

SOUTH EAST SCOTLAND CANCER NETWORK (SCAN) PROSPECTIVE CANCER AUDIT

Prostate Cancer 2019-20 Comparative Audit Report

Patients diagnosed 1st July 2019 to 30th June 2020

Prof A McNeill
SCAN Urology Group Chair

Mr B Thomas, NHS Borders
Miss Maria Bews-Hair, NHS Dumfries & Galloway
Mr A Rawlinson, NHS Fife
Prof A McNeill, NHS Lothian
Dr A Sundaramurthy, Prof D McLaren, NHS Lothian

Leanne Robinson, Cancer Audit Facilitator, NHS Borders
Campbell Wallis, Cancer Audit Facilitator, NHS Dumfries & Galloway
Alison Robertson, Audit Facilitator, NHS Fife
Adam Steenkamp, Cancer Audit Facilitator, Lothian

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Document History

Version	Circulation	Date	Comments
1	SCAN Urology Leads sign off meeting	02/07/2021	Action points and comments agreed. Chair's summary to be added.
2	SCAN Lead Clinician and sign off group	13/07/2021	Lead's commentary added and comments to be approved by sign off group
3	SCAN Urology Group	30/07/2021	For any final comments and SCAN Group Approval by 13/08/2021
Final Version	SCAN Group SCAN Governance Framework SCAN Action Plan Board Executive Leads.	17/08/2021	Document to be assessed for disclosive data in preparation for publishing to the website.
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SCAN Urology Chair Summary

I must first thank the SCAN Audit team for all their hard work in collating the data that underlies this report and my clinical colleagues who undertake the clinical work.

This is the first report following the last formal review of the Prostate Cancer QPIs and as such the first time we are reporting against some new QPIs, which inevitably means we have come across unintended consequences of wording and how this impacts the data collection. We must recognise that the QPI process is iterative with the important intervention being the measurement and review of outcomes, which brings review and reflection, rather than simply whether a target is achieved or not.

Where a target is consistently being achieved, then there is a case for delisting this as a measured QPI and as such several 'old' QPIs have been dropped and new ones added as we seek to continue to improve our services. Where a target is not achieved, we should of course examine the reasons why not. In some instances, it may be that the QPI is not sufficiently sophisticated to account for all situations that clinicians may need to address, in which case the QPI needs to be amended to reflect the variations in clinical practice. In other circumstances, there may be difficulties in collecting the data that need addressed, real variability in practice that requires improvement, or the target set is simply unrealistic when compared to other contemporary evidence.

Whilst in some of the Prostate Cancer QPI's it may appear that there are shortcomings careful analysis of the outliers by our audit and clinical teams has reassured us that the actual quality of patient care remains high and that it is issues related to process that have led to these shortcomings against the QPI. In others there is room for improvement, for example the new QPI relating to reporting of multi parametric MRI using a LIKERT score, whilst we are also making real progress in gathering Patient Reported Outcome Measures following radical prostatectomy. Up until now this has involved posting patients questionnaires for return, with the results being entered into the database by an administrative assistant, however over the last year we have developed a Quality Improvement Database for prostate cancer patients (thanks to Kevin Gallagher who is one of

our urology trainees) using the REDCap database which has built in capability to collect PROMS directly from patients by email. We believe that this could be the first time such technology has been applied to collecting PROMS and have plans to roll this out to other regions of Scotland soon. Public Health Scotland has

acquired a licence for REDCap and will host it on their servers, which will facilitate use by all regional centres offering radical prostatectomy. The Modernisation Team at the Scottish Government Health Department have been extremely helpful in putting together an application to PBPP that will hopefully approve this data collection. Once established there seems no reason why colleagues in Oncology cannot use the same database to collect PROMS from patients undergoing radiotherapy treatments. This will in turn allow a QPI to be established for these patient groups, which remains a gap in the current Prostate Cancer QPIs.

Overall, I believe that participation in the process of QPI reporting (or audit) and the discussion of the results by clinicians ultimately leads to improvement in standards of care and reduction in variation in outcomes. Despite the continuing absence of a QPI for radiation-based treatments for prostate cancer we should be pleased that the whole clinical team remain eager to participate in this process and are keen to do the best for our patients, as it is only through such engagement that the QPI process can succeed in its aims. It is also important that clinical leadership and a sense of ownership is central to the process of audit and QPI reporting, and that we seek to place our own results alongside those from the National Prostate Cancer Audit (NPCA) in England & Wales as this allows us to benchmark our performance more effectively.

Prof A McNeill
July 2021

Clinical Recommendation Summary 2019 – 2020

QPI	Action required	Lead	Date for update
2 & 4	Suggest removing cystoprostatectomy incidental findings from this QPI at next Formal Review	Lorna Bruce/QPI program	Next formal review
7ii	This QPI is out-dated and requires to be reviewed in light of new additional therapies e.g., Abiraterone or Enzalutamide.	Lorna Bruce/QPI program	Next formal review
14ii	SCAN Lead clinician to liaise with Lothian radiology	Alan McNeill	SCAN Group 29 th October
15	Burden of metastases to be added in the annotation section of patient record	Aravind Sundaramurthy	SCAN Group 29 th October

Clinical Recommendation Summary 2018 – 2019

QPI	Action required	Lead	Progress at Board Level
4	In the cases where MDM discussion did not take place, the consultants have already been reminded that all cases need to be at least registered at MDM to ratify treatment decision and to confirm appropriate clinical practice for all patients. No further action was identified.	N/A	N/A
6	Query source of data in Lothian coding department – Following National Cancer Quality Steering Group meeting on 14 th September 2020, data for this QPI is likely to be replaced by audit data in future reports so no action is required at this time.	N/A	N/A
7	Despite a high tolerance set for this QPI, more consideration should be given to the QPI measurement to include only patients where the MDM outcome suggests suitability for chemotherapy treatment.	Lorna Bruce and QPI program	Next formal review

Prostate Cancer QPI Attainment Summary 2019-20		Target %	Borders			D&G			Fife			Lothian			SCAN		
QPI 2: Radiological Staging: High risk cases undergoing radical treatment, who had MRI + Bone scan.		95	N 22 D 24	91.7%	N 30 D 32	93.8%	N 51 D 51	100%	N 107 D 112	95.5%	N 211 D 220	95.9%					
QPI 4: MDT Meeting: Patients with prostate cancer discussed by MDT before treatment	Non-metastatic prostate cancer (TanyNanyM0)	95	N 70 D 70	100%	N 101 D 105	96.2%	N 186 D 198	93.9%	N 317 D 352	90.1%	N 674 D 725	93.0%					
	Metastatic prostate cancer (TanyNanyM1)	95	N 8 D 13	61.5%	N 27 D 34	79.4%	N 42 D 45	93.3%	N 84 D 96	87.5%	N 161 D 188	85.6%					
QPI 5: Surgical Margins: Positive margins in pathologically confirmed organ confined pT2 radical prostatectomy		≤20	Presented by Board of Surgery						N 14 D 81	17.3%	N 14 D 81	17.3%					
QPI 6: Surgical Volume: Radical prostatectomy /surgeon in 1 year		50+	One 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 13	100%	N 30 D 34	88.2%	N 41 D 45	91.1%	N 84 D 94	89.4%	N 168 D 186	90.3%					
	Docetaxel chemotherapy within 90 days of Hormones	40	N 1 D 10	10%	N 5 D 28	17.9%	N 6 D 33	18.2%	N 7 D 60	11.7%	N 19 D 131	14.5%					
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 83 D 155	53.5%	N 83 D 155	53.5%					
QPI 11: Patients under active surveillance who have bpMRI or mpMRI within 12-18 months of diagnosis.		95	N 5 D 13	38.5%	N 3 D 11	27.3%	N 4 D 29	13.8%	N 25 D 67	37.3%	N 37 D 120	30.8%					
QPI 12: Patients who undergo SACT that die within 30 days of treatment.		<10	N N/A D N/A	N/A	N N/A D N/A	N/A	N N/A D N/A	N/A	N N/A D N/A	N/A	N N/A D N/A	N/A					
QPI 13: Patients diagnosed with prostate cancer consented for a clinical trial / research study.		15	N 0 D 107	0%	N 0 D 122	0%	N 0 D 253	0%	N 21 D 525	4.0%	N 21 D 100	2.1%					
QPI 14: Diagnostic Pre-biopsy MRI	Those for biopsy that had pre-biopsy bpMRI or mpMRI as initial investigation.	95	N 39 D 41	95.1%	N 74 D 78	94.9%	N 111 D 116	95.7%	N 201 D 208	96.6%	N 425 D 443	95.9%					
	Those that had pre biopsy bpMRI or mpMRI reported with PI-RADS/ Likert	95	N 28 D 48	58.3%	N 16 D 105	15.2%	N 123 D 157	78.3%	N 0 D 298	0%	N 167 D 608	27.5%					
QPI 15: Low Burden Metastatic Disease	Patients with metastatic prostate cancer in whom burden of disease is assessed.	95	N 13 D 13	100%	N 7 D 34	20.6%	N 34 D 45	75.6%	N 92 D 97	94.8%	N 146 D 189	77.2%					
	Those with low metastatic burden that receive radiotherapy.	60	N 3 D 6	50.0%	N 3 D 4	75.0%	N 6 D 12	50.0%	N 13 D 20	65.0%	N 25 D 42	59.5%					

Introduction and Methods

Cohort

This report covers patients newly diagnosed with prostate cancer in SCAN between 01/07/2019 and 30/06/2020. The results contained within this report are presented by NHS board of diagnosis, where the QPI relates to surgical outcomes the results has also 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 eighth publication of QPI results for prostate cancer within SCAN. The dataset was formally reviewed in 2019 along with changes to the QPI s to be measured. At the formal review QP 1: Biopsy Procedure, QPI 2i Radiological Staging for intermediate risk prostate cancer and QPI3: Pathology Reporting was archived. 2 new QPIs were added, QPI 14: Diagnostic Pre-Biopsy MRI and QPI 15: Low Burden Metastatic Disease. Significant changes were also made to the measurement of QPIs 2, 4, 7, 8, 11 and 12 following formal review.

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 I Mitchell	Alison Robertson
SCAN & NHS Lothian	St John's Hospital Western General Hospital	Prof A McNeill 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 2014 to 2018. 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 01/07/2019 to 30/06/2020

	Borders	D&G	Fife	Lothian	SCAN
Prostate Cancer	86	150	246	469	951

Estimate of Case Ascertainment: Calculated using the average of the most recent available five years of Cancer Registry Data 2015-2019

Note: Extract of data taken from PHS Cancer Registry website <http://www.PSscotland.org/Health-Topics/Cancer/Cancer-Audit/>

	Borders	D&G	Fife	Lothian	SCAN
Cases from Audit	86	150	246	469	951
Cancer Registry 5 Year Average	107	122	253	525	1006
Case Ascertainment %	80.4	123.0	97.2	89.3	94.5

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 17th August 2021.

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).

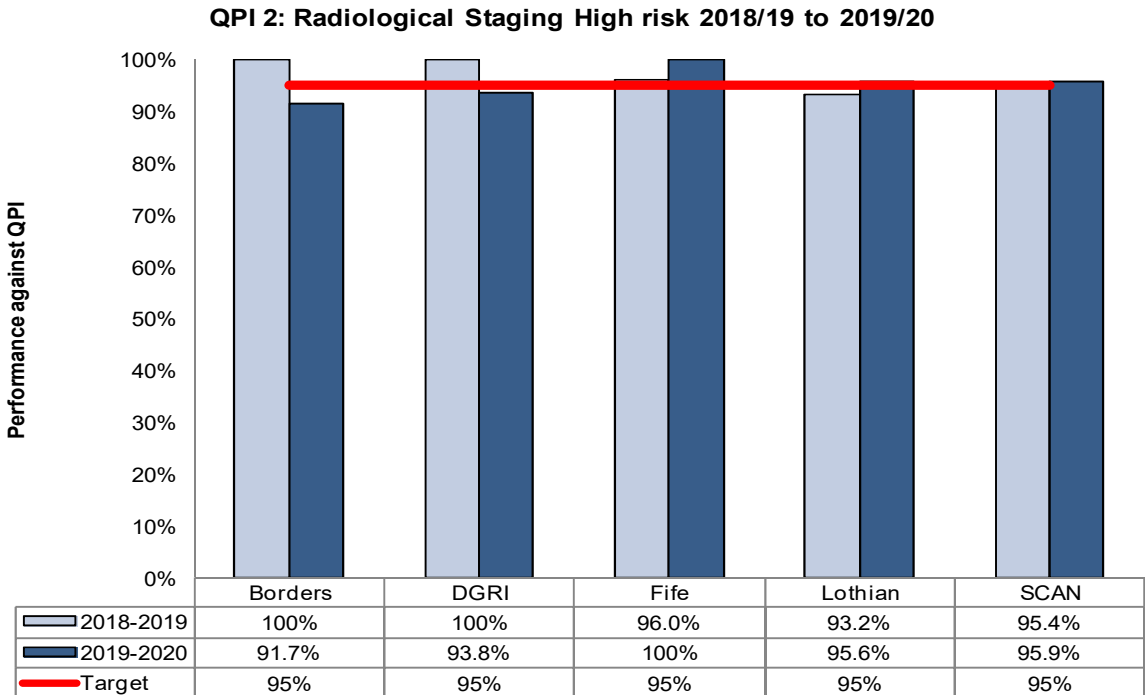
Target 95%	Borders	D&G	Fife	Lothian	SCAN
2019-2020 cohort	86	150	246	469	951
Excluded from analysis	4	1	50	17	72
Ineligible for analysis	58	117	145	339	659
Numerator	22	30	51	108	211
Not recorded for numerator	0	0	0	0	0
Denominator	24	32	51	113	220
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	16	0	0	16
% Performance	91.7	93.8	100	95.6	95.9

Comments:

Borders: The QPI target was not met showing a shortfall of 3.3% (2 cases) both cases were Gleason score 3+3=6 and cT3a on imaging.

DGRI: The QPI target was not met showing a shortfall of 1.2% (2 cases) 1 had MRI only (no bone scan but had recently had PET CT) 1 was an incidental finding at cystectomy so not imaged pre treatment (of 16 cases NR for Denominator, 14 have had complete MRI and Isotope Bone scan or whole body MRI - cT staging missing)

Action: Suggest removing cystoprostatectomy incidental findings from this QPI at next Formal Review



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
2019-2020 cohort	86	150	246	469	951
Excluded from analysis	0	0	0	2	2
Ineligible for analysis	16	45	45	115	221
Numerator	70	101	186	317	674
Not recorded for numerator	0	0	0	2	2
Denominator	70	105	198	352	725
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	9	3	2	14
% Performance	100	96.2	93.9	90.1	93.0

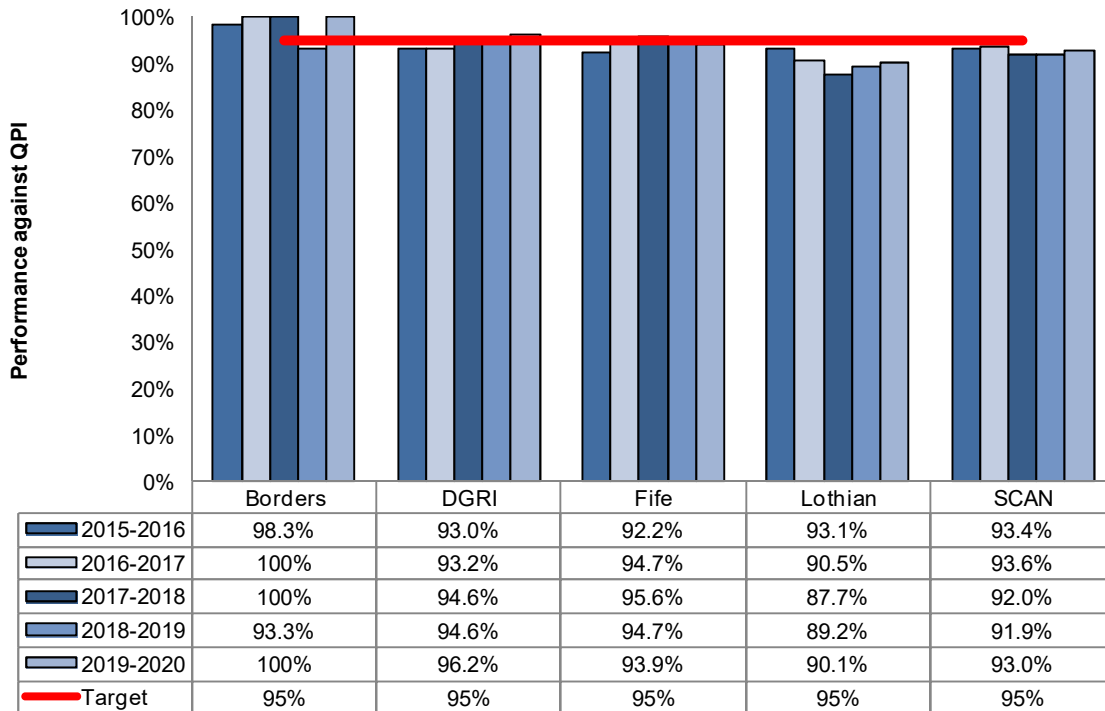
Comments:

Fife: The QPI target was not met showing a shortfall of 1.1% (12 cases) 7 were incidental findings at cystoprostatectomy. 2 were not discussed at MDM. 3 were discussed at MDM after first treatment.

Lothian: The QPI target was not met showing a shortfall of 4.9 % (35 cases) 2 still awaiting radiotherapy. 10 had treatment options confirmed pre MDM discussion. 23 did not have MDM discussion.

Action: Suggest removing cystoprostatectomy incidental findings from this QPI at next Formal Review.

QPI 4i: MDM Discussion - Non-Metastatic 2015/16 to 2019/20



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
2019-2020 cohort	86	150	246	469	951
Excluded from analysis	0	0	0	2	2
Ineligible for analysis	73	116	198	371	758
Numerator	8	27	42	84	161
Not recorded for numerator	0	0	0	0	0
Denominator	13	34	45	96	188
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	9	3	2	14
% Performance	61.5	79.4	93.3	87.5	85.6

Comments:

Borders: The QPI target was not met showing a shortfall of 33.5% (5 cases) all 5 had treatment started prior to MDT discussion.

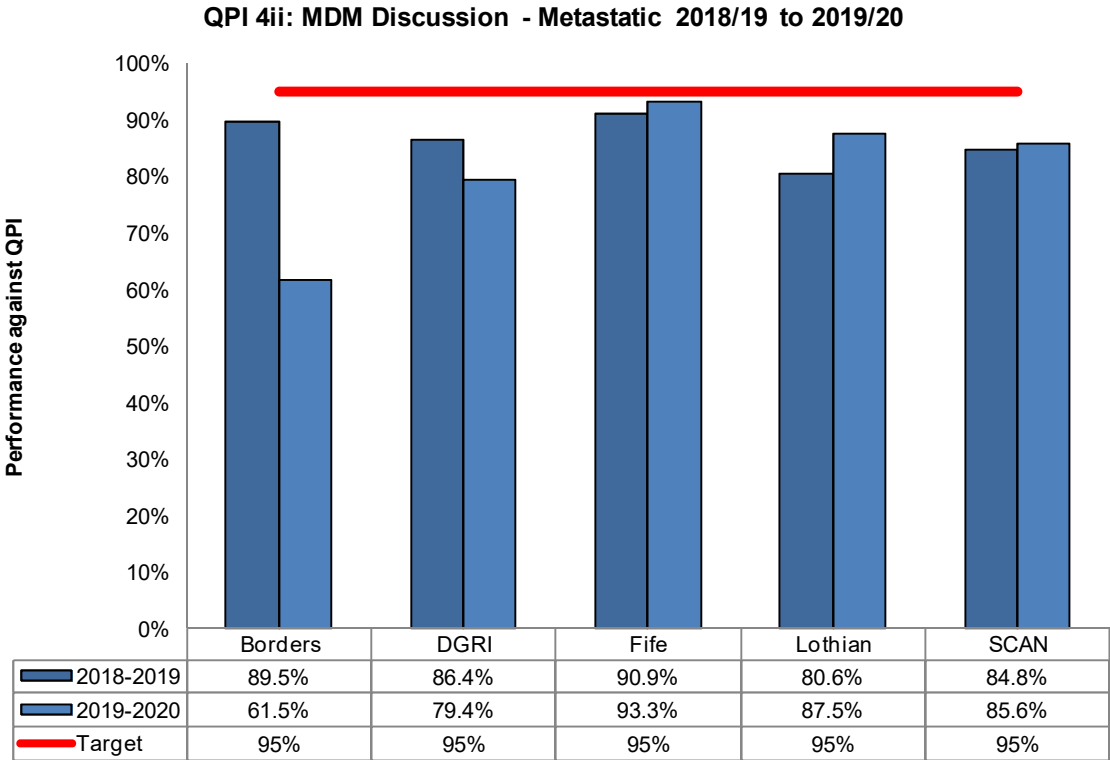
D&G: The QPI target was not met showing a shortfall of 5.6% (7 cases) All started on hormone treatment. 5 were discussed outside the specified timescale for discussion. 2 had no MDT discussion.

Fife: The QPI target was not met showing a shortfall of 1.7% (3 cases) 1 was not discussed at MDM. 2 were treated outwith the 42 day time limit before MDT discussion.

Lothian: The QPI target was not met showing a shortfall of 7.5% (12 cases) 2 "near miss" / timing issues with treatment within target. 8 had no MDM discussion. 2 were treated well outside the recommended timescale.

Action:

Patients not discussed got the correct care but clinicians need reminded to register the patients for MDT discussion in order to capture cases in the audit.



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 2019-20 rather than diagnoses in 2019-20)

Exclusions = No exclusions.

By Board of Surgery

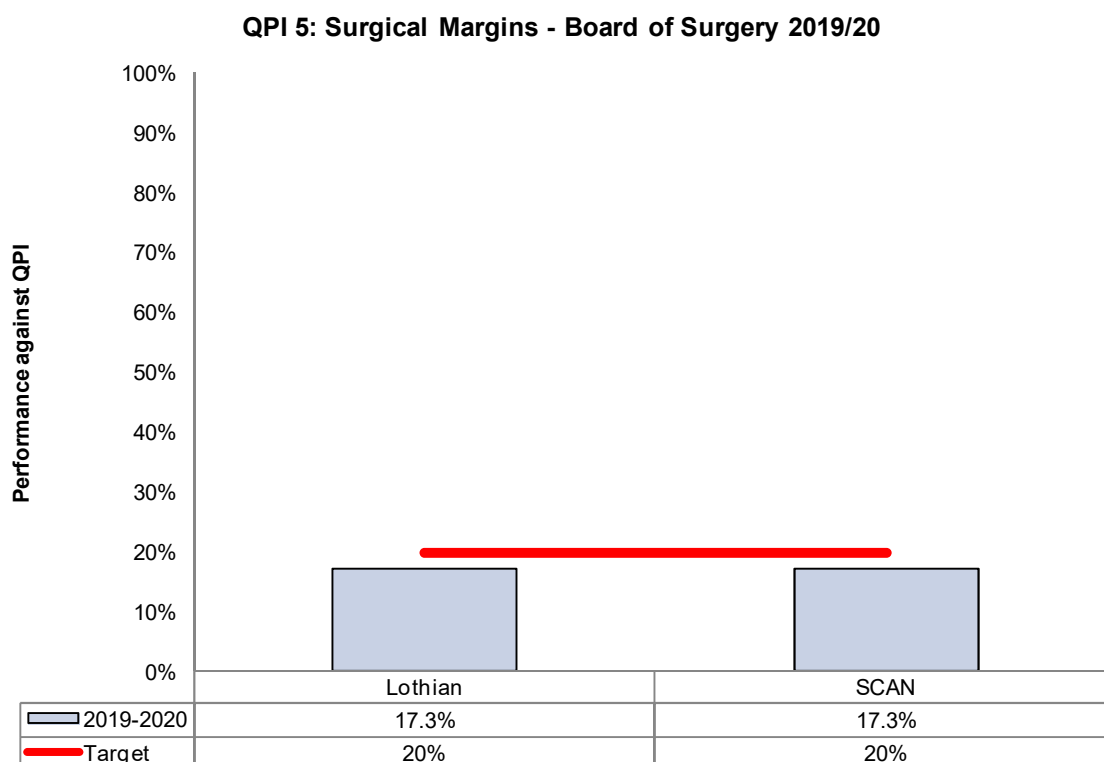
Target ≤ 20%	Lothian	SCAN
Numerator	14	14
Not recorded for numerator	0	0
Denominator	81	81
Not recorded for exclusion	0	0
Not recorded for denominator	1	1
% Performance	17.3	17.3

Note: All surgery was performed in Lothian with the exception of 2 Fife patients operated in Tayside (included in the NCA report).

Since June 2016 NHS Lothian exclusively performed robotic assisted prostatectomies on Borders, D&G and most Fife patients.

Comment: The current national query available in eCase is producing erroneous results so SCAN are reporting QPI 5 by board of surgery only this year.

Action: None



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 2019-20 rather than diagnoses in 2019-20.

Number of prostatectomy procedures by surgeon in 2019/20				
	B	A	C	D
SCAN Audit figures	2	140	39	23

Consultant C only took up post on 1st March 2020 and overall performance will show improvement in next year's data.

Consultant B performed 2 local surgical procedures deemed necessary due to clinical requirements.

Consultant D left NHS service mid cohort year.

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
2019-2020 cohort	86	150	246	469	951
Excluded from analysis	0	0	0	3	3
Ineligible for analysis	73	116	198	372	759
Numerator	13	30	41	84	168
Not recorded for numerator	0	1	0	0	1
Denominator	13	34	45	94	186
Not recorded for exclusion	0	1	0	0	1
Not recorded for denominator	0	9	3	2	14
% Performance	100	88.2	91.1	88.7	90.3

Comments:

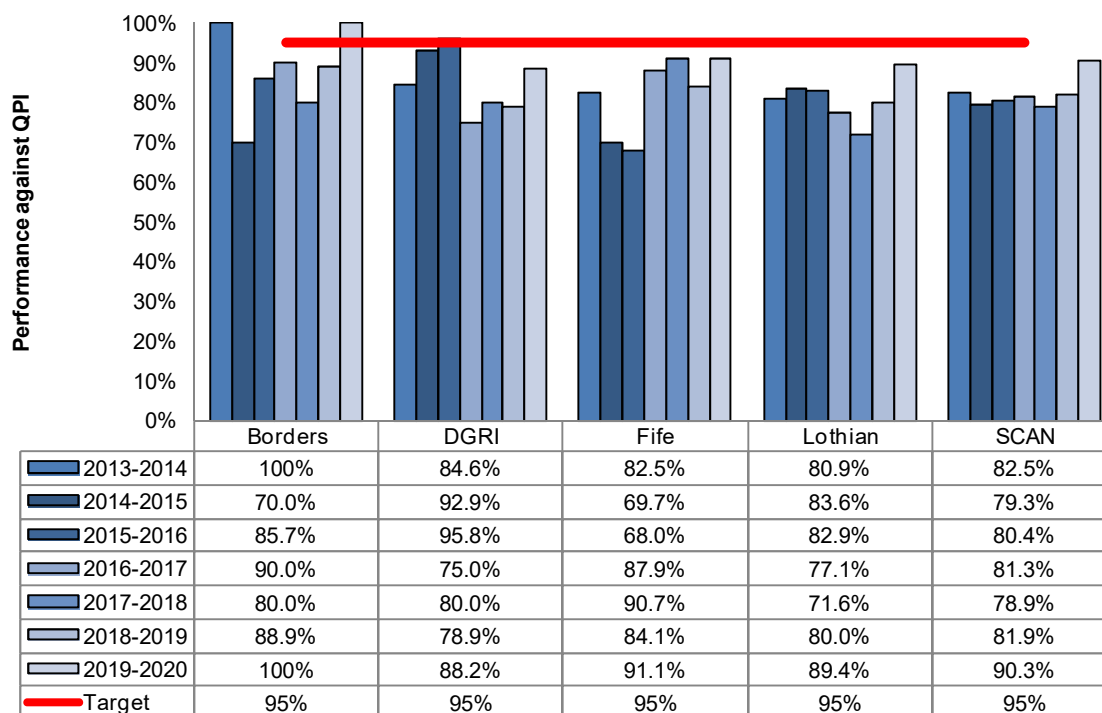
D&G: The QPI target was not met showing a shortfall of 6.8% (4 cases) 2 were not discussed at MDM. 2 had hormone treatment outwith 31 days from MDT discussion.

Fife: The QPI target was not met showing a shortfall of 3.9% (4 cases) 1 was not discussed at MDM (BSC). 2 were not treated with hormones (all treated appropriately). 1 was >31 days to treatment.

Lothian: The QPI target was not met showing a shortfall of 5.6% (10 cases) 8 had hormone treatment started without MDT discussion. 1 died before treatment. 1 had hormone treatment outwith the 31 day timescale.

Action: No action identified

QPI 7i: Hormone Therapy 2013/14 to 2019/20



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
2019-2020 cohort	86	150	246	469	951
Excluded from analysis	2	6	12	40	60
Ineligible for analysis	74	116	198	369	757
Numerator	1	5	6	7	19
Not recorded for numerator	0	1	0	0	1
Denominator	10	28	33	60	131
Not recorded for exclusion	0	1	0	0	1
Not recorded for denominator	0	9	3	2	14
% Performance	10.0	17.9	18.2	11.7	14.5

Comments:

Borders: The QPI target was not met showing a shortfall of 30% (9 cases) 4 did not receive chemotherapy as per MDT decision. 2 received palliative radiotherapy. 1 started chemotherapy outwith the 90 day timescale. 1 died before oncology review. 1 had been offered palliative radiotherapy only, as COVID 19 risk assessment was considered too high in this case.

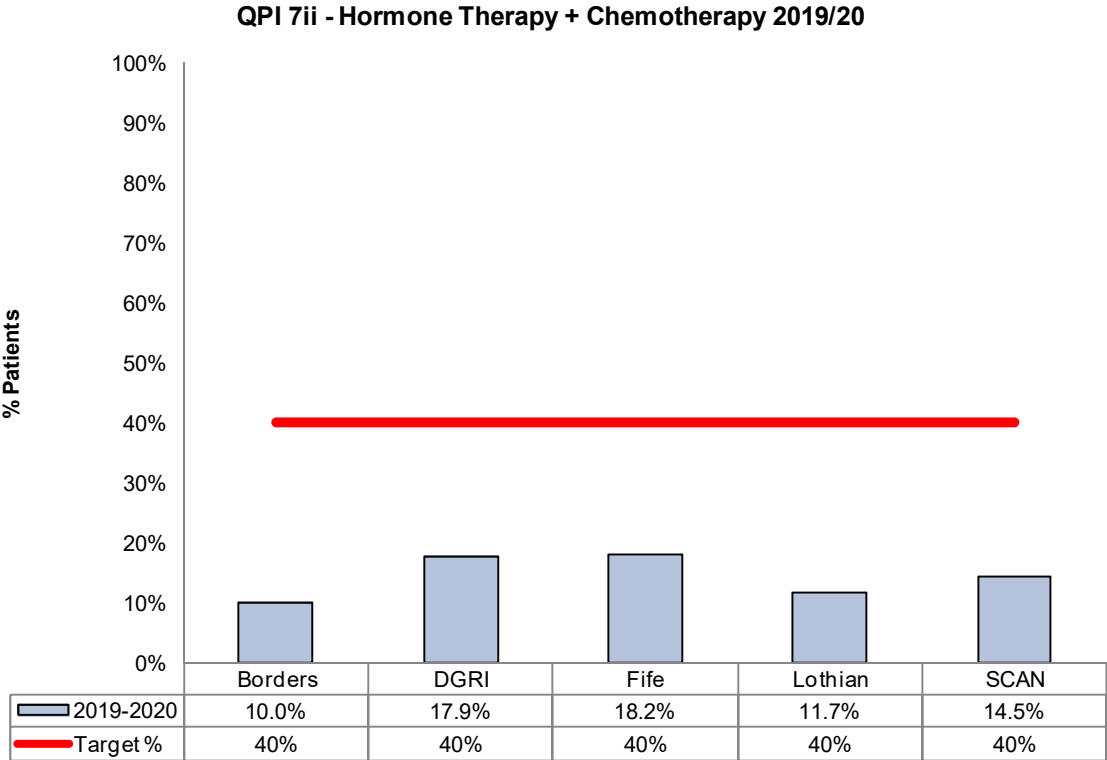
D&G: The QPI target was not met showing a shortfall of 22.1% (23 cases) 22 were not treated with chemotherapy. 1 had chemotherapy 221 days after hormone treatment started.

Fife: The QPI target was not met showing a shortfall of 21.8% (27 cases) 23 did not receive chemotherapy. 2 cases were best supportive care. 1 case was not discussed at MDM. 1 had chemotherapy 101 days after starting hormones.

Lothian: The QPI target was not met showing a shortfall of 28.3% (53 cases) mostly the cases were not suitable for chemotherapy and COVID 19 also played a role in clinical decision making.

SCAN Comment: A high proportion of patients are unsuitable for chemotherapy treatment (e.g., over 80 years old).

Action: This QPI is out-dated and requires to be reviewed in light of new additional therapies e.g., Abiraterone or Enzalutamide.



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.

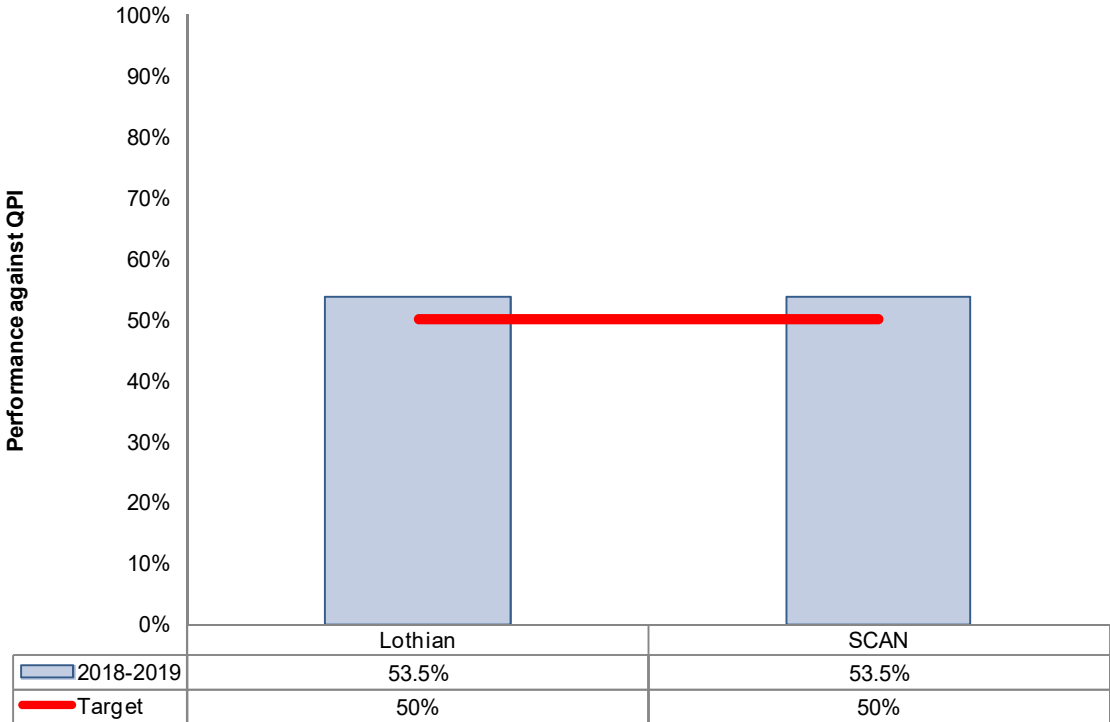
By Board of Surgery

Target 50%	Lothian	SCAN
2018-2019 cohort	N/A	986
Excluded from analysis	N/A	0
Ineligible for analysis	N/A	831
Numerator	83	83
Not recorded for numerator	71	71
Denominator	155	155
Not recorded for exclusion	1	1
Not recorded for denominator	0	0
% Performance	53.5	53.5

Note: All surgery was performed in Lothian with the exception of 2 Fife patients operated in Tayside (included in the NCA report).

Comment SCAN is currently transitioning from paper forms to using an email-based system on the REDCap database. It's important to note that all patients are sent these forms and ~84% are returning them by email as compared with ~60% by paper form. Therefore performance is likely to improve significantly

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



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
2018-2019 cohort	83	101	303	499	986
Excluded from analysis	0	0	4	7	11
Ineligible for analysis	70	90	268	425	853
Numerator	5	3	4	25	37
Not recorded for numerator	0	0	0	0	0
Denominator	13	11	29	67	120
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	38.5	27.3	13.8	37.3	30.8

Comments:

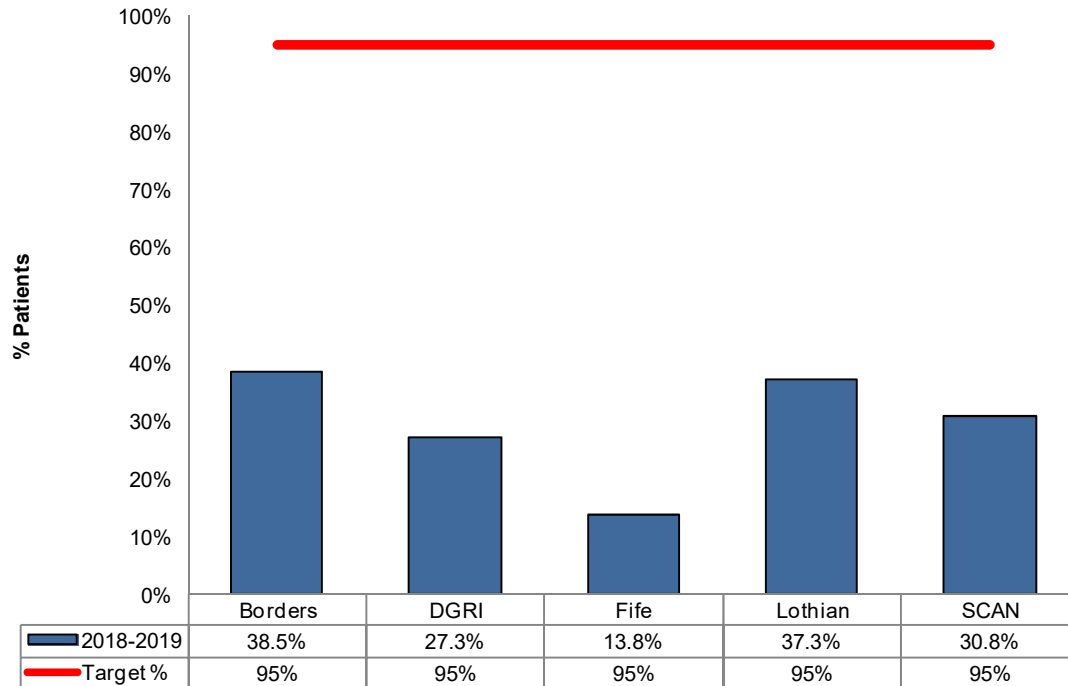
Borders: The QPI target was not met showing a shortfall of 56.5% (8 cases) 6 had follow up scans outwith the timescale. 2 did not receive surveillance scans. The median time was 228 days (range 182-718 days)

D&G: The QPI target was not met showing a shortfall of 67.7% (8 cases) 2 had no surveillance MRI. 6 had MRI outwith the timeframe. The median time was 497 days (range 242-764 days)

Fife: The QPI target was not met showing a shortfall of 81.2% (25 cases) 17 did not have a Surveillance MRI. 8 were outwith the timescale for a review MPMRI. The median time was 605 days (range 209-965 days)

Lothian: The QPI target was not met showing a shortfall of 57.7% (42 cases) 2 did not have surveillance MRI. 40 had imaging but timings fell outwith the timescale. The median time was 248 days (range 108-844 days)

QPI 11 - Surveillance with MP MRI 2017/18



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 is to be reported from Chemocare data.

Methodology is currently not yet available nationally.

QPI 13: Clinical Trials – Target 15%

Proportion of patients with Prostate cancer who are consented for an interventional clinical trial or translational research.

Numerator = Number of patients with Prostate cancer consented to a clinical trial (SCRN) in 2020.

Denominator = All patients with Prostate cancer. Average 5 year incidence Cancer Registry (2015- 2019)

Target 15%	Borders	D&G	Fife	Lothian	SCAN
Numerator	0	0	0	21	21
Denominator	107	122	253	525	1006
% Performance	0	0	0	4.0	2.1

Open Trials in 2020	Number recruited
Phase 3 Study of Pembrolizumab plus Enzalutamide	2
PRINToUT	1
Biobank SR1418	18

Cancer Registry data taken from PHS website (2015 – 2019).
SCRN data 2020 calendar year cohort.

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.

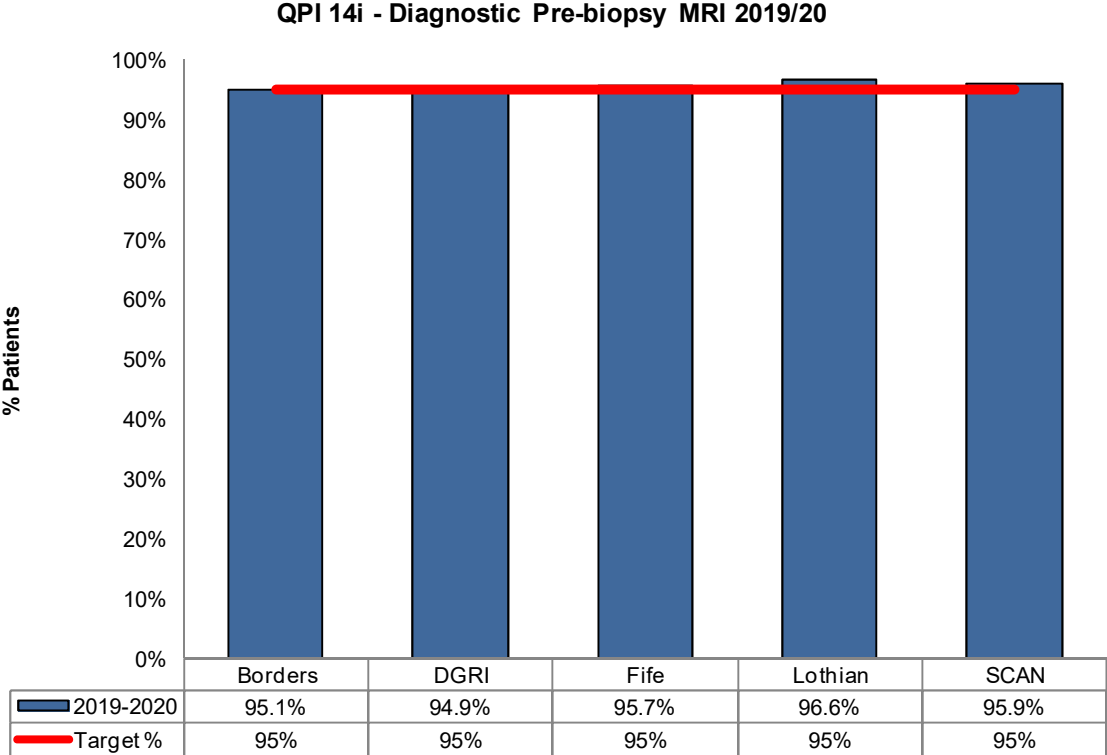
Exclusions = Patients unable to undergo an MRI scan, decline MRI, have undergone TURP, have undergone laser enucleation, or those with locally advanced (Clinical T3 and above) and / or M1 disease.

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2019-2020 cohort	86	150	246	469	951
Excluded from analysis	42	45	62	218	367
Ineligible for analysis	3	26	68	43	140
Numerator	39	74	111	201	425
Not recorded for numerator	4	0	0	0	4
Denominator	41	78	116	208	443
Not recorded for exclusion	0	32	1	0	33
Not recorded for denominator	0	0	0	0	0
% Performance	95.1	94.9	95.7	96.6	95.9

Comments:

D&G: The QPI target was not met showing a shortfall of 0.1% (4 cases) 4 patients with nodular prostate on DRE and high PSA had MPMRI after biopsy.

Action: No action required.



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

Title: Patients with prostate cancer who undergo biopsy and had a pre-biopsy bpMRI or mpMRI 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
2019-2020 cohort	86	150	246	469	951
Excluded from analysis	0	0	0	0	0
Ineligible for analysis	38	45	89	171	343
Numerator	28	16	123	0	167
Not recorded for numerator	19	89	34	297	439
Denominator	48	105	157	298	608
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	58.3	15.2	78.3	0	27.5

Comments:

Borders: The QPI target was not met showing a shortfall of 36.7% (20 cases) neither Likert nor PI-RADS were recorded.

D&G: The QPI target was not met showing a shortfall of 79.8% (89 cases) PI RADS was not recorded. Practice has changed and this is now routinely recorded.

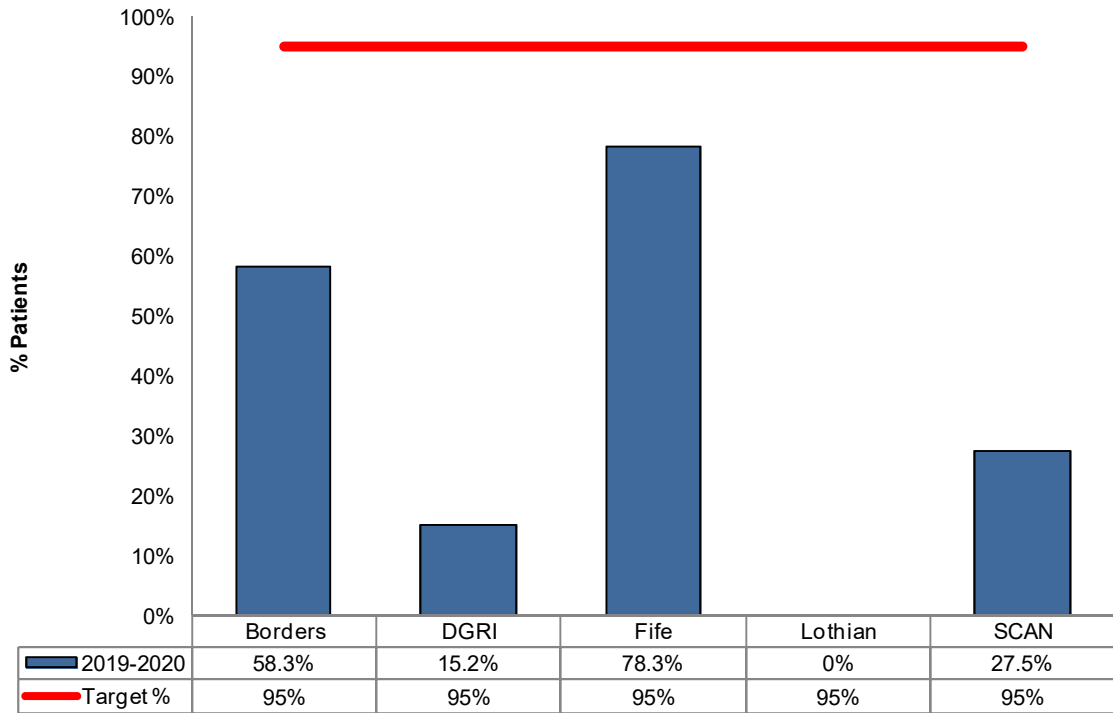
Fife: The QPI target was not met showing a shortfall of 16.4% (34 cases) None had a LIKERT score assigned. 25 of which were reported by a consultant outwith Fife health board (reported in NHS Lothian).

Lothian: The QPI target was not met (298 cases) neither Likert nor PI-RADS were recorded.

Lothian radiologists are resistant to recording PI-RADS due to time and complexity. Likert is less complex, however, there is resistance to having specialist radiologists reporting all prostate MRIs and non-urology specialists are not familiar with these scores.

Action: SCAN Lead clinician to liaise with Lothian radiology

QPI 14ii - Diagnostic Pre-biopsy MRI 2019/20



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
2019-2020 cohort	86	150	246	469	951
Excluded from analysis	0	0	0	0	0
Ineligible for analysis	73	116	198	372	759
Numerator	13	7	34	92	146
Not recorded for numerator	0	27	11	5	43
Denominator	13	34	45	97	189
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	9	3	2	14
% Performance	100	20.6	75.6	94.8	77.2

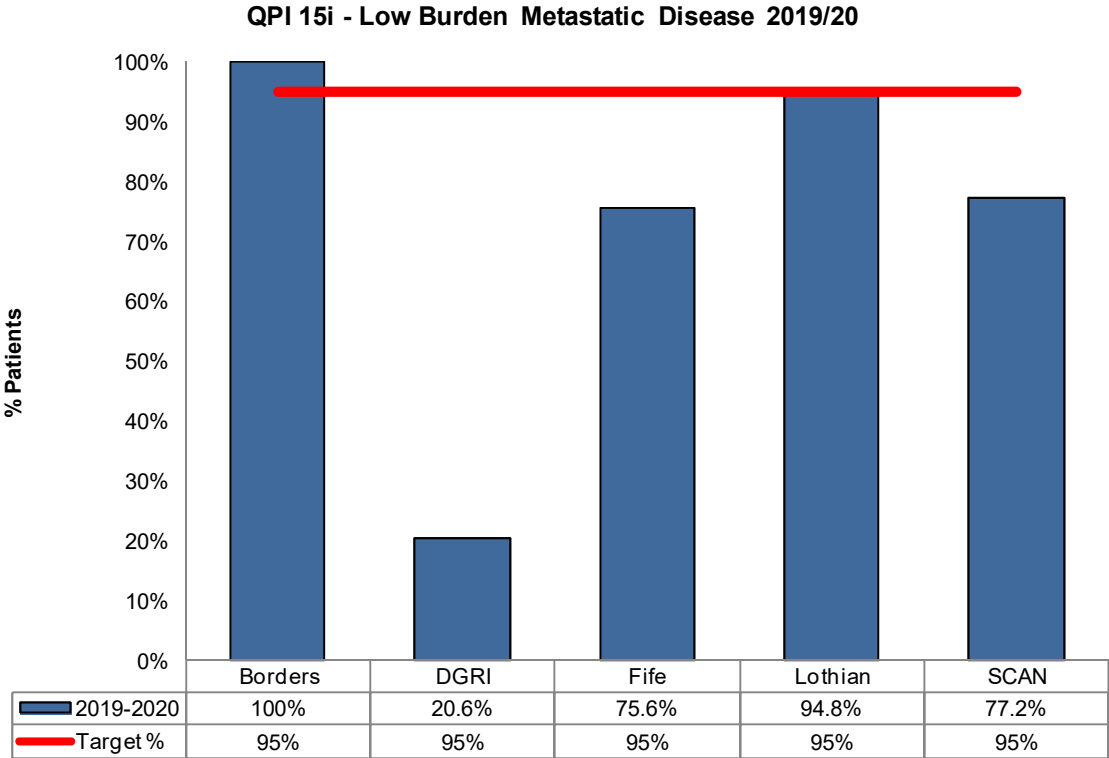
Comments:

D&G: The QPI target was not met showing a shortfall of 74.4% (27 cases) None had burden of disease assessment recorded. Bone scans are frequently done in England where this is not a requirement.

Fife: The QPI target was not met showing a shortfall of 19.4% (11 cases) None had metastatic burden recorded.

Lothian: The QPI target was not met showing a shortfall of 0.2% (5 cases) Metastatic burden was not obvious from imaging reports or clinical summaries.

Action: Burden of metastases to be added in the annotation section of patient record.



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

Title: Patients with metastatic prostate cancer who have their burden of disease assessed, and undergo 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
2019-2020 cohort	86	150	246	469	951
Excluded from analysis	1	0	0	1	2
Ineligible for analysis	79	146	220	449	893
Numerator	3	3	6	13	25
Not recorded for numerator	0	0	0	0	0
Denominator	6	4	12	20	42
Not recorded for exclusion	0	1	1	1	3
Not recorded for denominator	0	26	13	6	45
% Performance	50.0	75.0	50.0	65.0	59.5

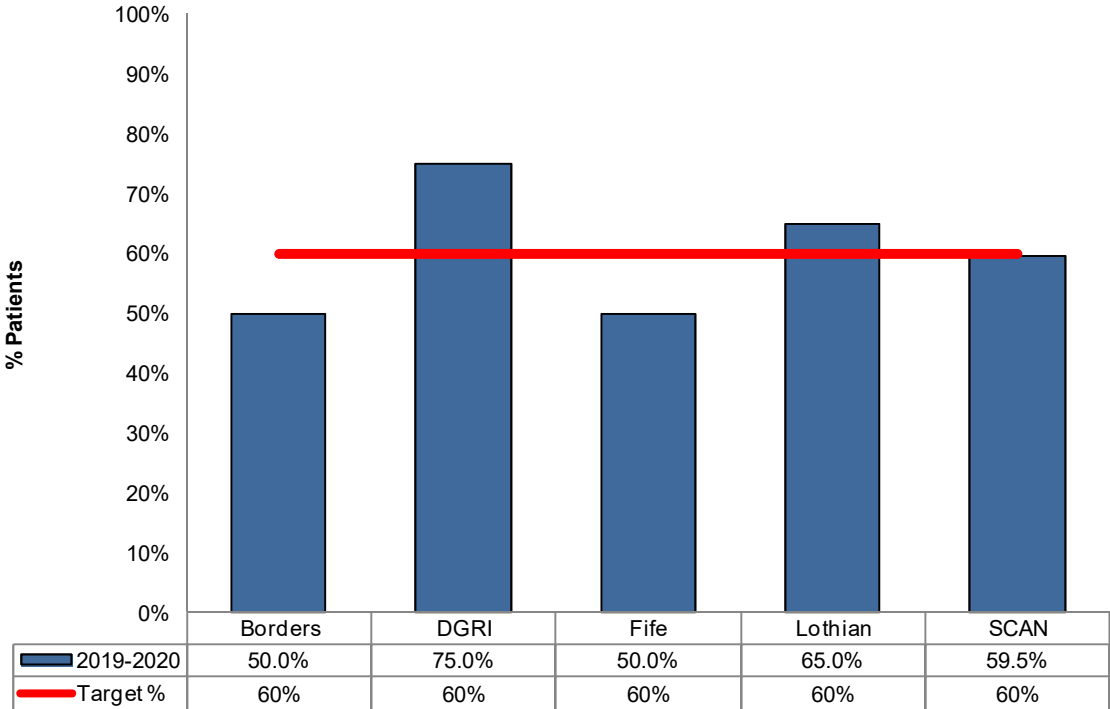
Comments:

Borders: The QPI target was not met showing a shortfall of 10% (3 cases) 1 did not have radiotherapy due to co-morbidities. 1 was not assessed in Oncology and deemed as low-moderate disease. 1 patient did not have MDT discussion.

Fife: The QPI target was not met showing a shortfall of 10% (6 cases) did not have radiotherapy for low metastatic burden prostate cancer.

Action: Burden of metastases to be added in the annotation section of patient record.

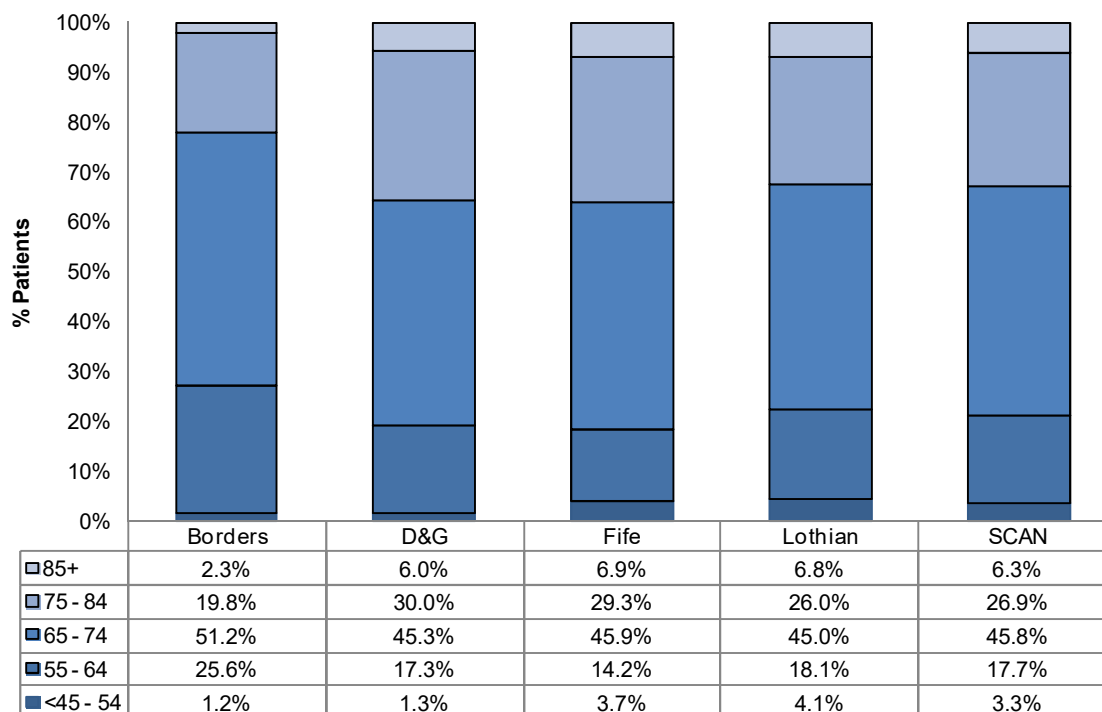
QPI 15ii - Low Burden Metastatic Disease 2019/20



Age Analysis

Age Analysis	Borders	D&G	Fife	Lothian	SCAN
Under 45	0	0	2	0	2
45 - 49	1	1	0	2	4
50 - 54	0	1	7	17	25
55 - 59	7	14	15	31	67
60 - 64	15	12	20	54	101
65 - 69	24	33	48	118	223
70 - 74	20	35	65	93	213
75 - 79	12	33	46	78	169
80 - 84	5	12	26	44	87
85+	2	9	17	32	60
Total	86	150	246	469	951

Age at Diagnosis 2019/20



Treatment Types

Health Board	Primary Hormones		Active Surveillance		WW / BSC		Radical Radiotherapy		Brachytherapy		Surgery	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Borders	17	19.8%	12	14.0%	0	0%	18	20.9%	4	4.7%	30	34.9%
D&G	45	30.0%	18	12.0%	6	4.0%	49	32.7%	3	2.0%	29	19.3%
Fife	60	24.4%	27	10.9%	34	13.8%	78	31.7%	8	3.3%	39	15.9%
Lothian	123	26.2%	57	12.2%	56	11.9%	128	27.3%	19	4.1%	65	13.9%
SCAN	245	25.8%	114	12.0%	96	10.1%	273	28.7%	34	3.6%	163	17.1%

Prostate Cancer QPI Attainment Summary 2018-19		Target %	Borders			D&G			Fife			Lothian			SCAN		
QPI 2: Radiological Staging: High risk cases undergoing radical treatment, who had MRI + Bone scan.		95	N 17	100%	D 17	N 22	100%	D 22	N 72	96.0%	D 75	N 96	93.2%	D 103	N 207	95.4%	D 217
QPI 4: MDT Meeting: Patients with prostate cancer discussed by MDT before treatment	Non-metastatic prostate cancer (TanyNanyM0)	95	N 60	98.4%	D 61	N 70	94.6%	D 74	N 233	94.7%	D 246	N 344	92.5%	D 372	N 707	93.9%	D 753
	Metastatic prostate cancer (TanyNanyM1)	95	N 17	89.5%	D 19	N 19	86.4%	D 22	N 40	90.9%	D 44	N 75	80.6%	D 93	N 151	84.8%	D 178
QPI 5: Surgical Margins: Positive margins in pathologically confirmed organ confined pT2 radical prostatectomy		≤20	Presented by Board of Surgery			N 0	0%	D 2	N 9	12.2%	D 74	N 9	11.8%	D 76			
QPI 6: Surgical Volume: Radical prostatectomy /surgeon in 1 year		50+	1 of the Surgeons in SCAN met the Target.														
QPI 7: Hormone Therapy and Docetaxel Chemotherapy	Hormone therapy within 31 days of MDM decision	95	N 16	88.9%	D 18	N 15	78.9%	D 19	N 37	84.1%	D 44	N 68	80.0%	D 85	N 136	81.9%	D 166
	Docetaxel chemotherapy within 90 days of Hormones	40	N 4	22.2%	D 18	N 6	31.6%	D 19	N 10	23.8%	D 42	N 17	21.8%	D 78	N 37	23.6%	D 157
Clinical Trial QPI - N = Patients consented to trials on SCRN database. D = 5 year average Cancer Registry patients		15	N 5	4.7%	D 106	N 3	2.5%	D 121	N 1	0.4%	D 230	N 14	2.7%	D 523	N 23	2.3%	D 980