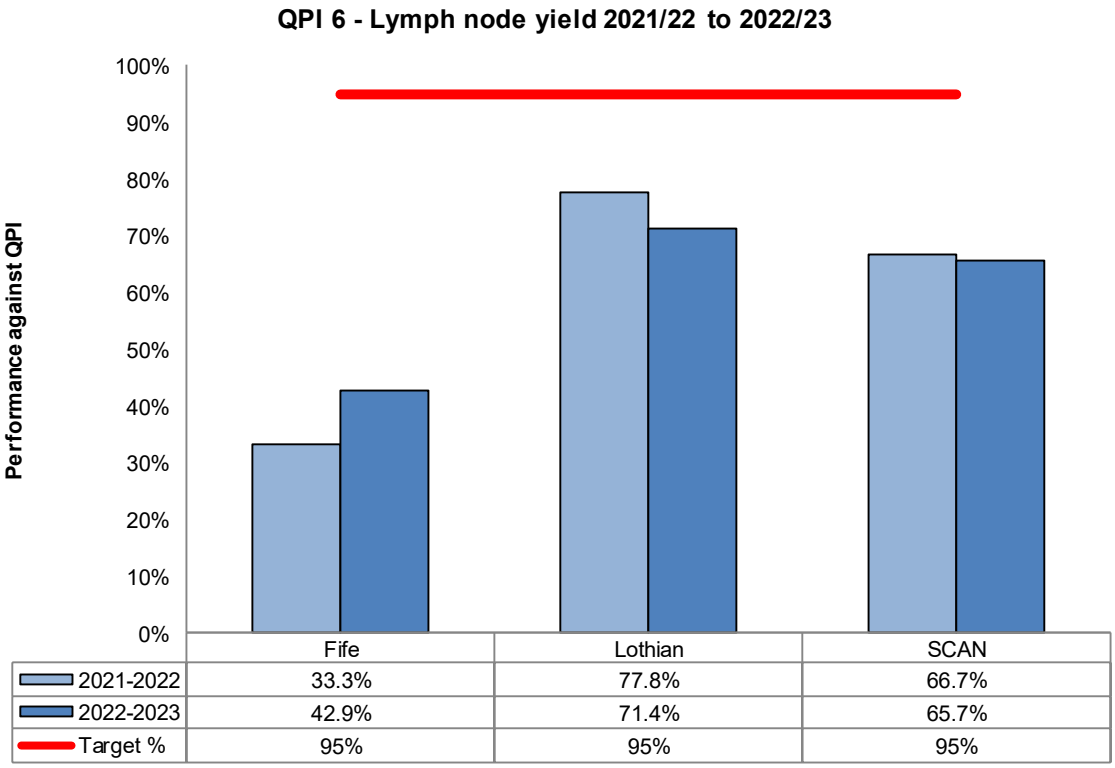
The tolerance within this target accounts for situations where patients are not fit enough to undergo extensive lymphadenectomy.

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2022-23 cohort	32	49	110	242	433
Ineligible for analysis	29	45	103	214	391
Excluded from analysis	0	0	0	0	0
Numerator	-	-	3	20	23
Not recorded for numerator	-	-	1	0	1
Denominator	-	-	7	28	35
Not recorded for exclusion	-	-	0	0	0
Not recorded for denominator	-	-	0	0	0
% Performance	**N/A**	**N/A**	**42.9**	**71.4**	**65.7**

Comment:

Fife: The QPI target was not met showing a shortfall of 52.1% (3 cases) Only 1 did not have the appropriate lymph node dissection. Pelvic lymph node dissection was performed on the other 2 as per the operation note but less than 10 lymph nodes were examined. The operation note was missing with regards the 'not recorded for numerator' case so it was not possible to determine the level of lymph node dissection. As per Fife's action from last year, the operation note template has now been adjusted to include the level of lymph node dissection so Fife's performance should show improvement next year.

Lothian: The QPI target was not met showing a shortfall of 23.6% (8 cases) these cases did not have an extended lymphadenectomy and/or 10 or more lymph nodes included in the surgical specimen.



QPI 7i – Time to Treatment – Target = 90%

Title: Patients with muscle invasive bladder cancer (MIBC) undergoing treatment with radical intent should commence treatment as soon as possible.

Numerator = Number of patients with MIBC who undergo radical cystectomy or radiotherapy only within 6 weeks of diagnosis of MIBC.

Denominator = All patients with MIBC undergoing radical cystectomy or radiotherapy only.

Exclusion = None.

The tolerance within this target accounts for situations where patients are not fit enough to undergo treatment within the required timescales due to other medical conditions.

Target 90%	Borders	D&G	Fife	Lothian	SCAN
2022-23 cohort	32	49	110	242	433
Ineligible for analysis	31	46	104	205	386
Excluded from analysis	0	0	0	12	12
Numerator	0	1	1	5	7
Not recorded for numerator	0	0	0	0	0
Denominator	1	3	6	25	35
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**0**	**33.3**	**16.7**	**20.0**	**20.0**

Comment:

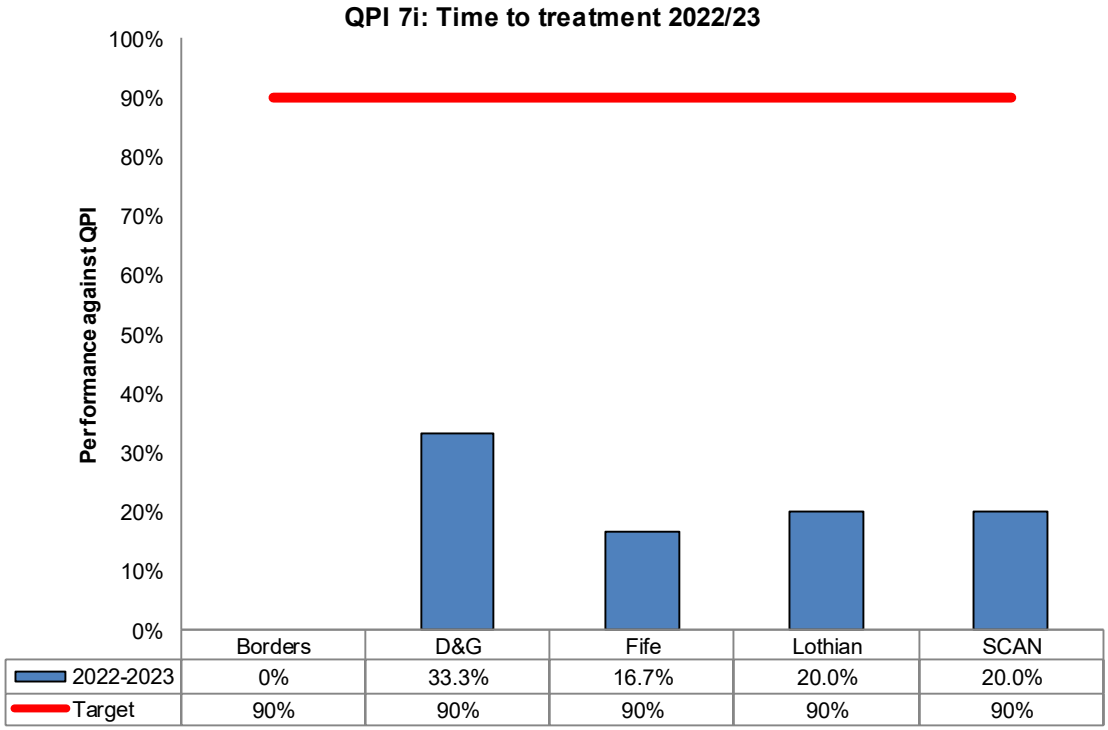
Borders: The QPI target was not met showing a shortfall of 90% (1 case) treatment at day 61. Delay in clinic appointment at Lothian pre-treatment.

DGRI: The QPI target was not met showing a shortfall of 56.7% (2 cases) at 51 days from MIBC to surgery. 1 at 67 days from MIBC to radiotherapy.

Fife: The QPI target was not met showing a shortfall of 73.3% (5 cases) with a variety of short delays in pathway from diagnosis to treatment. **NOTE**: a further 4 Fife patients (not included in analysis) had radical surgery post TURBT. However, 3 of these were for high risk disease [not MIBC]1 had no mention made of muscle invasive disease prior to definitive treatment, which is why they were not measured.

Lothian: The QPI target was not met showing a shortfall of 70% (20 cases) 8 had radical surgery outwith 42 days from MIBC diagnosis date. 12 had oncology treatment outwith 42 days from MIBC diagnosis. (Surgical median 74 days. Surgical range 60 days)(Oncology median 61 days. Oncology range 35 days).

Comment: Formal Review – Consider revision of starting point for this measurement. The timeline seems too ambitious to be realistic.
Consider reporting this QPI by board of treatment, although with the combined measurement the radiotherapy measurement by board of treatment might prove a bit more complex.



	Borders	D&G	Fife	Lothian	SCAN
2022-2023	0%	33.3%	16.7%	20.0%	20.0%
Target	90%	90%	90%	90%	90%

QPI 7ii – Time to Treatment – Target = 90%

Title: Patients with muscle invasive bladder cancer (MIBC) undergoing treatment with radical intent should commence treatment as soon as possible.

Numerator = Number of patients with MIBC who have neoadjuvant chemotherapy who undergo cystectomy or radiotherapy within 8 weeks of completing treatment.

Denominator = All patients with MIBC undergoing neo-adjuvant chemotherapy.

Exclusion = None.

The tolerance within this target accounts for situations where patients are not fit enough to undergo treatment within the required timescales due to other medical conditions.

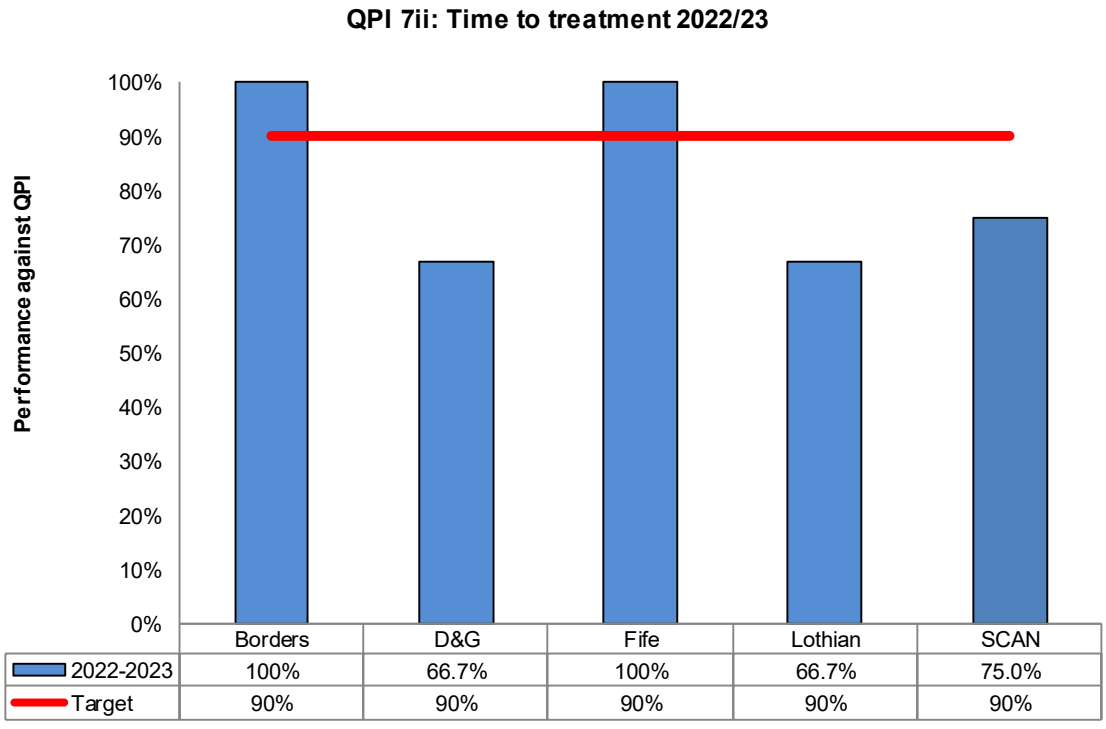
Target 90%	Borders	D&G	Fife	Lothian	SCAN
2022-23 cohort	32	49	110	242	433
Ineligible for analysis	31	46	108	236	421
Excluded from analysis	0	0	0	0	0
Numerator	1	2	2	4	9
Not recorded for numerator	0	0	0	0	0
Denominator	1	3	2	6	12
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**100**	**66.7**	**100**	**66.7**	**75.0**

Comment:

DGRI: The QPI target was not met showing a shortfall of 23.3% (1 case) 88 days to radiotherapy post neo-adjuvant chemotherapy.

Lothian: The QPI target was not met showing a shortfall of 23.3% (2 cases) both had radical surgery outwith the 63 days from completion of neo-adjuvant chemotherapy.

Action: None identified.



QPI 8 – Volume of Cases per Centre/Surgeon – Target = ≥ 20 cases per year.

Title: Radical cystectomy should be performed by surgeons who perform the procedure routinely.

The criteria for this QPI are defined by a minimum of 10 operations per surgeon and overall 20 operations per Centre.

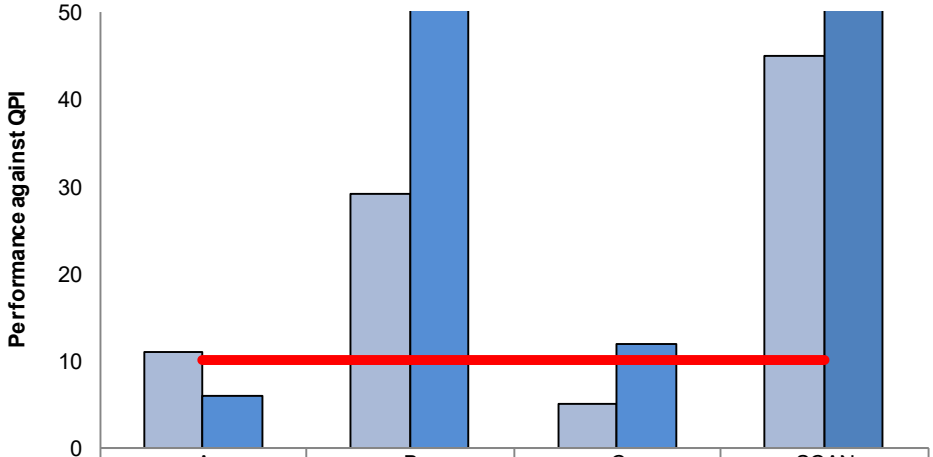
Numerator = Number of radical cystectomy procedures performed by each surgeon in a given year (no exclusions).

All cystectomies are carried out in Fife and Lothian.

Board of Surgery*	Surgeon	Number of radical cystectomies
NHS Fife	A	6
NHS Lothian	B	54
NHS Lothian	C	12

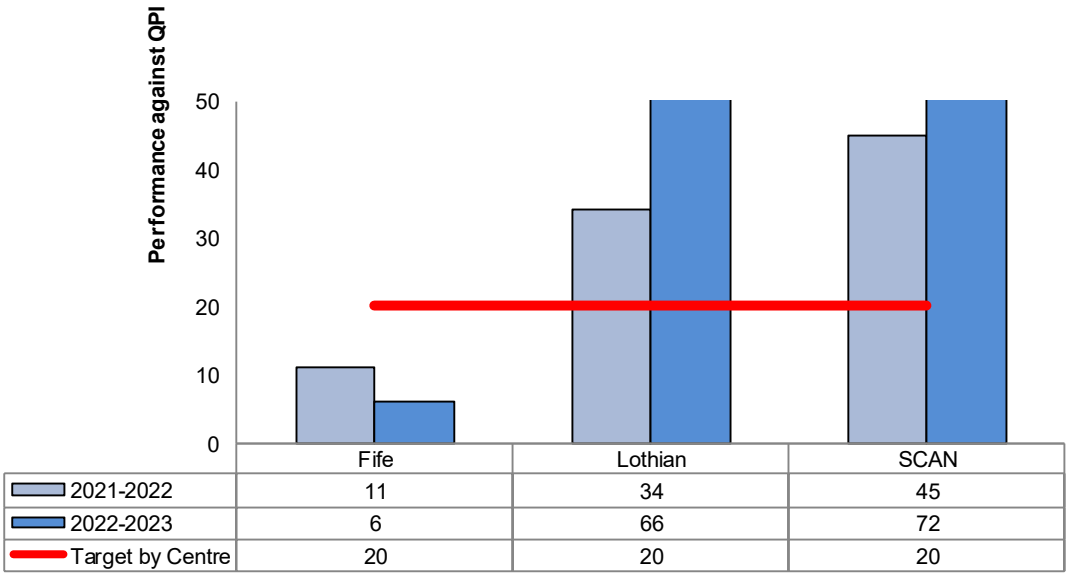
*Data supplied by PHS SMR01 returns.

QPI 8: Volume of cases per Surgeon 2021/22 to 2022/23



	A	B	C	SCAN
2021-2022	11	29	5	45
2022-2023	6	54	12	72
Target by Surgeon	10	10	10	10

QPI 8: Volume of cases per Centre 2021/22 to 2022/23



QPI 9 – Oncological Discussion – Target = 60%

Title: Patients with muscle invasive bladder cancer should have all treatment options discussed with them prior to radical cystectomy.

Numerator = Number of patients with muscle invasive bladder cancer who undergo cystectomy who met with an oncologist prior to radical cystectomy.

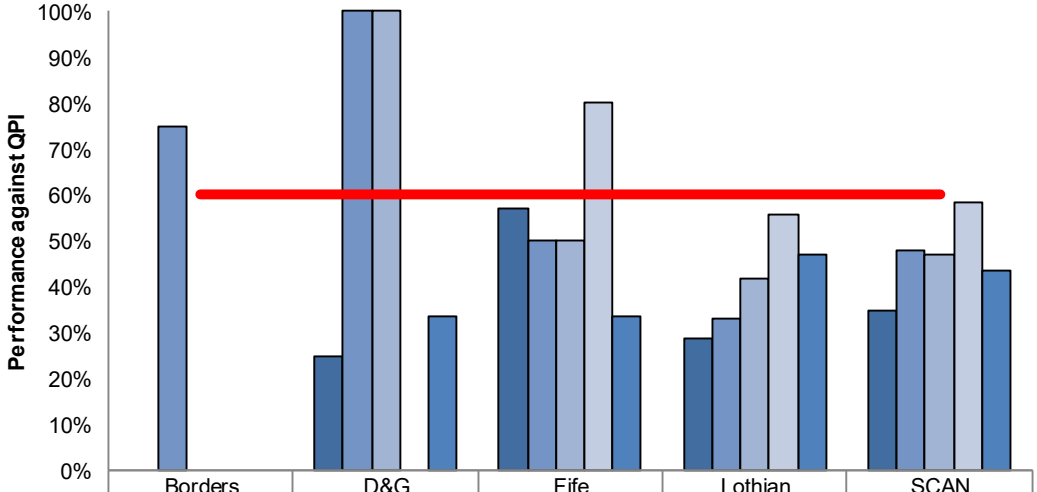
Denominator = All patients with muscle invasive bladder cancer who undergo radical cystectomy (no exclusions)

The tolerance accounts for the fact that patients might decline to see an oncologist, are deemed at multi-disciplinary team meeting to not be suitable for radical radiotherapy or neo-adjuvant chemotherapy, due to co-morbidities and for patients who undergo emergency cystectomy.

Target 60%	Borders	D&G	Fife	Lothian	SCAN
2022-23 cohort	32	49	110	242	433
Ineligible for analysis	32	46	107	225	410
Excluded from analysis	0	0	0	0	0
Numerator	0	1	1	8	10
Not recorded for numerator	0	0	0	0	0
Denominator	0	3	3	17	23
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**N/A**	**33.3**	**33.3**	**47.1**	**43.5**

SCAN Oncology Comment: These patients are always discussed in MDM and for various reasons (multifocal disease, extensive CIS, symptoms and presence of hydronephrosis) would have surgery recommended as the better treatment option. There are no concerns about these cases. Given the trends over the past 7 years, this target might be too ambitious.

QPI 9 - Oncology discussion 2018/19 to 2022/23



	Borders	D&G	Fife	Lothian	SCAN
2018-2019	0%	25.0%	57.1%	28.6%	35.0%
2019-2020	75.0%	100%	50.0%	33.3%	48.0%
2020-2021	0%	100%	50.0%	41.7%	47.1%
2021-2022	0%	0%	80.0%	55.6%	58.3%
2022-2023	0%	33.3%	33.3%	47.1%	43.5%
Target %	60%	60%	60%	60%	60%

QPI 10 – Radical Radiotherapy with Concomitant Radiosensitiser – Target = 50%

Title: Patients undergoing radical radiotherapy for transitional cell carcinoma of bladder should be considered for treatment with a concomitant radiosensitiser.

Numerator = Number of patients with transitional cell carcinoma of the bladder (T2-T4) receiving radical radiotherapy treated with a concomitant radiosensitiser.

Denominator = All patients with transitional cell carcinoma of the bladder (T2-T4) receiving radical radiotherapy.

Exclusions = Patients enrolled in a clinical trial.

The target accounts for the fact that patients with cardiac disease may not be suitable to receive this type of treatment. It also accounts for the fact that due to co-morbidities and fitness not all patients will require or be suitable for radical radiotherapy with a radiosensitiser.

Target 50%	Borders	D&G	Fife	Lothian	SCAN
2022-23 cohort	32	49	110	242	433
Ineligible for analysis	32	47	106	227	412
Excluded from analysis	0	0	0	2	2
Numerator	0	0	0	2	2
Not recorded for numerator	0	0	0	0	0
Denominator	0	2	4	13	19
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	**N/A**	**0**	**0**	**15.4**	**10.5**

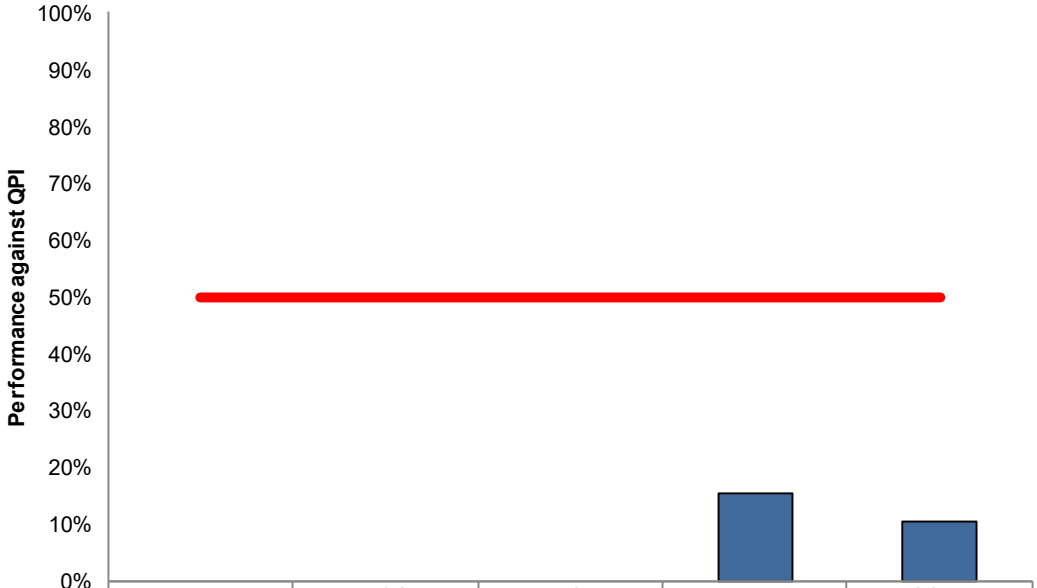
Comment:

DGRI: The QPI target was not met showing a shortfall of 50% (2 cases) 1 declined SACT. 1 did not have radiosensitiser.

Fife: The QPI target was not met showing a shortfall of 50% (4 cases) 4 seen by oncology, who deemed them not suitable for chemo / concomitant radiosensitiser due to co-morbidities.

Lothian: The QPI target was not met showing a shortfall of 34.6% (11 cases) due to various factors. Patient performance status, co-morbidities and overall clinical picture all play a role when assessing patient suitability to receive oncology options. In many cases radical radiotherapy with radiosensitiser is not an appropriate treatment.

QPI 10: Radical radiotherapy with Chemotherapy 2022/23



	Borders	D&G	Fife	Lothian	SCAN
2022-2023	0%	0%	0%	15.4%	10.5%
Target	50%	50%	50%	50%	50%

QPI 11 – 30-day Mortality after radical cancer treatment –Target= <3%

Title: 30-day mortality following treatment with curative intent for bladder cancer.

Numerator: Number of patients with bladder cancer who receive treatment with curative intent (radical cystectomy or radiotherapy) that die within 30 days of treatment.

Denominator: All patients with bladder cancer who receive treatment with curative intent (radical cystectomy, radiotherapy).

Exclusion: No exclusions.

Surgery – Presented by Board of surgery.

Target <3%	Borders	D&G	Fife	Lothian	SCAN
2022-23 cohort	32	49	110	242	433
Ineligible for analysis	31	45	103	214	393
Excluded from analysis	0	0	0	0	0
Numerator	-	-	0	1	1
Denominator	-	-	7	28	35
% Performance	**N/A**	**N/A**	**0**	**3.6**	**2.9**

Comment:

Lothian: The QPI target was not met showing a shortfall of 0.6% (1 case) all cases are discussed at M&M meetings. Small numbers in measurements create greater percentage change.

Radiotherapy – Presented by Board of diagnosis.

Target <3%	Borders	D&G	Fife	Lothian	SCAN
2022-23 cohort	32	49	110	242	433
Ineligible for analysis	30	46	105	230	411
Excluded from analysis	0	0	0	0	0
Numerator	0	0	0	1	1
Denominator	1	3	5	12	21
% Performance	**0**	**0**	**0**	**8.3**	**4.8**

Comment:

Lothian: The QPI target was not met showing a shortfall of 0.6% (1 case) all cases are discussed at M&M meetings. Small numbers in measurements create greater percentage change.

QPI 11 – 90-day Mortality after radical cancer treatment –Target= <5%

Title: 90-day mortality following treatment with curative intent for bladder cancer.

Numerator: Number of patients with bladder cancer who receive treatment with curative intent (radical cystectomy or radiotherapy) that die within 90 days of treatment.

Denominator: All patients with bladder cancer who receive treatment with curative intent (radical cystectomy or radiotherapy).

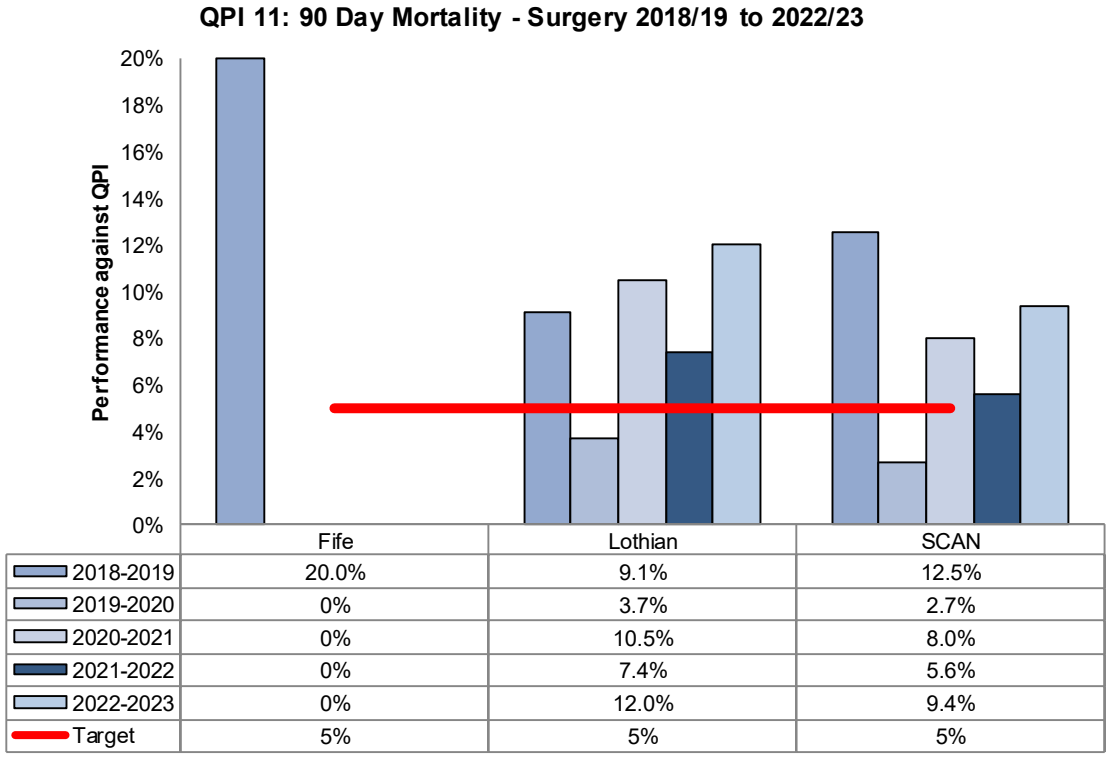
Exclusion: No exclusions.

Surgery – Presented by Board of surgery.

Target <5%	Borders	D&G	Fife	Lothian	SCAN
2022-23 cohort	32	49	110	242	433
Ineligible for analysis	31	45	103	217	396
Excluded from analysis	0	0	0	0	0
Numerator	-	-	0	3	3
Denominator	-	-	7	25	32
% Performance	**N/A**	**N/A**	**0**	**12.0**	**9.4**

Comment:

Lothian: The QPI target was not met showing a shortfall of 7.0% (3 cases) patients with very advanced disease from the outset who died from advanced cancer. Small numbers in measurements create greater percentage change.



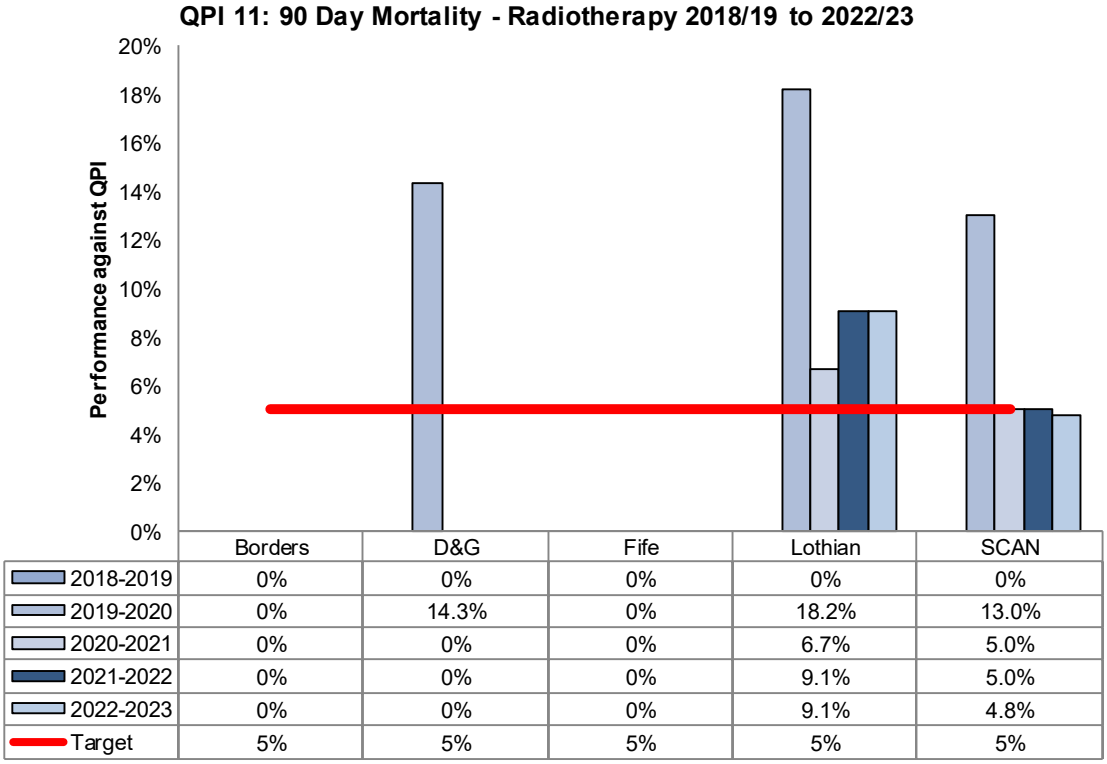
	Fife	Lothian	SCAN
2018-2019	20.0%	9.1%	12.5%
2019-2020	0%	3.7%	2.7%
2020-2021	0%	10.5%	8.0%
2021-2022	0%	7.4%	5.6%
2022-2023	0%	12.0%	9.4%
Target	5%	5%	5%

Radiotherapy – Presented by Board of diagnosis.

Target <5%	Borders	D&G	Fife	Lothian	SCAN
2022-23 cohort	32	49	110	242	433
Ineligible for analysis	30	47	105	231	413
Excluded from analysis	0	0	0	0	0
Numerator	0	0	0	1	1
Denominator	2	3	5	11	21
% Performance	**0**	**0**	**0**	**9.1**	**4.8**

Comment:

Lothian: The QPI target was not met showing a shortfall of 4.1% (1 case) small numbers in measurements create greater percentage change.



	Borders	D&G	Fife	Lothian	SCAN
2018-2019	0%	0%	0%	0%	0%
2019-2020	0%	14.3%	0%	18.2%	13.0%
2020-2021	0%	0%	0%	6.7%	5.0%
2021-2022	0%	0%	0%	9.1%	5.0%
2022-2023	0%	0%	0%	9.1%	4.8%
Target	5%	5%	5%	5%	5%

QPI 13i - Early Recurrence NMIBC – Target = <10%

Title: The risk of early recurrence in patients with non-muscle invasive bladder cancer (NMIBC) should be minimised.

Numerator = Number of patients with low grade pTa NMIBC who have undergone initial TURBT where recurrence is found at first follow up cystoscopy.

Denominator = All patients with low grade pTa NMIBC who have undergone initial TURBT.

Exclusion = Patients with incomplete resection at initial TURBT.

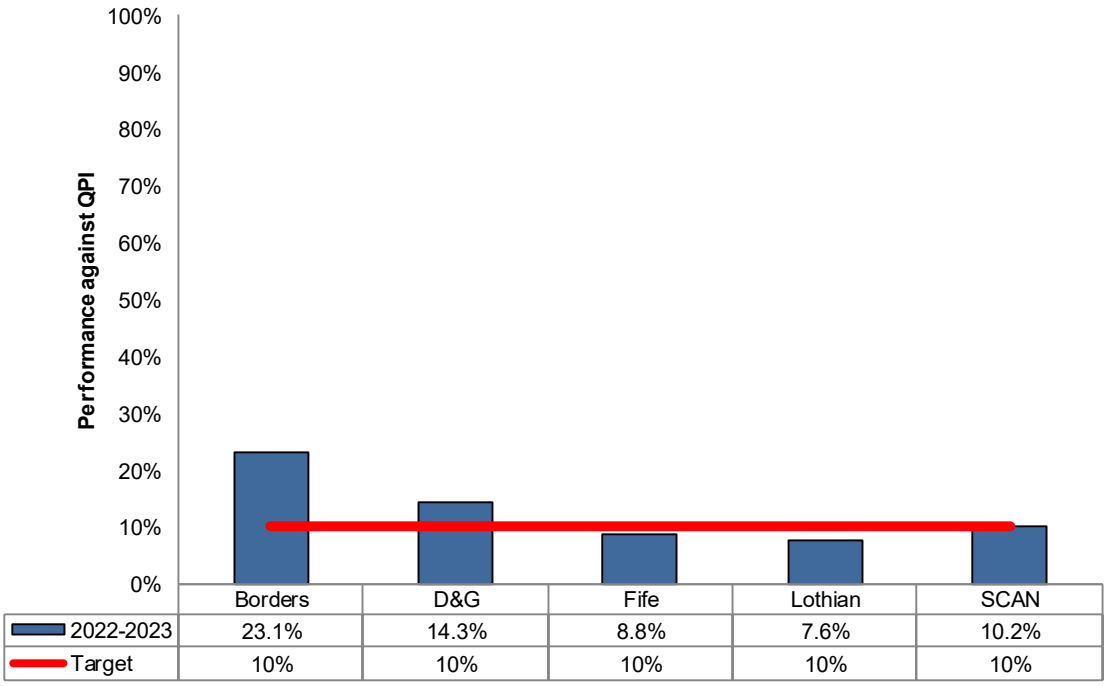
Target <10%	Borders	D&G	Fife	Lothian	SCAN
2022-23 cohort	32	49	110	242	433
Ineligible for analysis	13	34	74	176	297
Excluded from analysis	6	1	2	0	9
Numerator	3	2	3	5	13
Not recorded for numerator	0	1	6	0	7
Denominator	13	14	34	66	127
Not recorded for exclusion	0	5	0	1	6
Not recorded for denominator	0	0	0	0	0
% Performance	**23.1**	**14.3**	**8.8**	**7.6**	**10.2**

Comment:

Borders: The QPI target was not met showing an excess of 13.1% (3 cases) recurrences found at cystoscopy post TURBT1. Small numbers in measurements create greater percentage change.

DGRI: The QPI target was not met showing an excess of 4.3% (2 cases) found recurrence post TURBT1.

QPI 13i: Early Recurrence (NMIBC) 2022/23



QPI 13ii - Early Recurrence NMIBC – Target = <20%

Title: The risk of early recurrence in patients with non-muscle invasive bladder cancer (NMIBC) should be minimised.

Numerator = Number of patients with pT1 NMIBC who have undergone a second TURBT or early cystoscopy (± biopsy) and have residual cancer at re-TURBT.

Denominator = All patients with pT1 NMIBC who have undergone a second TURBT or early cystoscopy (± biopsy).

Exclusion = Patients in whom concomitant cis is present in the tumour specimen. Patients with incomplete resection at initial TURBT.

Target <20%	Borders	D&G	Fife	Lothian	SCAN
2022-23 cohort	32	49	110	242	433
Ineligible for analysis	22	41	91	207	361
Excluded from analysis	5	0	13	10	28
Numerator	3	2	2	11	18
Not recorded for numerator	0	0	0	0	0
Denominator	5	8	6	25	44
Not recorded for exclusion	0	0	1	0	1
Not recorded for denominator	0	2	0	1	3
% Performance	**60.0**	**25.0**	**33.3**	**44.0**	**40.9**

Comment:

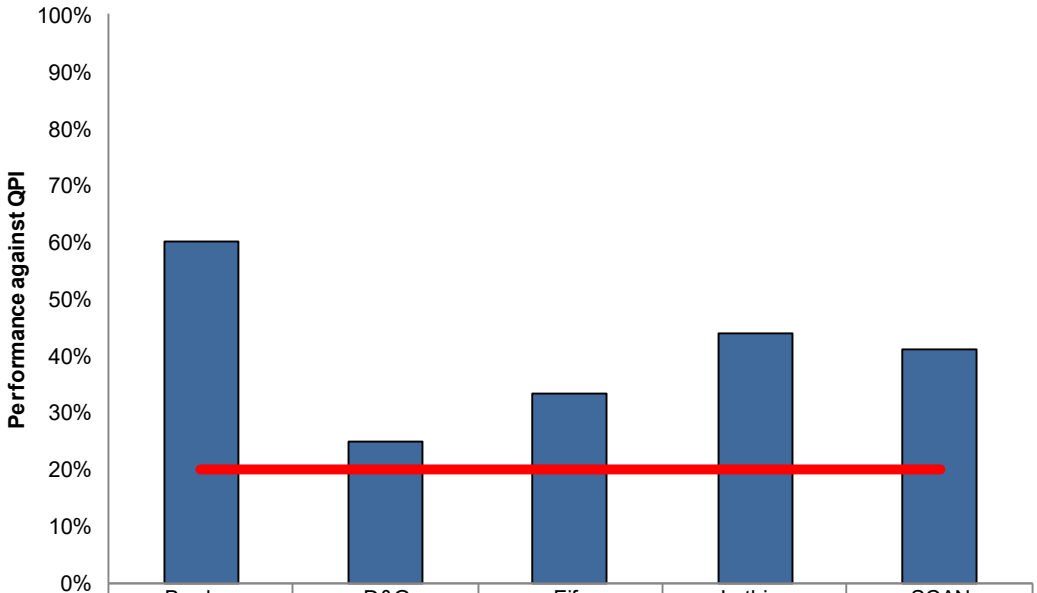
Borders: The QPI target was not met showing an excess of 40% (3 cases) recurrences found post TURBT1. Small numbers in measurements create greater percentage change.

DGRI: The QPI target was not met showing an excess of 5% (2 cases) recurrence found post TURBT1. Small numbers in measurements create greater percentage change.

Fife: The QPI target was not met showing an excess of 13.3% (2 cases) small denominator should be noted. The 'not recorded for exclusion / include in Denominator' case had no indication as to whether CIS was present at TURBT1. Small numbers in measurements create greater percentage change.

Lothian: The QPI target was not met showing an excess of 24% (11 cases) recurrent disease present at repeat resection.

QPI 13ii: Recurrence post pT1 disease at TURBT1 2022/23



	Borders	D&G	Fife	Lothian	SCAN
2022-2023	60.0%	25.0%	33.3%	44.0%	40.9%
Target	20%	20%	20%	20%	20%

QPI 13iii - Early Recurrence NMIBC – Target = <1%

Title: The risk of early recurrence in patients with non-muscle invasive bladder cancer (NMIBC) should be minimised.

Numerator = Number of patients with pT1 NMIBC who have undergone a second TURBT or early cystoscopy (± biopsy) and have Pathological MIBC (pT2) at re-TURBT.

Denominator = All patients with pT1 NMIBC who have undergone a second TURBT or early cystoscopy (± biopsy).

Exclusion = Patients with incomplete resection at initial TURBT.

Target <1%	Borders	D&G	Fife	Lothian	SCAN
2022-23 cohort	32	49	110	242	433
Ineligible for analysis	21	41	91	214	367
Excluded from analysis	6	0	6	2	14
Numerator	0	0	1	4	5
Not recorded for numerator	0	0	0	0	0
Denominator	5	8	12	26	51
Not recorded for exclusion	0	2	0	0	2
Not recorded for denominator	0	0	1	1	2
% Performance	**0**	**0**	**8.3**	**15.4**	**9.8**

Comment:

Fife: The QPI target was not met showing an excess of 7.3% (1 case) small denominator should be noted. The 'not recorded for / exclude from Denominator' case would appear to have been lost to follow up, as initial TURBT was performed in September 2022 but to date, no second procedure/ follow up has been arranged.

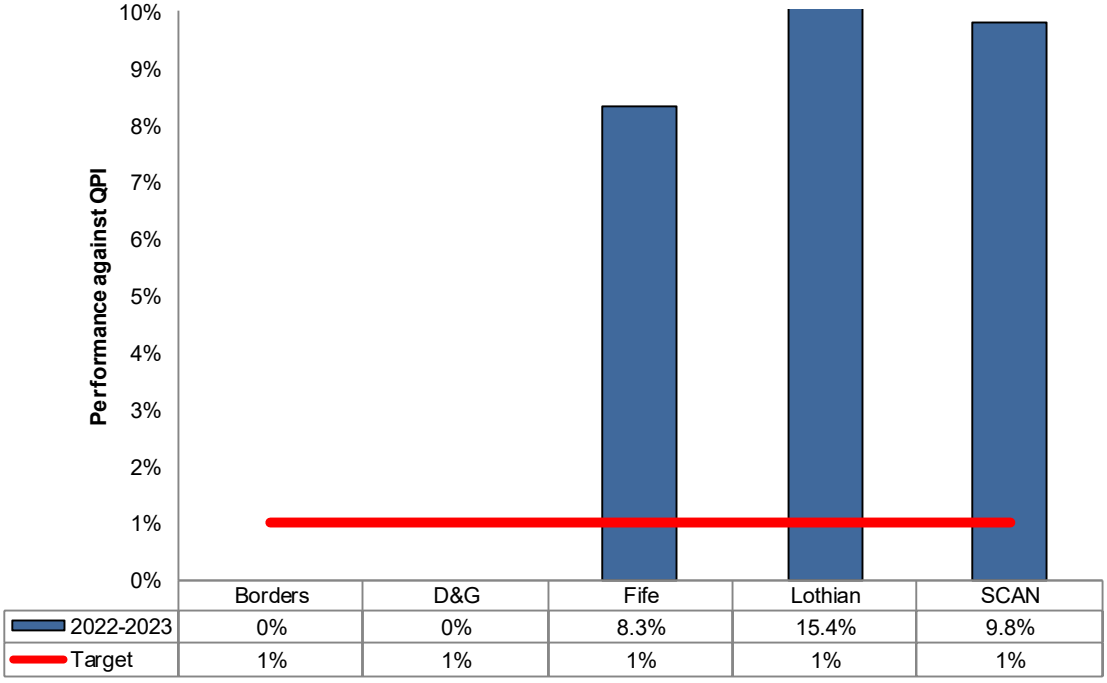
Lothian: The QPI target was not met showing an excess of 14.4% (4 cases) small numbers in measurements create greater percentage change.

Comment: The target for this QPI is aspirational but not realistic considering the numbers measured.

The Lothian surgical lead is happy with the low target set. This QPI is a better metric to measure quality of endoscopic treatment than QPI 4.

In Fife and Lothian dedicated lists are crucial to ensure a gold standard in endoscopic service.

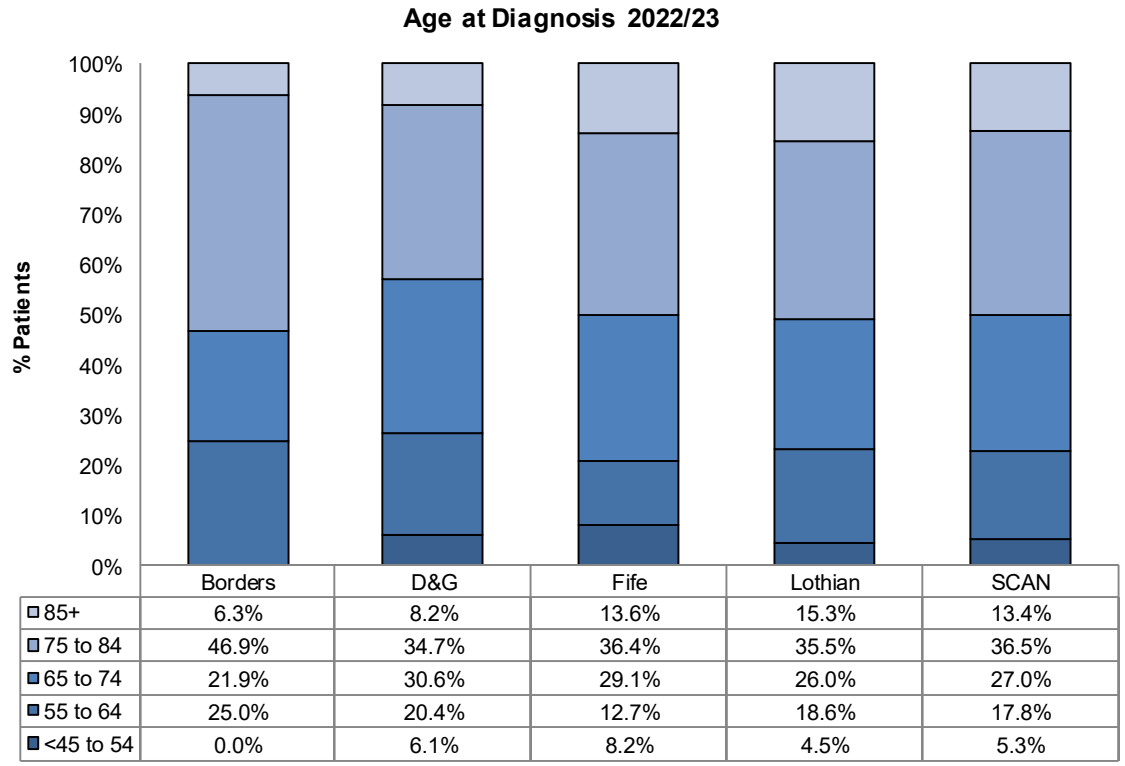
QPI 13iii: MIBC at recurrence post TURBT1 2022/23



	Borders	D&G	Fife	Lothian	SCAN
2022-2023	0%	0%	8.3%	15.4%	9.8%
Target	1%	1%	1%	1%	1%

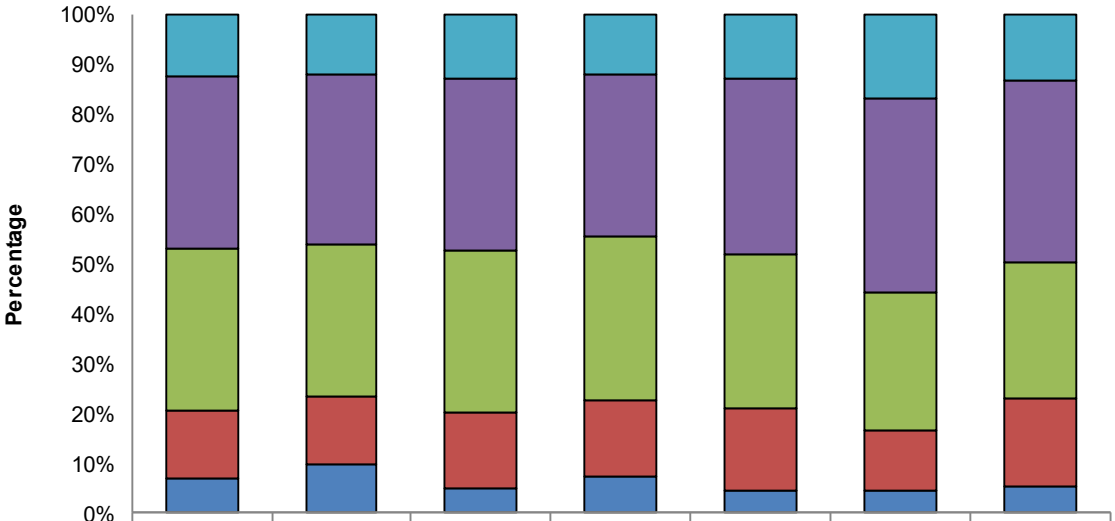
Age and Gender Analysis

Age and Gender Analysis		Borders	D&G	Fife	Lothian	SCAN
Under 45	M	0	1	1	1	3
	F	0	0	0	1	1
45 - 49	M	0	0	0	2	2
	F	0	1	2	2	5
50 - 54	M	0	1	5	1	7
	F	0	0	1	4	5
55 - 59	M	4	1	6	11	22
	F	0	2	2	6	10
60 - 64	M	4	5	5	18	32
	F	0	2	1	10	13
65 - 69	M	3	7	11	23	44
	F	0	2	1	5	8
70 - 74	M	3	4	15	23	45
	F	1	2	5	12	20
75 - 79	M	5	6	16	35	62
	F	5	2	1	9	17
80 - 84	M	5	8	13	37	63
	F	0	1	10	5	16
85+	M	1	1	11	23	36
	F	1	3	4	14	22
Total	M	25	34	83	174	316
	F	7	15	27	68	117



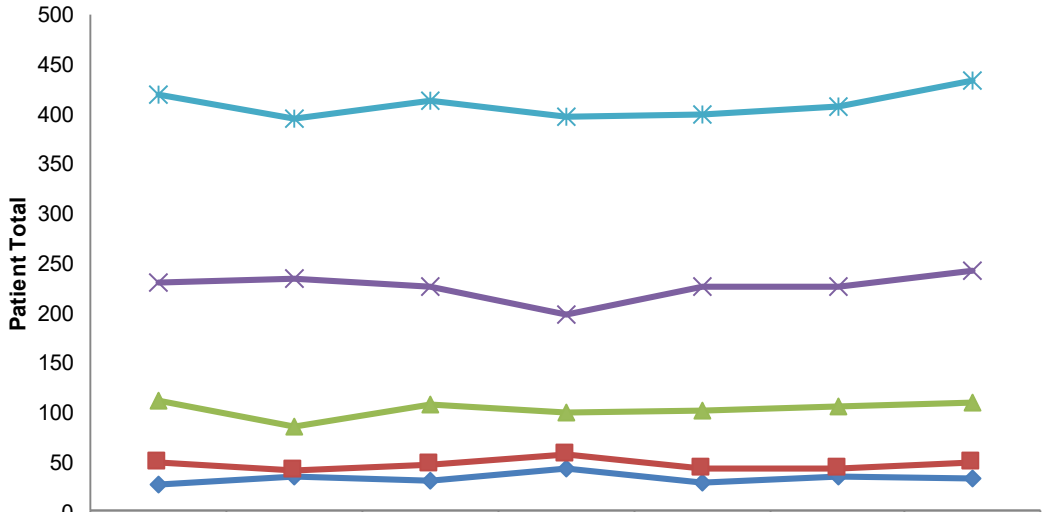
	Borders	D&G	Fife	Lothian	SCAN
85+	6.3%	8.2%	13.6%	15.3%	13.4%
75 to 84	46.9%	34.7%	36.4%	35.5%	36.5%
65 to 74	21.9%	30.6%	29.1%	26.0%	27.0%
55 to 64	25.0%	20.4%	12.7%	18.6%	17.8%
<45 to 54	0.0%	6.1%	8.2%	4.5%	5.3%

Age at Diagnosis - SCAN Total over 7 years



	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
85+	12.4%	12.2%	12.9%	12.4%	13.1%	16.9%	13.4%
75 to 84	34.4%	34.2%	34.7%	32.3%	35.2%	38.7%	36.5%
65 to 74	32.5%	30.1%	32.3%	32.8%	30.9%	27.9%	27.0%
55 to 64	13.4%	13.9%	15.3%	15.2%	16.3%	12.0%	17.8%
<45 to 54	7.2%	9.6%	4.9%	7.3%	4.5%	4.4%	5.3%

New Bladder Cancer totals by Year of Diagnosis



	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Borders	26	35	31	42	28	35	32
D&G	50	41	48	57	43	42	49
Fife	112	86	108	99	101	106	110
Lothian	230	233	225	198	226	225	242
SCAN	418	395	412	396	398	407	433

Bladder Cancer QPI Attainment Summary 2021-22			Target%	Borders		D&G		Fife		Lothian		SCAN	
QPI 1: MDT Discussion		Before definitive treatment (MIBC)	95	N 9 D 9	100%	N 7 D 7	100%	N 27 D 28	96.4%	N 60 D 63	95.2%	N 103 D 107	96.3%
		NMIBC discussed at the MDT after histological confirmation of NMIBC	95	N 22 D 22	100%	N 34 D 34	100%	N 68 D 69	98.6%	N 124 D 124	100%	N 248 D 249	99.6%
QPI 2: Quality of TURBT at initial resection		Detailed description with tumour location, size, number, appearance	95	N 31 D 31	100%	N 26 D 40	65.0%	N 68 D 74	91.9%	N 163 D 169	96.4%	N 288 D 314	91.7%
		Where the resection is documented as complete or not	95	N 28 D 28	100%	N 35 D 39	89.7%	N 63 D 67	94.0%	N 154 D 164	93.9%	N 280 D 298	94.0%
		HG NMIBC with detrusor muscle in the specimen at initial TURBT.	90	N 10 D 10	100%	N 13 D 15	86.7%	N 17 D 24	70.8%	N 41 D 54	75.9%	N 81 D 103	78.6%
QPI 4: Early TURBT		All Grades T1 or HG Ta (>1 or >3cm) NMIBC to have re-resection within 42 days from TURBT1	80	N 0 D 8	0%	N 0 D 9	0%	N 0 D 25	0%	N 0 D 50	0%	N 0 D 92	0%
		HG NMIBC with no Detrusor muscle at TURBT1 to have re-resection in 42 days	80	N 0 D 0	N/A	N 0 D 1	0%	N 0 D 9	0%	N 0 D 14	0%	N 0 D 24	0%
		NMIBC where resection was incomplete at TURBT1 to have re-resection in 42 days	80	N 0 D 1	0%	N 0 D 1	0%	N 0 D 3	0%	N 0 D 4	0%	N 0 D 9	0%
QPI 6: Lymph Node Yield. Pelvic lymph node dissection (>10 lymph nodes) and level 2 undertaken at radical cystectomy			95	Presented by Board of surgery				N 3 D 9	33.3%	N 21 D 27	77.8%	N 24 D 36	66.7%
QPI 8: Volume of Cases / Surgeon: radical cystectomies 20 per centre, 10 procedures by a surgeon over a 1 year.			>20	2 Surgeons met the QPI criteria. 1 Health Board met the QPI criteria.									
QPI 9: Oncological Discussion: MIBC patients who had radical surgery who met with an oncologist prior to radical cystectomy			60	N 0 D 0	N/A	N 0 D 1	0%	N 4 D 5	80.0%	N 10 D 18	55.6%	N 14 D 24	58.3%
QPI 11: 30 Day Mortality Patients who die within 30 days of treatment with curative intent for bladder cancer.	Radical Surgery		<3	Presented by Board of surgery				N 0 D 9	0%	N 1 D 26	3.8%	N 1 D 35	2.9%
	Radiotherapy		<3	N 0 D 4	0%	N 0 D 2	0%	N 0 D 3	0%	N 0 D 11	0%	N 0 D 20	0%
QPI 11: 90 Day Mortality Patients who die within 90 days of treatment with curative intent for bladder cancer.	Radical Surgery		<5	Presented by Board of surgery				N 0 D 9	0%	N 2 D 27	7.4%	N 2 D 36	5.6%
	Radiotherapy		<5	N 0 D 4	0%	N 0 D 2	0%	N 0 D 3	0%	N 1 D 11	9.1%	N 1 D 20	5.0%