

SOUTH EAST SCOTLAND CANCER NETWORK (SCAN) PROSPECTIVE CANCER AUDIT

Prostate Cancer 2021-22 Comparative Audit Report

Patients diagnosed 1st July 2021 to 30th June 2022

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Prostate Cancer QPI Attainment Summary 2020-2130

Document History

Version	Circulation	Date	Comments
1	SCAN Urology Leads sign off meeting	09/06/2023	Action points and comments agreed. Chair's summary to be added.
2	SCAN Lead Clinician and sign off group	19/06/2023	Lead's commentary added and comments to be approved by sign off group
3	SCAN Urology Group	21/06/2023	For any final comments and SCAN Group Approval by
Final Version	SCAN Group SCAN Governance Framework SCAN Action Plan Board Executive Leads.	04/08/2023	Document to be assessed for disclosive data in preparation for publishing to the website.
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Summary by Lead for Prostate Cancer

This year of the Prostate Cancer QPIs represents an unusual year in that it was the first year when lockdowns from COVID had started to ease. We still had a large impact on clinical services with different patterns of working. I have to start by thanking Adam Steenkamp for Lothian and all of his colleagues throughout the SCAN region for their efforts in getting such detailed reports.

The most striking aspect of the report is the large increase in prostate cancer diagnoses in the year now over 1000 patients. This has and continues to have a large pressure on clinical services involved in the prostate cancer pathway. It is vital that our systems change and modernise in order to streamline and cope with the increased workload. It is pleasing to see that on the whole patients are receiving high quality care throughout the region.

The purpose of the QPIs remains to highlight areas for improvement in order to driving quality. However, the iterative nature of the way the QPIs are measured can sometimes lead to appropriate care being highlighted as “failure” due to the strict criteria. The best example of this is the Active surveillance and MRI (QPI 11) where patients with PSA progression within a shorter time frame have been quite rightly directed to an earlier MRI failing as a result of their MRI having been earlier despite there being a correct clinical indication for this. We also have to be aware of the impact some of these QPIs are having within the wider pathway and the pressures they have elsewhere. No doubt MRI in active surveillance is useful but it places pressures on the pre-biopsy MRI waiting list and the delays to the overall pathways. Given the large role MRI plays in our pathway from the very beginning, it is my belief that a new QPI to assess the percentage of patients who can avoid an initial biopsy will help drive an improvement across Scotland in the quality of MRI reporting.

It was disappointing to see the positive margin rate rise (QPI 5) largely driven by focal apical margins which represented over half of all margins which we know do not impact clinically as much as non focal margins. There has also been a large disruption to the Robotic service during last and this year having been moved during COVID and also last year to help facilitate other surgical services to start their own robotic programmes. This has resulted in the retraining of numerous different teams which likely has had an impact. The Robotic surgeons in Lothian remain keen and committed to implementing a regular surgical planning meeting which is an evidence based method to improve outcomes and remain hopefully of getting management support for this.

We all remain interested to see the impact of the revamped QPIs for next year, particularly QPI 7ii which will change to include Abiraterone. The Scottish government having invested significantly in this being available to Scottish patients in the metastatic and non metastatic but high risk setting which is the envy of other parts of the UK.

Mr D Good Prostate Cancer Lead Consultant
Prof A McNeill SCAN Urology Group Chair
NHS Lothian.

Clinical Recommendation Summary 2021 – 2022

QPI	Action required	Lead	Date for update
4i & 4ii	Mr Good to send a reminder to all clinicians to register patients for MDT discussion.	Mr D Good	September 2023
7i & 7ii	Mr Good and Dr A Sundaramurthy to send a reminder to all clinicians to register patients for MDT discussion.	Mr D Good / Dr A Sundaramurthy	September 2023
15i	Departments are encouraged to confirm metastatic burden recording as high or low.	Mr D Good / Dr A Sundaramurthy	September 2023

Clinical Recommendation Summary 2020 – 2021

QPI	Action required	Lead	Progress at Board Level
2&4	Suggest removing cystoprostatectomy incidental findings from this QPI at next Formal Review.	Lorna Bruce / QPI program	Kept as a treatment option after formal review.
4	If possible, archive this QPI at formal review or remove timeframe. Otherwise request that CNS teams register all patients with the MDT	Lorna Bruce / QPI program/ CNS teams	Not achieved at formal review. Ongoing.
5	UK audit has a measure for percentage of patients with Gleason 3+3 who undergo treatment with radiotherapy or surgery – consider for formal review	Lorna Bruce / QPI program	Completed. Not supported at formal review as additional QPI.
7i	SCAN Chair to write to outlier clinicians to remind registration at MDT	Alan McNeill	Completed.
7ii	This QPI is out-dated and requires to be reviewed in light of new additional therapies e.g., Abiraterone or Enzalutamide. Consider exclusion criteria for elderly patients unsuitable for chemotherapy on basis of age or co-morbidities and where cases patients are not reviewed by the Oncology service.	Lorna Bruce / QPI program	Change agreed and implemented after formal review.
11	QPI is out-dated and requires revision at formal review	Lorna Bruce / QPI program	Change agreed and implemented after formal review.
14ii	Borders lead to write to radiology head in Borders. Explore reasons why radiologists are not recording PI-RADS or Likert scores	Ben Thomas	Ongoing. Recording of PI-RADS or Likert score improved in 2021-22. Continue to monitor for 2022-23 report.
15i	Services to encourage burden recording as high or low	All Clinical Leads	Completed and improvement evident.

Prostate Cancer QPI Attainment Summary 2021-22		Target %	Borders			D&G			Fife			Lothian			SCAN		
QPI 2: Radiological Staging: High risk cases undergoing radical treatment, who had MRI + Bone scan.		95	N 28 D 29	96.6%	N 28 D 28	100%	N 58 D 58	100%	N 123 D 128	96.1%	N 237 D 243	97.5%					
QPI 4: MDT Meeting: Patients with prostate cancer discussed by MDT before treatment	Non-metastatic prostate cancer (TanyNanyM0)	95	N 65 D 69	94.2%	N 106 D 110	96.4%	N 157 D 167	94.0%	N 408 D 478	85.4%	N 736 D 824	89.3%					
	Metastatic prostate cancer (TanyNanyM1)	95	N 22 D 24	91.7%	N 21 D 28	75.0%	N 45 D 48	93.8%	N 98 D 122	80.3%	N 186 D 222	83.8%					
QPI 5: Surgical Margins: Positive margins in pathologically confirmed organ confined pT2 radical prostatectomy		≤20	Presented by Board of Surgery						N 30 D 115	26.1%	N 30 D 115	26.1%					
QPI 6: Surgical Volume: Radical prostatectomy /surgeon in 1 year		50+	Two of NHS Lothian consultants met the QPI target.														
QPI 7: Hormone Therapy and Docetaxel Chemotherapy	Hormone therapy within 31 days of MDM decision	95	N 22 D 23	95.7%	N 23 D 26	88.5%	N 54 D 57	94.7%	N 102 D 118	86.4%	N 201 D 224	89.7%					
	Docetaxel chemotherapy within 90 days of Hormones	40	N 0 D 14	0%	N 0 D 16	0%	N 13 D 31	41.9%	N 1 D 51	2.0%	N 14 D 112	12.5%					
QPI 8: Those undergoing prostatectomy who returned PROMs pre and post operatively (12-18 months) to assess continence.		50	Presented by Board of Surgery						N 104 D 183	56.8%	N 104 D 183	56.8%					
QPI 11: Patients under active surveillance who have bpMRI or mpMRI within 12-18 months of diagnosis.		95	N 2 D 8	25.0%	N 6 D 18	33.3%	N 6 D 20	30.0%	N 43 D 62	69.4%	N 57 D 108	52.8%					
QPI 14: Diagnostic Pre-biopsy MRI	Those for biopsy that had pre-biopsy bpMRI or mpMRI as initial investigation.	95	N 39 D 39	100%	N 62 D 62	100%	N 80 D 80	100%	N 279 D 282	98.9%	N 460 D 463	99.4%					
	Those that had pre biopsy bpMRI or mpMRI reported with PI-RADS/ Likert	95	N 14 D 63	22.2%	N 62 D 103	60.2%	N 117 D 169	69.2%	N 331 D 422	78.4%	N 524 D 757	69.2%					
QPI 15: Low Burden Metastatic Disease	Patients with metastatic prostate cancer in whom burden of disease is assessed.	95	N 24 D 24	100%	N 21 D 28	75.0%	N 47 D 57	82.5%	N 121 D 123	98.4%	N 213 D 232	91.8%					
	Those with low metastatic burden that receive radiotherapy.	60	N 1 D 6	16.7%	N 8 D 10	80.0%	N 4 D 9	44.4%	N 23 D 38	60.5%	N 36 D 63	57.1%					

Introduction and Methods

Cohort

This report covers patients newly diagnosed with prostate cancer in SCAN between 01/07/2021 and 30/06/2022. The results contained within this report are presented by NHS board of diagnosis, where the QPI relates to surgical outcomes the results has been presented by hospital of surgery.

Dataset and Definitions

The QPIs have been developed collaboratively with the three Regional Cancer Networks, Information Services Division (PHS), and Healthcare Improvement Scotland. QPIs are 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. NHS boards are required to report against QPIs as part of a mandatory, publicly reported programme at a national level.

The QPI dataset for prostate cancer was implemented from 01/07/2012 and this is the tenth publication of QPI results for prostate cancer within SCAN. The dataset had another formal review in 2022. Changes to QPIs and how it will be measured will be implemented and reported in the 2022-2023 report.

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 Audit Facilitator for Urological cancer.

Data capture focuses round the process for the weekly multidisciplinary meetings (MDM) ensuring that information is collected through routine process. Data is recorded in eCase.

Clinical Sign-Off: This report compares analysed data from individual Health Boards within SCAN 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.

QPI Dashboard

National QPI performance is now recorded on the SCRIS dashboard provided by PHS.

The SCRIS dashboard has all the different cancer QPIs contained in one place along with survival data for each when that becomes available. SCRIS requires individual user access and all interested parties are encouraged to sign up.

For guidance on registering for access, please follow this link:

<http://www.nssdiscovery.scot.nhs.uk/docs/discovery-registering-for-access-v1-4.pdf>

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	Jennifer Bruce Campbell Wallis
NHS Fife	Queen Margaret Hospital	Mr Nabeel Al-Shammary	Sarah Allan
SCAN & NHS Lothian	St John's Hospital Western General Hospital	Mr D Good Dr A Sundaramurthy	Adam Steenkamp

Data Quality

Estimate of Case Ascertainment

An estimate of case ascertainment (the percentage of the population with prostate cancer recorded in the audit) is made by 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 01/07/2021 to 30/06/2022

	Borders	D&G	Fife	Lothian	SCAN
Prostate Cancer	104	146	294	615	1159

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

Note: Extract of data taken from PHS Cancer Registry website: <https://www.isdscotland.org/Health-Topics/Cancer/Scottish-Cancer-Registry/>

	Borders	D&G	Fife	Lothian	SCAN
Cases from Audit	104	146	294	615	1159
Cancer Registry 5 Year Average	96	140	261	519	1017
Case Ascertainment %	108.3	104.3	112.6	118.5	114.0

Quality Assurance

All hospitals in the region participate in a Quality Assurance (QA) programme provided by the National Services Scotland Information Services Division (PHS). QA of the prostate cancer data was carried out in 2020 (2017-18 cohorts) and overall accuracy percentage results are shown below:

	Borders	D&G	Fife	Lothian	SCAN
Accuracy of data recording (%)	95.0	96.3	99.5	99.8	97.7

Clinical Sign-Off

This report compares data from reports prepared for individual hospitals and 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.
- Final report circulated to SCAN Urology Group and Clinical Governance Groups on 4 August 2023.

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

QPI 2: Radiological Staging – High Risk - Target = 95%

Title: Patients with high risk prostate cancer, who are suitable for radical treatment, should be evaluated for locally advanced, nodal or bony metastatic disease.

Numerator = Number of patients with high risk prostate cancer undergoing radical treatment who have an MRI of the prostate and isotope bone scan (or alternative whole body MRI evaluation).

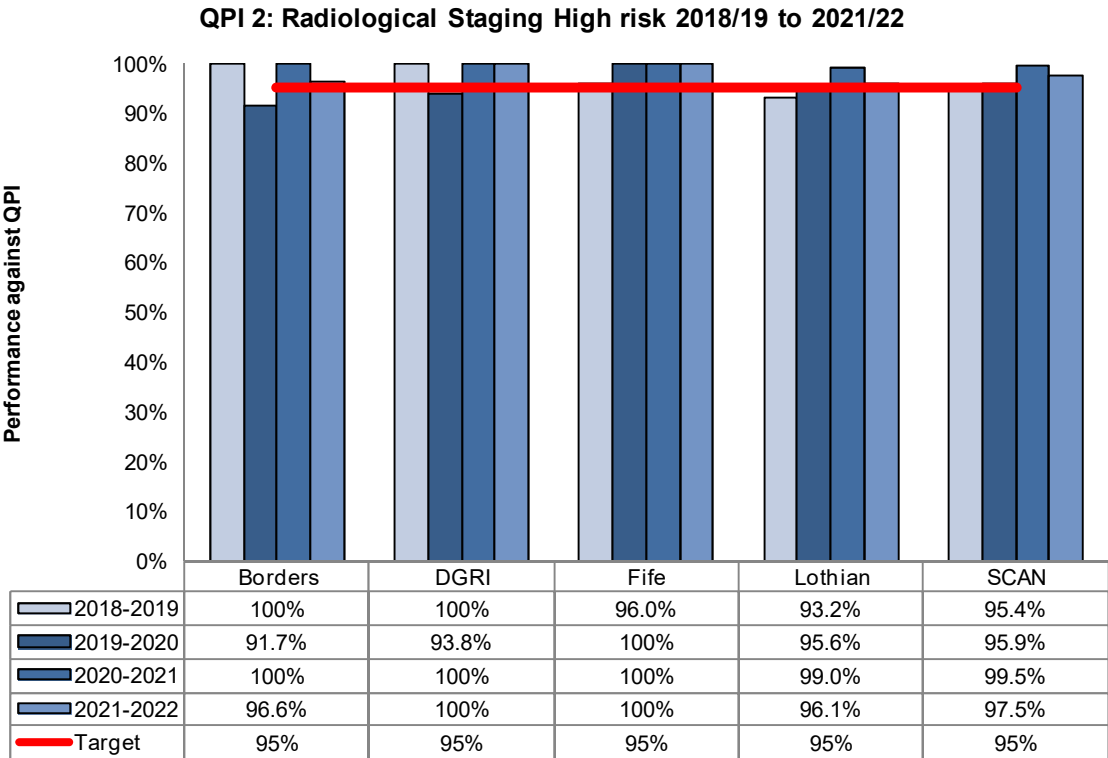
Denominator = All patients with high risk prostate cancer undergoing radical treatment.

Exclusions: Patients unable to undergo an MRI scan, patients who decline MRI and Patients with T2c tumours (with no other high risk factors).

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2021-2022 cohort	104	146	294	615	1159
Excluded from analysis	0	4	1	18	23
Ineligible for analysis	72	109	235	469	885
Numerator	28	28	58	123	237
Not recorded for numerator	0	0	0	0	0
Denominator	29	28	58	128	243
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	3	5	0	0	8
% Performance	96.6	100	100	96.1	97.5

Comments: All boards met the QPI.

**As per international staging guidelines bone scan is not required for low risk patients. For these patients the cM stage is radiologically staged as cNx or “Not Recorded” These cases are regarded as cM0 for audit.



QPI 4i: Multi-Disciplinary Team (MDT) Meeting - Target = 95%

Title: Patients should be discussed by a multidisciplinary team prior to definitive treatment.

Numerator = Number of patients with non-metastatic prostate cancer (TanyNanyM0) discussed at the MDT before definitive treatment.

Denominator = All patients with non-metastatic prostate cancer (TanyNanyM0).

Exclusion = Patients who died before first treatment.

The tolerance within this target accounts for situations where patients require treatment urgently or where prostate cancer is an incidental finding at surgery.

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2021-2022 cohort	104	146	294	615	1159
Excluded from analysis	0	0	0	0	0
Ineligible for analysis	24	35	118	128	305
Numerator	65	106	157	408	736
Not recorded for numerator	2	0	0	7	9
Denominator	69	110	167	478	824
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	11	1	9	9	30
% Performance	94.2	96.4	94.0	85.4	89.3

Comments:

BGH: The QPI target was not met showing a shortfall of 0.8% (4 cases) 3 started on hormone treatment before MDM. 1 was not discussed at MDM (treatment was unlikely to change at MDM)

Fife: The QPI target was not met showing a shortfall of 1% (10 cases) 10 had treatment commenced before MDM discussion.

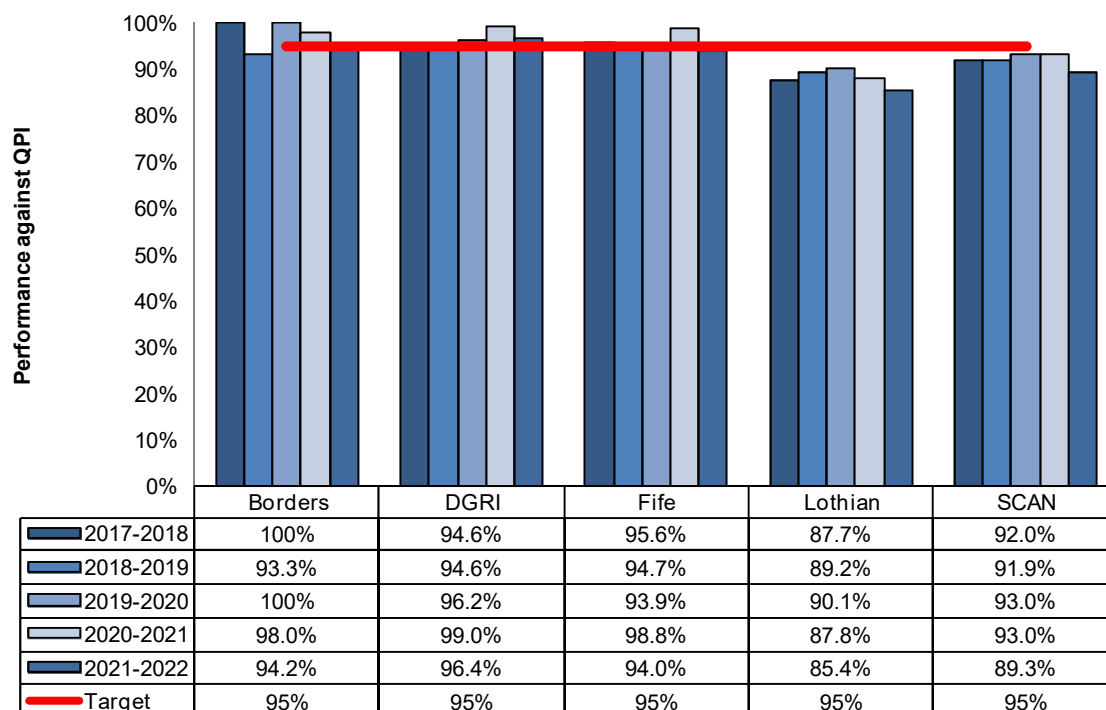
Lothian: The QPI target was not met showing a shortfall of 9.6% (70 cases) 36 didn't have MDM discussion pre treatment. 6 were diagnosed incidentally at Cystoprostatectomy. 7 still waited for definitive treatment at time of reporting. 21 had definitive treatment before MDM discussion. Excluding cystoprostatectomies from the calculation, the result would improve to 86.2%

Comment: Patients who were not considered for radical treatment has not been referred for MDT discussion. Clinically diagnosed patients, who started on hormone therapy prior to MDT discussion. Patients incidentally diagnosed at Cystoprostatectomy.

Action: Mr Good to send a reminder to all clinicians to register patients for MDT discussion.

**Consider out of review change for the QPI: Adding a timeline +/- 30 days. Add exclusion for patients not for active treatment (watchful waiting or best supportive care).

QPI 4i: MDM Discussion - Non-Metastatic 2017/18 to 2021/22



QPI 4ii: Multi-Disciplinary Team (MDT) Meeting - Target = 95%

Title: Patients should be discussed by a multidisciplinary team prior to definitive treatment.

Numerator = Number of patients with metastatic prostate cancer (TanyNanyM1) discussed at the MDT within 42 days of commencing treatment.

Denominator = All patients with metastatic prostate cancer (TanyNanyM1).

Exclusion = Patients who died before first treatment.

The tolerance within this target accounts for situations where patients require treatment urgently or where prostate cancer is an incidental finding at surgery.

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2021-2022 cohort	104	146	294	615	1159
Excluded from analysis	0	0	0	1	1
Ineligible for analysis	69	117	237	483	906
Numerator	22	21	45	98	186
Not recorded for numerator	0	0	0	0	0
Denominator	24	28	48	122	222
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	11	1	9	9	30
% Performance	91.7	75.0	93.8	80.3	83.8

Comments:

Borders: The QPI target was not met showing a shortfall 3.3% (2 cases) 1 not discussed at MDM. 1 started Hormone treatment but outwith the 6 week timescale.

D&G: The QPI target was not met showing a shortfall of 20% (7 cases) 5 started Hormone treatment before MDM but outside of the 6 week timeframe. 2 not discussed at MDM.

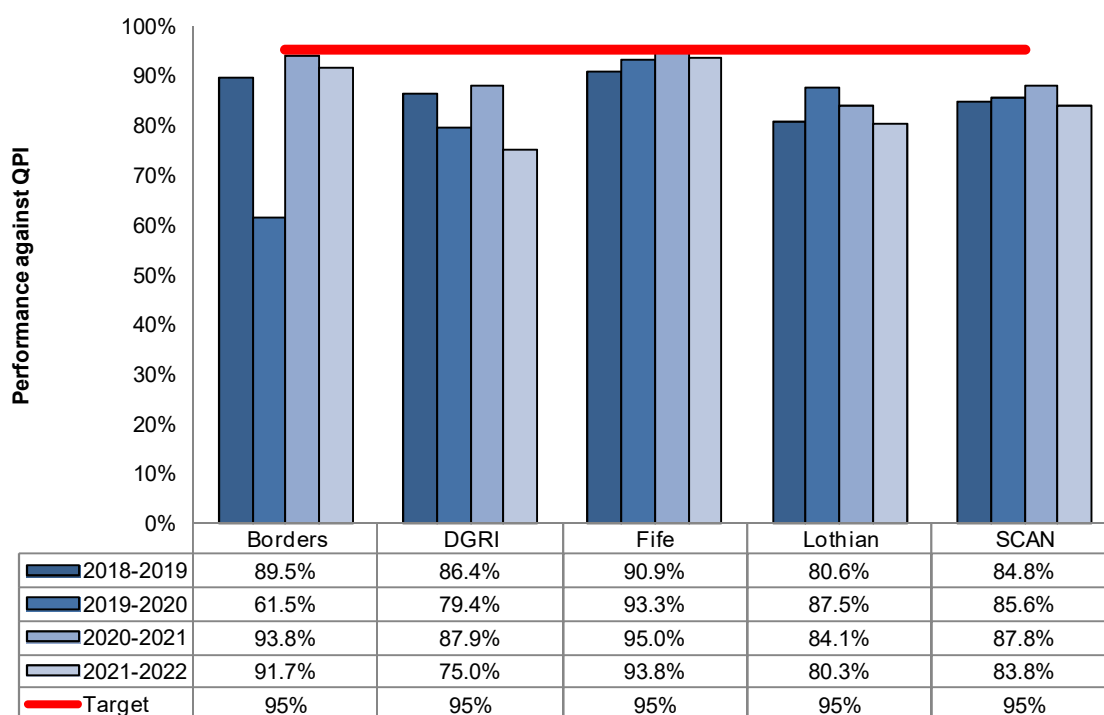
Fife: The QPI target was not met showing a shortfall of 1.2% (3 cases) 1 not discussed at MDM. 2 discussed at MDM outwith 6 weeks of starting definitive treatment.

Lothian: The QPI target was not met showing a shortfall of 14.7% (24 cases) 10 were not discussed at MDM. 14 had treatment but outwith the prescribed 42 days.

Comment: Patients who were not for active treatment (watchful waiting and best supportive care) has not been referred for MDT discussion. We identified a timing issue for patients treated with hormone therapy. In all cases, patients were treated appropriately.

Action: Mr Good to send a reminder to all clinicians to register patients for MDT discussion.

QPI 4ii: MDM Discussion - Metastatic 2018/19 to 2021/22



QPI 5: Surgical Margins - Target ≤ 20%

Title: Organ confined prostate cancers which are surgically treated with radical prostatectomy should be completely excised.

Numerator = Number of patients with stage pT2 prostate cancer who underwent radical prostatectomy in which tumour is present at the margin.

Denominator = All patients with stage pT2 prostate cancer who underwent radical prostatectomy (cohort based on surgeries performed in 2021-2022 rather than diagnoses in 2021-2022).

No exclusions.

By Board of Surgery

Target ≤ 20%	Lothian	SCAN
Numerator	30	30
Not recorded for numerator	0	0
Denominator	115	115
Not recorded for exclusion	0	0
Not recorded for denominator	1	1
% Performance	26.1	26.1

Note: All surgery was performed in Lothian. Since June 2016 NHS Lothian exclusively performed robotic assisted prostatectomies on Borders, D&G and most Fife patients.

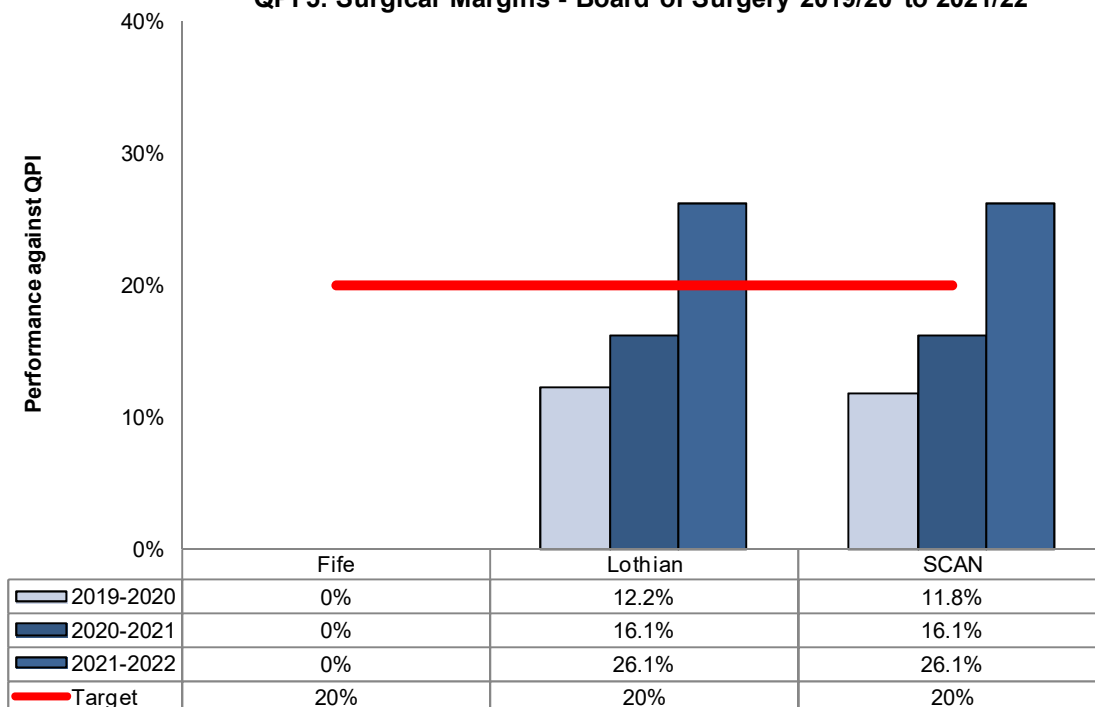
Comment: The margin rate has gone up driven by focal apical margins which are not as clinically significant. Reassuringly, margin rates have been lower last year. This year has coincided with a large amount of disruption due to the service being moved from its normal home in the western general hospital with a complete change in team.

To consider for the next formal review: To exclude apical margins and to look at radial margins positivity.

Moving to St John's hospital (away from Spire Hospital 2020-21 location) and setting up new service with clinical teams had an impact on outcomes.

Action: No Action.

QPI 5: Surgical Margins - Board of Surgery 2019/20 to 2021/22



QPI 6: Volume of Cases per Surgeon - Target ≥ 50

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

These figures are reported using QPI Audit data, as agreed at the QPI formal review.

Cohort based on surgeries performed in 2021-2022 rather than diagnoses in 2021-2022.

Number of prostatectomy procedures by GMC number in 2021/22				
	A	B	C	D
SCAN Audit figures	2	116	98	9

Consultant A performed 2 local surgical procedures deemed necessary due to clinical requirements. Consultant D left NHS service in 2021-22.

QPI 7i: Immediate Hormone Therapy - Target = 95%

Title: Patients with metastatic prostate cancer should undergo hormone therapy within 31 days of being discussed at MDM.

Numerator = Number of patients presenting with metastatic prostate cancer (TanyNanyM1) treated with hormone therapy (LHRH agonist monotherapy, maximum androgen blockade or bilateral orchidectomy) within 31 days of being discussed at MDM.

Denominator = All patients presenting with metastatic prostate cancer (TanyNanyM1).

Exclusions = Patients documented to have declined hormone therapy and patients enrolled in clinical trials.

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2021-2022 cohort	104	146	294	615	1159
Excluded from analysis	1	1	0	5	7
Ineligible for analysis	69	118	228	483	898
Numerator	22	23	54	102	201
Not recorded for numerator	0	0	0	0	0
Denominator	23	26	57	118	224
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	11	1	9	9	30
% Performance	95.7	88.5	94.7	86.4	89.7

Comments:

D&G: The QPI target was not met showing a shortfall of 6.5% (3 cases) 1 had Bicalutamide only. 1 didn't have Hormone therapy as recommended by Oncology team. 1 had no MDM discussion.

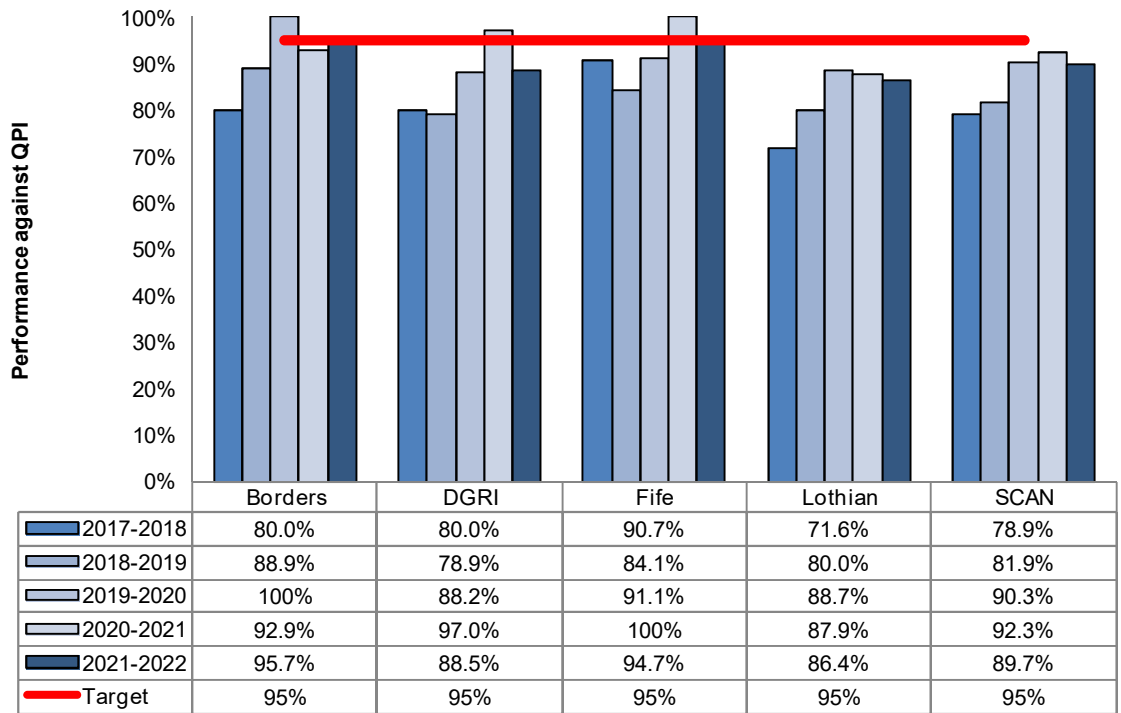
Fife: The QPI target was not met showing a shortfall of 0.3% (3 cases) 1 was not discussed at MDM - Started on Hormone treatment. 1 was never fit enough to start treatment. 1 didn't start treatment within 31 days from MDM discussion.

Lothian: The QPI target was not met showing a shortfall of 8.6% (16 cases) 11 didn't have MDM discussion. 3 had Hormone treatment but outwith the 31 day timeframe. 2 didn't start Hormone treatment.

Comment: Patients who were not for active treatment (watchful waiting and best supportive care) has not been referred for MDT discussion. We identified a timing issue for patients treated with hormone therapy. In all cases, patients were treated appropriately.

Action: Mr Good to send a reminder to all clinicians to register patients for MDT discussion.

QPI 7i: Hormone Therapy 2017/18 to 2021/22



QPI 7ii: Immediate Hormone Therapy and Docetaxel Chemotherapy - Target = 40%

Title: Patients with metastatic prostate cancer should undergo immediate hormone therapy and chemotherapy where appropriate

Numerator = Number of patients presenting with metastatic prostate cancer (TanyNanyM1) treated with immediate hormone therapy and Docetaxel chemotherapy.

Denominator = All patients presenting with metastatic prostate cancer (TanyNanyM1).

Exclusions = Patients documented to have declined immediate hormone therapy. Patients documented to have declined chemotherapy. Patients enrolled in clinical trials.

Target 40%	Borders	D&G	Fife	Lothian	SCAN
2021-2022 cohort	104	146	294	615	1159
Excluded from analysis	10	12	NR	76	98
Ineligible for analysis	69	117	254	479	919
Numerator	0	0	13	1	14
Not recorded for numerator	0	0	0	0	0
Denominator	14	16	31	51	112
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	11	1	9	9	30
% Performance	0	0	41.9	2.0	12.5

Comments:

Borders: The QPI target was not met showing a shortfall of 40% (14 cases) Docetaxel is not often used having been replaced by other (ARTA) treatments.

D&G: The QPI target was not met showing a shortfall of 40% (16 cases) Docetaxel is not often used having been replaced by other (ARTA) treatments.

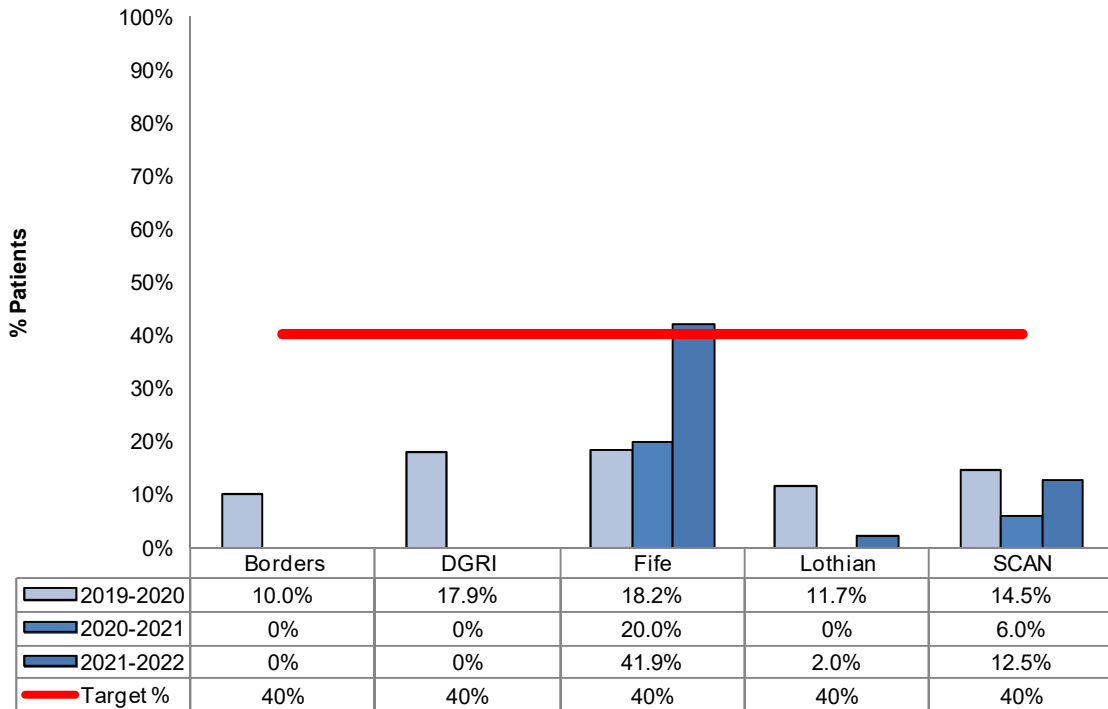
Lothian: The QPI target was not met showing a shortfall of 38% (50 cases) Docetaxel is not often used having been replaced by other (ARTA) treatments.

SCAN Comment: Docetaxel is rarely used, having been replaced by other ARTA treatments. All patients were appropriately treated.

Action: No Action.

** This QPI has been updated at formal review to reflect the change in clinical practice. The 2022-23 report will better reflect clinical practice.

QPI 7ii - Hormone Therapy + Chemotherapy 2019/20 to 2021/22



QPI 8: Post Surgical Incontinence - Target = 50%

Title: Post surgical incontinence for patients with prostate cancer should be assessed using a validated PROMs (Patient Reported Outcome Measures) tool.

Numerator = Patients with prostate cancer undergoing radical prostatectomy that have returned a PROMs tool both pre-operatively and post-operatively (12-18 months following surgery) for assessment of incontinence.

Denominator = All patients with prostate cancer undergoing radical prostatectomy.

Exclusions = Patients who undergo salvage prostatectomy and patients who receive adjuvant radiotherapy within 12 months of surgery.

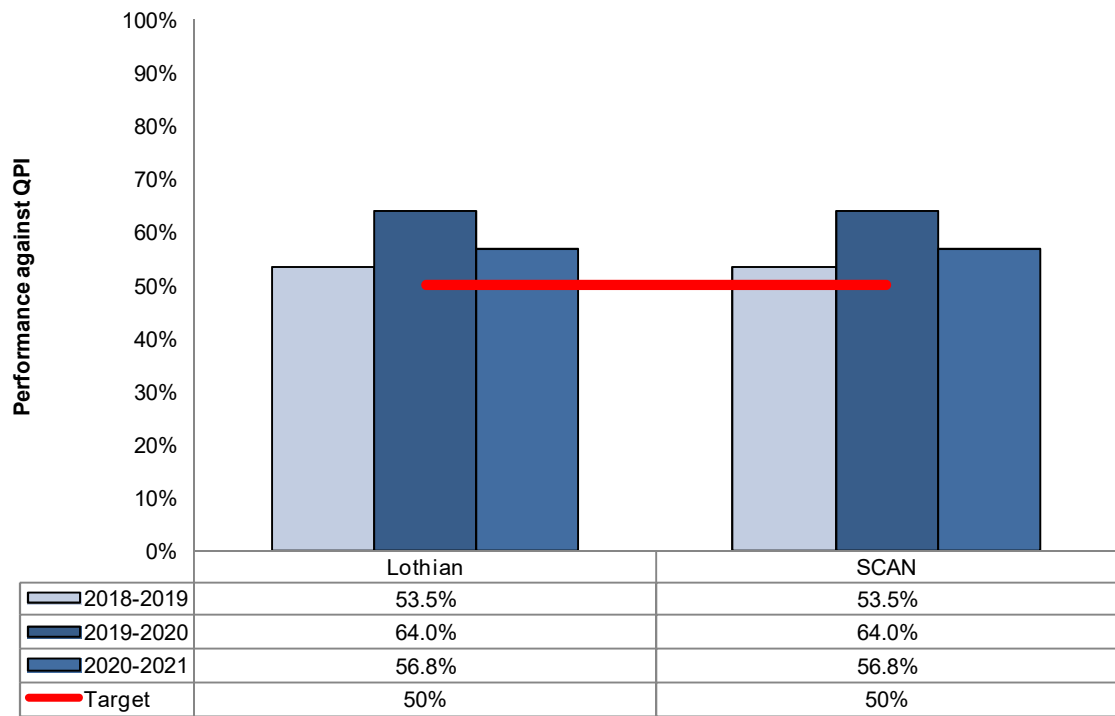
By Board of Surgery

Target 50%	Fife	Lothian	SCAN
2020-2021 cohort	N/A	N/A	939
Excluded from analysis	N/A	N/A	0
Ineligible for analysis	N/A	N/A	756
Numerator	N/A	104	104
Not recorded for numerator	N/A	78	78
Denominator	N/A	183	183
Not recorded for exclusion	N/A	0	0
Not recorded for denominator	N/A	0	0
% Performance	N/A	56.8	56.8

Note: All surgery was performed in Lothian.

Comment: For the 2022-23 report (and after formal review) – ALL radical treatment for prostate cancer will be added to this QPI. That will require access for all health boards to the RedCap PROMs database. When the database has been incorporated at Public Health Scotland, all clinical and audit teams will be able to apply for access.

QPI 8i: Post Surgical Incontinence - Board of Surgery 2018/19 to 2020/21



QPI 11: Management of Active Surveillance - Target = 95%

Title: Patients under active surveillance for prostate cancer should undergo bi-parametric MRI (bpMRI) or multi parametric MRI (mpMRI) within 12-18 months of diagnosis.

Numerator = Patients with prostate cancer under active surveillance who undergo bpMRI or mpMRI within 12-18 months of diagnosis.

Denominator = All patients with prostate cancer under active surveillance.

Exclusions = Patients unable to undergo an MRI scan and patients who decline MRI.

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2020-2021 cohort	70	149	230	490	939
Excluded from analysis	0	0	NR	10	10
Ineligible for analysis	62	131	210	418	821
Numerator	2	6	6	43	57
Not recorded for numerator	0	0	0	0	0
Denominator	8	18	20	62	108
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	25.0	33.3	30.0	69.4	52.8

Comments:

Borders: The QPI target was not met showing a shortfall of 70% (6 cases) 3 received follow up scan outwith 12-18 month period. 1 had no follow up scan. 1 did not have diagnostic scan. 1 delayed due to clinic capacity issues.

D&G: The QPI target was not met showing a shortfall of 61.7% (12 cases) 9 had MRI outwith the timeframe (range 229-840 days). 2 had no surveillance MRI. 1 had no scan but died during 12-18 surveillance window.

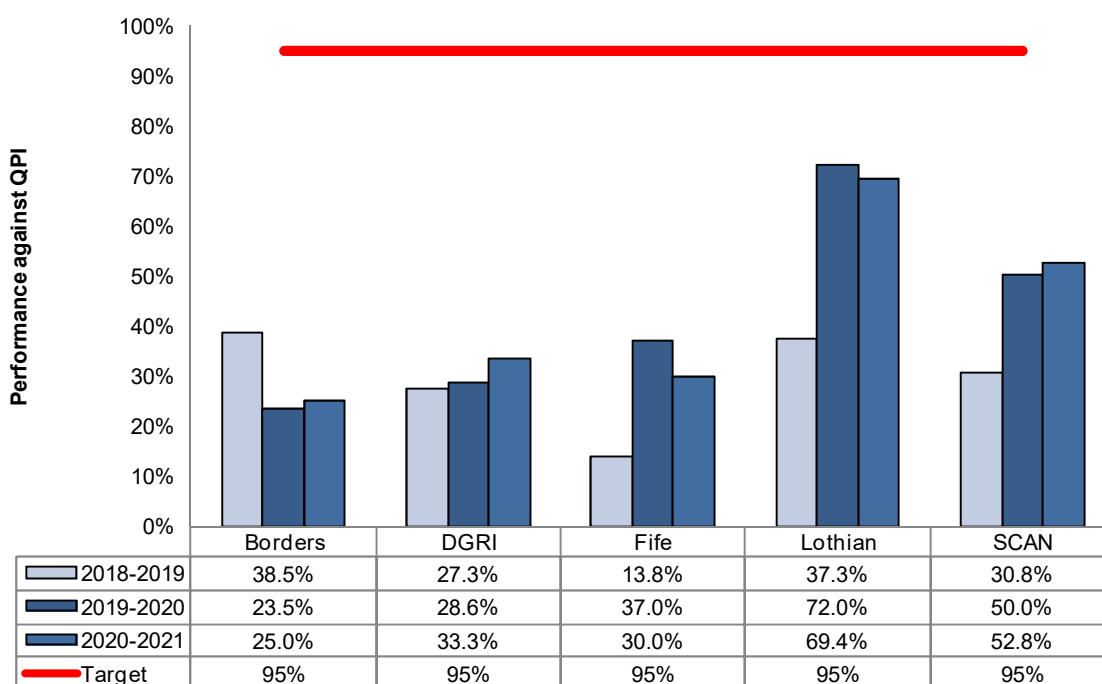
Fife: The QPI target was not met showing a shortfall of 65% (14 cases) 3 didn't have a surveillance MRI. 11 had surveillance MRI scans outwith the prescribed 12-18 months from diagnosis.

Lothian: The QPI target was not met showing a shortfall of 25.6% (19 cases) all patients had surveillance MRI scans but these 19 had their scans outwith the prescribed 12 - 18 months from diagnosis.

SCAN Comment: This QPI has been changed at the formal review to exclude patients who undergo radical treatment within 12 months. The timeline for surveillance imaging and or biopsy has been updated also.

Action: No Action.

QPI 11: Surveillance MRI 12-18 months from Diagnosis 2018/19 to 2020/21



QPI 12: 30 Day Mortality following SACT - Target = <10%

Title: Proportion of patients with prostate cancer who die within 30 days of SACT treatment.

Numerator = Patients with prostate cancer who undergo SACT that die within 30 days of treatment.

Denominator = All patients with prostate cancer who undergo SACT (no exclusions)

This QPI has been replaced with a standardised 30 day SACT Mortality QPI across all the tumour types covered by the QPI program.

Measurement is being revised to use data from Chemocare (electronic chemotherapy prescribing system) for reporting in order to utilise existing data and provide an accurate picture of all patients with prostate cancer undergoing chemotherapy, rather than the subset of all diagnosed in the audit year cohort only. Future reporting will be part of the National SACT Program rather than the QPI program.

Progress has been complicated by the differences in the 5 instances of Chemocare across Scotland and a date for initial reporting is yet to be confirmed at the time of writing this report.

QPI 14i: Diagnostic Pre-biopsy MRI - Target = 95%

Title: Patients with prostate cancer that undergo biopsy and had a pre-biopsy bpMRI or mpMRI as their first line diagnostic investigation.

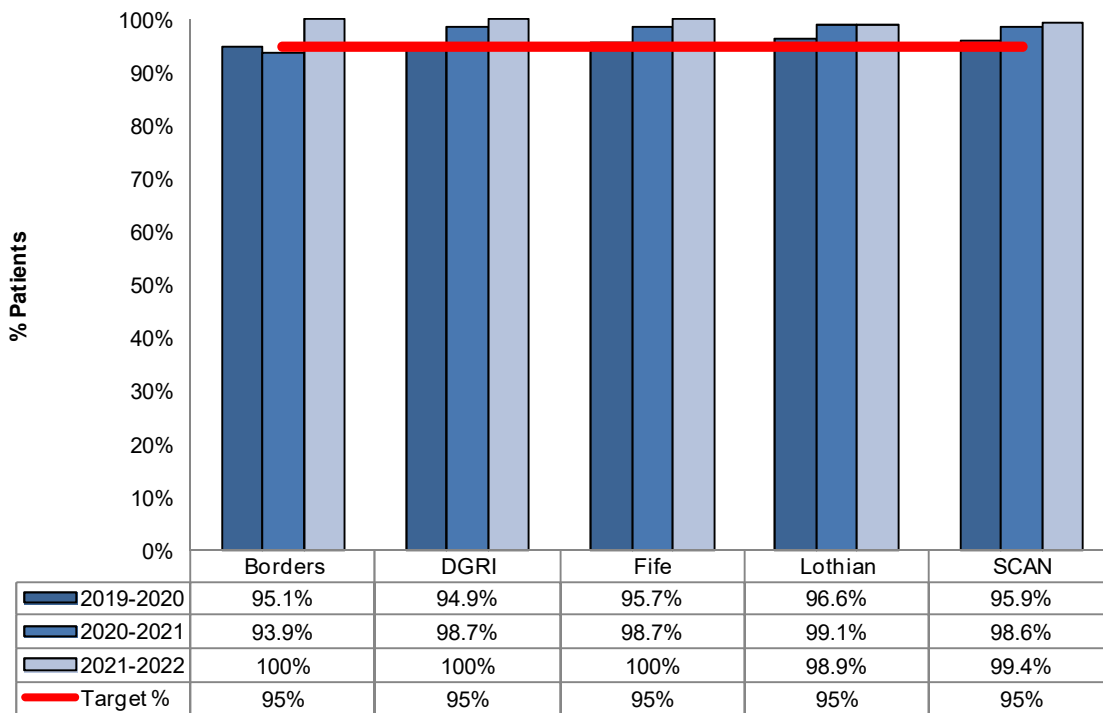
Numerator = Patients with prostate cancer who undergo biopsy that have a pre-biopsy bpMRI or mpMRI as their first line diagnostic investigation.

Denominator = All patients with prostate cancer who undergo biopsy.

Exclusions = Patients unable to undergo an MRI scan, decline MRI, have undergone TURP, have undergone laser enucleation, or those with locally advanced (Clinical T3 and above) and / or M1 disease.

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2021-2022 cohort	104	146	294	615	1159
Excluded from analysis	55	51	NR	275	381
Ineligible for analysis	10	33	214	58	315
Numerator	39	62	80	279	460
Not recorded for numerator	0	0	0	0	0
Denominator	39	62	80	282	463
Not recorded for exclusion	7	12	0	1	20
Not recorded for denominator	0	0	0	0	0
% Performance	100	100	100	98.9	99.4

QPI 14i - Diagnostic Pre-biopsy MRI 2019/20 to 2021/22



QPI 14ii: Diagnostic Pre-biopsy MRI - Target = 95%

Title: Patients with prostate cancer who undergo biopsy and had a pre-biopsy bpMRI or mp MRI as their first line diagnostic investigation, with imaging reported using a PI-RADS/Likert system of grading.

Numerator = Patients with prostate cancer who undergo biopsy that have a pre-biopsy bpMRI or mpMRI as their first line diagnostic investigation with imaging reported using a PI-RADS/Likert system of grading.

Denominator = All patients with prostate cancer who undergo biopsy that have a pre-biopsy bpMRI or mpMRI as their first line diagnostic investigation.

Exclusions = None.

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2021-2022 cohort	104	146	294	615	1159
Excluded from analysis	0	0	0	0	0
Ineligible for analysis	41	43	125	193	402
Numerator	14	62	117	331	524
Not recorded for numerator	49	41	52	91	233
Denominator	63	103	169	422	757
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	22.2	60.2	69.2	78.4	69.2

Comments:

Borders: The QPI target was not met showing a shortfall of 72.8% (49 cases) Likert Score was not recorded.

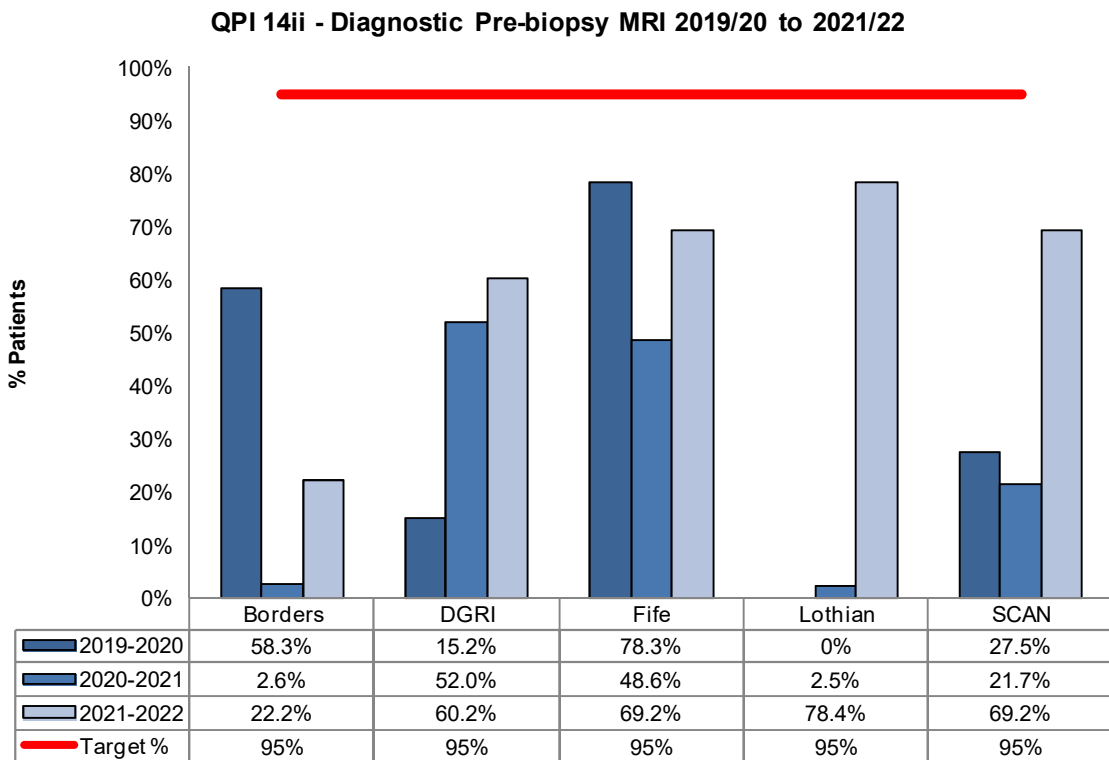
D&G: The QPI target was not met showing a shortfall of 34.8% (41 cases) Likert Score was not recorded.

Fife: The QPI target was not met showing a shortfall of 25.8% (52 cases) No Likert score assigned to MRI scans.

Lothian: The QPI target was not met showing a shortfall of 16.6% (91 cases) Likert Score was not recorded at reporting of diagnostic MRI scans.

Action: No Action.

**Audit staff in Borders noticed a marked improvement in this QPI. This will be reflected in the 2022-23 report.



QPI 15i: Low Burden Metastatic Disease - Target = 95%

Title: Patients with metastatic prostate cancer who have their burden of disease assessed.

Numerator = Patients with metastatic prostate cancer in whom burden of disease is assessed. (MRI, Bone Scan or CT is the current method routinely used within NHS Scotland to assess metastatic burden of disease.)

Denominator = All patients with metastatic prostate cancer. (No exclusions)

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2021-2022 cohort	104	146	294	615	1159
Excluded from analysis	0	0	0	0	0
Ineligible for analysis	69	117	228	483	897
Numerator	24	21	47	121	213
Not recorded for numerator	0	7	10	2	19
Denominator	24	28	57	123	232
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	11	1	9	9	30
% Performance	100	75.0	82.5	98.4	91.8

Comments:

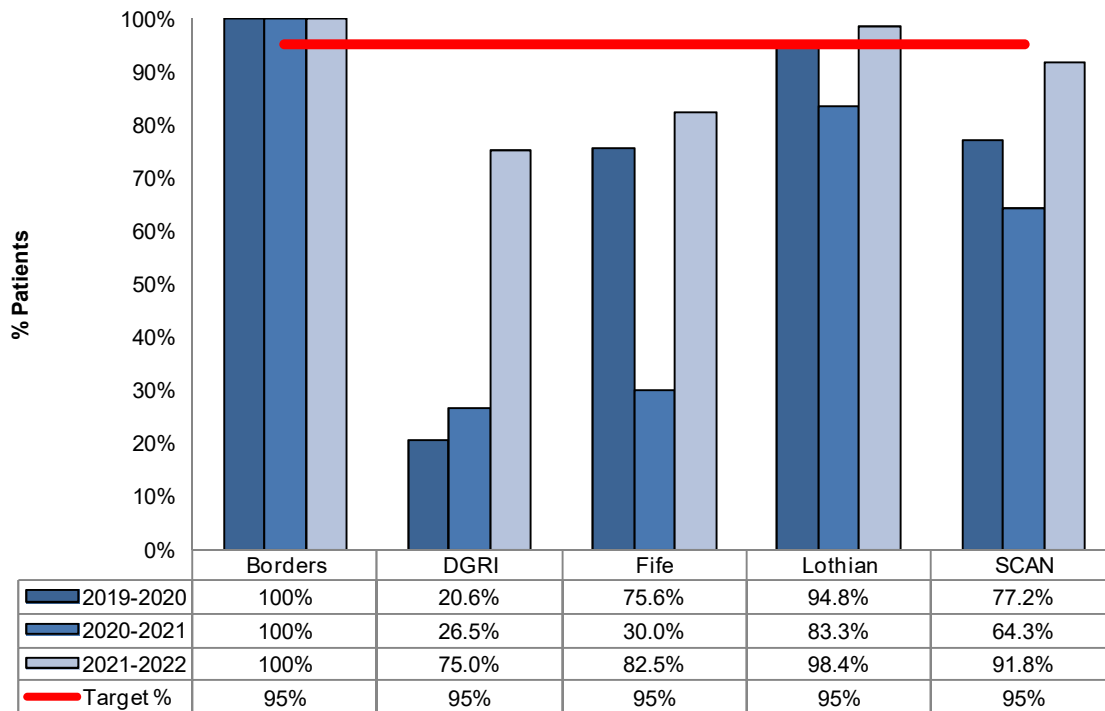
D&G: The QPI target was not met showing a shortfall of 20% (7 cases) Burden of Metastatic disease - not recorded. Some bone scans reported in Ayr and Carlisle.

Fife: The QPI target was not met showing a shortfall of 12.5% (10 cases) 10 did not have burden of metastatic disease recorded. 9 did not have cM stage from TNM recorded for denominator.

SCAN Comment: Radiotherapy to the prostate is influenced by this measure. 4 or less sites of metastatic disease would be considered low volume / burden. 5 or more would be considered high volume / burden.

Action Departments are encouraged to confirm metastatic burden recording as high or low.

QPI 15i - Low Burden Metastatic Disease 2019/20 to 2021/22



QPI 15ii: Low Burden Metastatic Disease - Target = 60%

Title: Patients with metastatic prostate cancer who has their burden of disease assessed, and undergoes radiotherapy if metastatic burden is low. (Radiotherapy regimes included in the measurement of this QPI are 36Gy (6 fractions) or a minimum of 50Gy (20 fractions).

Numerator = Patients with metastatic prostate cancer who have a low metastatic burden that receive radiotherapy.

Denominator = All patients with metastatic prostate cancer who have a low metastatic burden.

Exclusions = Patients documented to have declined radiotherapy treatment.

Target 60%	Borders	D&G	Fife	Lothian	SCAN
2021-2022 cohort	104	146	294	615	1159
Excluded from analysis	0	0	0	1	1
Ineligible for analysis	95	129	267	574	1065
Numerator	1	8	4	23	36
Not recorded for numerator	0	0	0	0	0
Denominator	6	10	9	38	63
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	3	7	18	2	30
% Performance	16.7	80.0	44.4	60.5	57.1

Comments:

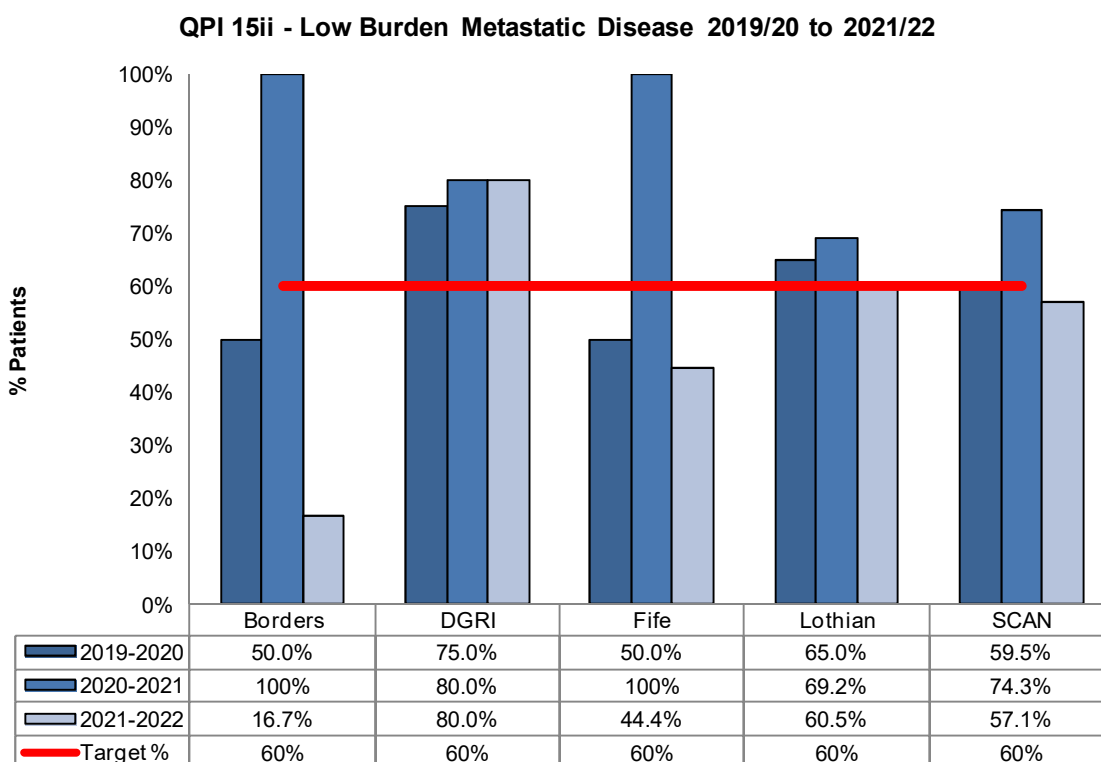
Borders: The QPI target was not met showing a shortfall of 43.3% (5 cases) 1 had ARTA only. 3 had Hormone treatment only, as recommended at MDM. 1 not fit for Radiotherapy.

Fife: The QPI target was not met showing a shortfall of 15.6% (5 cases) 3 were contraindicated for radiotherapy. 2 had hormone treatment only.

Action: No Action.

** Small numbers for Borders, D&G and Fife. Exclusion criteria should be considered for the next formal review.

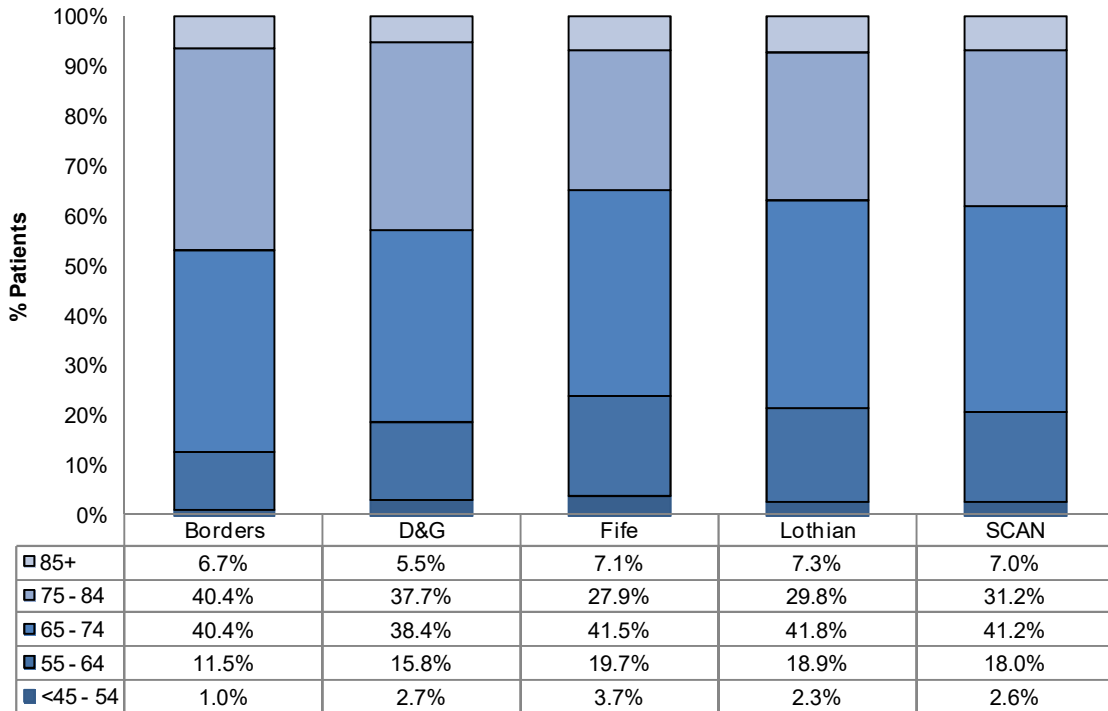
Clinicians to be more clear in correspondence if patients are fit for Radiotherapy or not.



Age Analysis

Age Analysis	Borders	D&G	Fife	Lothian	SCAN
Under 45	0	0	0	2	2
45 - 49	0	0	0	1	1
50 - 54	1	4	11	11	27
55 - 59	3	8	22	41	74
60 - 64	9	15	36	75	135
65 - 69	18	24	50	127	219
70 - 74	24	32	72	130	258
75 - 79	31	35	51	118	235
80 - 84	11	20	31	65	127
85+	7	8	21	45	81
Total	104	146	294	615	1159

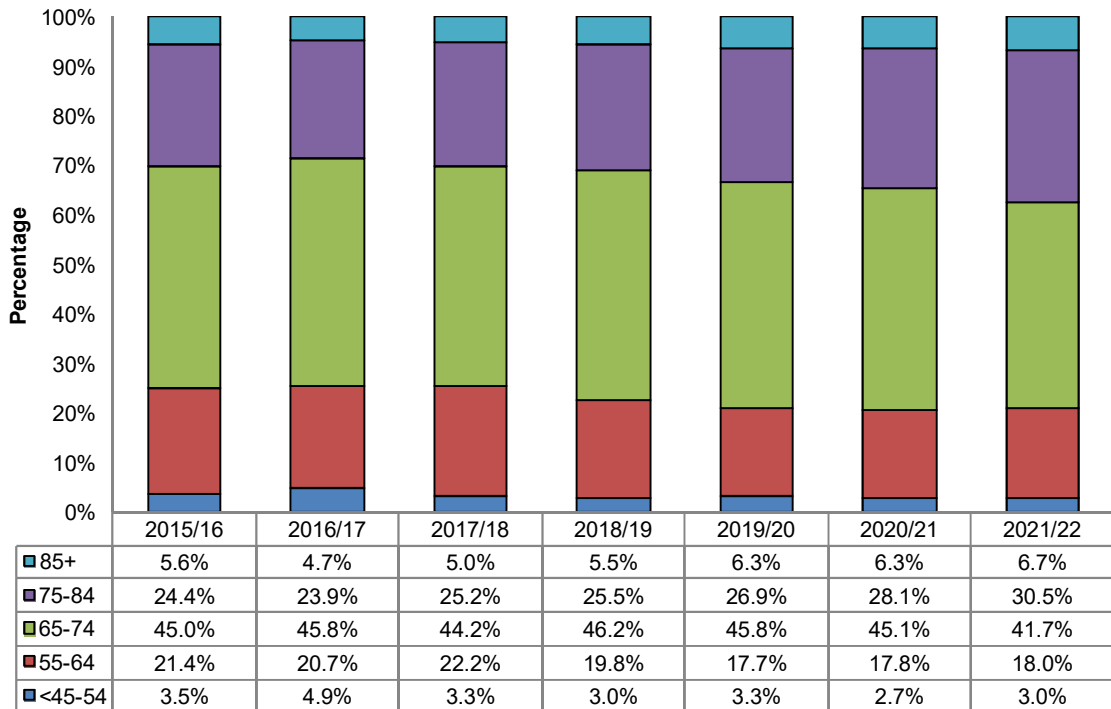
Age at Diagnosis 2021/22



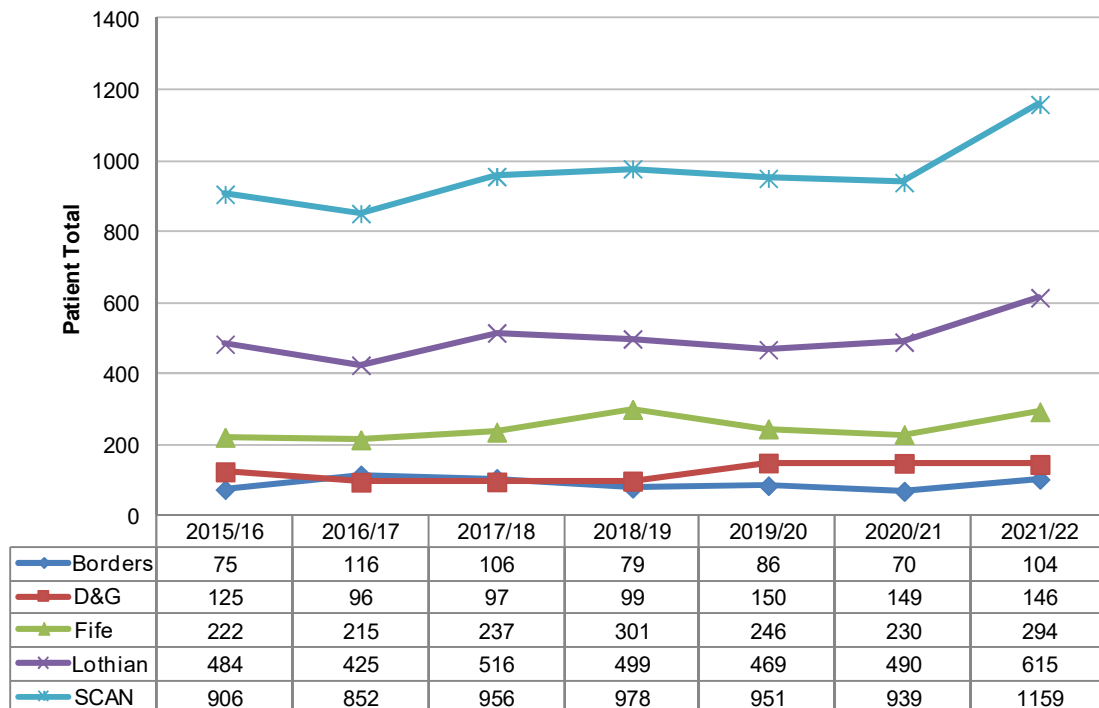
Treatment Types

Health Board	Primary Hormones		Active Surveillance		WW / BSC		Radical Radiotherapy		Brachytherapy		Surgery	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Borders	40	38.5%	14	13.5%	1	1.0%	27	26.0%	4	3.9%	18	17.3%
D&G	41	28.1%	19	13.0%	21	14.4%	30	20.5%	2	1.4%	26	17.8%
Fife	74	25.2%	35	12.0%	33	11.0%	61	20.7%	5	1.7%	57	19.0%
Lothian	146	23.7%	101	16.4%	78	12.7%	137	22.3%	34	5.5%	132	17.4%
SCAN	301	28.9%	169	13.7%	133	9.8%	255	22.4%	45	3.1%	208	17.9%

Age at Diagnosis - SCAN Total over 7 years



New Prostate Cancer totals by Year of Diagnosis



Prostate Cancer QPI Attainment Summary 2020-21		Target %	Borders		D&G		Fife		Lothian		SCAN	
QPI 2: Radiological Staging: High risk cases undergoing radical treatment, who had MRI + Bone scan.		95	N 10 D 10	100%	N 23 D 23	100%	N 57 D 57	100%	N 95 D 96	99.0%	N 185 D 186	99.5%
QPI 4: MDT Meeting: Patients with prostate cancer discussed by MDT before treatment	Non-metastatic prostate cancer (TanyNanyM0)	95	N 48 D 49	98.0%	N 104 D 105	99.0%	N 170 D 172	98.8%	N 325 D 370	87.8%	N 647 D 696	93.0%
	Metastatic prostate cancer (TanyNanyM1)	95	N 15 D 16	93.8%	N 29 D 33	87.9%	N 38 D 40	95.0%	N 90 D 107	84.1%	N 172 D 196	87.8%
QPI 5: Surgical Margins: Positive margins in pathologically confirmed organ confined pT2 radical prostatectomy		≤20	Presented by Board of Surgery						N 20 D 124	16.1%	N 20 D 124	16.1%
QPI 6: Surgical Volume: Radical prostatectomy /surgeon in 1 year		50+	Two of NHS Lothian consultants met the QPI target.									
QPI 7: Hormone Therapy and Docetaxel Chemotherapy	Hormone therapy within 31 days of MDM decision	95	N 13 D 14	92.9%	N 32 D 33	97.0%	N 40 D 40	100%	N 94 D 107	87.9%	N 179 D 194	92.3%
	Docetaxel chemotherapy within 90 days of Hormones	40	N 0 D 2	0%	N 0 D 15	0%	N 5 D 25	20.0%	N 0 D 41	0%	N 5 D 83	6.0%
QPI 8: Those undergoing prostatectomy who returned PROMs pre and post operatively (12-18 months) to assess continence.		50	Presented by Board of Surgery						N 110 D 172	64.0%	N 110 D 172	64.0%
QPI 11: Patients under active surveillance who have bpMRI or mpMRI within 12-18 months of diagnosis.		95	N 4 D 17	23.5%	N 4 D 14	28.6%	N 10 D 27	37.0%	N 36 D 50	72.0%	N 54 D 108	50.0%
QPI 13: Patients diagnosed with prostate cancer consented for a clinical trial / research study.		15	N 4 D 94	4.3%	N 3 D 131	2.3%	N 3 D 252	1.2%	N 54 D 514	10.5%	N 64 D 991	6.5%
QPI 14: Diagnostic Pre-biopsy MRI	Those for biopsy that had pre-biopsy bpMRI or mpMRI as initial investigation.	95	N 31 D 33	93.9%	N 78 D 79	98.7%	N 76 D 77	98.7%	N 223 D 225	99.1%	N 408 D 414	98.6%
	Those that had pre biopsy bpMRI or mpMRI reported with PI-RADS/ Likert	95	N 1 D 39	2.6%	N 52 D 100	52.0%	N 67 D 138	48.6%	N 8 D 314	2.5%	N 128 D 591	21.7%
QPI 15: Low Burden Metastatic Disease	Patients with metastatic prostate cancer in whom burden of disease is assessed.	95	N 17 D 17	100%	N 9 D 34	26.5%	N 12 D 40	30.0%	N 90 D 108	83.3%	N 128 D 199	64.3%
	Those with low metastatic burden that receive radiotherapy.	60	N 2 D 2	100%	N 4 D 5	80.0%	N 2 D 2	100%	N 18 D 26	69.2%	N 26 D 35	74.3%