

SOUTH EAST SCOTLAND CANCER NETWORK PROSPECTIVE CANCER AUDIT

Renal Cancer 2019 Comparative Audit Report

Patients diagnosed 1st January 2019 to 31st December 2019

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Document History

Version	Circulation	Date	Comments
1	Lead Clinicians sign off group	27/11/2020	Actions agreed, clinical comment added.
2	SCAN Renal Lead Clinician Steve Leung Leads Sign off group	01/12/2020	For approval and Lead Clinician's commentary
3	SCAN Urology Group	18/12/2020	For final SCAN Group approval and Lead Clinician's commentary
4	SCAN Group SCAN Governance Framework SCAN Action Plan Board Leads	13/01/2021	Board approved action plans due on 10 th Feb 2021
4W	Published to SCAN Website	2022	

Clinical Lead's Summary

I am pleased to present the annual report of the renal cancer audit QPI results for SCAN.

We continue to demonstrate good performance against QPI 1 with the majority of patients undergoing full cross sectional imaging prior to treatment. Translating this to TNM staging is the focus of QPI 3 and we have made amendments to the way we capture this information during the regional MDT discussion to ensure all patients from peripheral boards have this appropriately documented.

QPI 7 describes the percentage of patients with renal cancers less than 4cm in size receiving nephron sparing surgery or cryotherapy. On first inspection, it appears that we did not achieve this particular target which may raise concern about the quality of the service. However, I would like to reassure readers that the close review of patient outcomes in this cohort demonstrate that clinically appropriate decisions were taken when deciding not to proceed with partial nephrectomy or cryotherapy.

If we review QPI 13 together with QPI 7, we see that the outcomes and the quality of care provided to patients who have underwent partial nephrectomy is high.

QPI 9 was revised last year to be more reflective of the fact that many patients do not need to start systemic therapy within 12 months of diagnosis with advanced or metastatic disease. We see that a significant proportion of patients have access to and commenced systemic therapy in this cohort.

QPI 10 relates to the assignment of a prognostic score in patients with metastatic renal cancer. As this QPI was introduced mid-2019, this is reflected somewhat in the low performance against the target. We also noted that a small number of patients with metastatic disease were not fit for urology or oncology review at the outset – and therefore could not have a prognostic score ascribed. We acknowledge that prognostic scoring is an important aspect of the assessment of patients that are considering treatment and we will strive to improve upon this measure.

I am pleased to note that, in QPI 14, we continue to improve on our recruitment of patients across the network to clinical trials and research studies in renal cancer.

Again, I wish to thank all members of the teams across the SCAN region who have contributed to this audit report. This report continues to show our commitment to the provision of the highest quality care for our renal cancer patients.

Mr Steve Leung
SCAN Clinical Lead in Renal Cancer

Clinical Recommendations 2019

QPI	Action required	Lead	Date for Action Plan returns
3	Add TNM (and plan) to MDM outcome sheet. Suggest to radiologist to update radiology reports post MDM for all boards involved in the Lothian MDM.	S Leung	10/02/2021
11	Steve Leung to clarify if Prof McNeill got a response from NHS Fife.	S Leung	10/02/2021

Clinical Recommendations 2018

QPI	Action required	Lead	Progress
3	The MDM chair to remind the on duty radiologist at MDM of the need to verbalize and TNM staging. MDM chair to ensure the reviewed TNM is recorded at MDM. The aim is to record the TNM on the MDM outcomes on TRAK.	S Leung A Chapman	Lothian: Not achieved in Lothian as yet. Fife: TNM staging is being recorded at MDM and added to the MDM proforma. Improvement seen in 2019 compared to 2018 data. Progress is ongoing.
9	Performance status and prognostic scoring should be documented for metastatic patients.	J Malik	Lothian: Improvement already evident in 2019 data compared to 2018 results. Continued improvement expected.
10	Prognostic scoring is required to be recorded in 90% of all renal patients diagnosed with metastatic disease at presentation. Only 30.2% of patients in scan were assigned a score. Action is required to improve documentation of prognostic scoring. – Prognostic score combined with performance status to be better verbalised and recorded as part of the MDM outcome for cases meeting this criteria.	Ben Thomas Steve Leung Alex Chapman / Sarah Scobie Maria Bews-Hair	
11	SCAN Chair to write to NHS Fife requesting compliance with this nationally agreed requirement to use the Leibovich score.	Alan McNeill	Complete

Renal Cancer QPI Attainment Summary 2019		Target %	Borders		D&G		Fife		Lothian		SCAN	
QPI 1 Patients with RCC who undergo pre-treatment cross-sectional imaging of chest, abdomen +/- pelvis or MRI.		95	N 12 D 13	92.3%	N 19 D 21	90.5%	N 38 D 39	97.4%	N 76 D 81	93.8%	N 145 D 154	94.2%
QPI 2 Patients with RCC who have a histological diagnosis via biopsy before Non-surgical primary treatment.	Cryotherapy / RFA	90	N 1 D 1	100%	N 2 D 2	100%	N 0 D 0	N/A	N 2 D 2	100%	N 4 D 5	80.0%
	SACT	90	N 2 D 2	100%	N 1 D 1	100%	N 4 D 4	100%	N 13 D 13	100%	N 20 D 20	100%
QPI 3 Patients whose RCC is staged pre-treatment using the TNM staging system.		98	N 17 D 17	100%	N 27 D 38	71.1%	N 56 D 61	91.8%	N 168 D 175	96.0%	N 268 D 291	92.1%
QPI 4 Patients with RCC who are discussed at MDT meeting before definitive treatment.		95	N 15 D 16	93.8%	N 38 D 38	100%	N 58 D 61	95.1%	N 160 D 171	93.6%	N 271 D 286	94.8%
QPI 7 T1aN0M0 RCC who have nephron sparing treatment (Cryotherapy, RFA or robotic/lap/open partial nephrectomy)		50	N 2 D 3	66.7%	N 1 D 2	50.0%	N 4 D 8	50.0%	N 7 D 16	43.8%	N 14 D 29	48.3%
QPI 8 Proportion of patients who die within 30 days of treatment for RCC.	Surgery	<2	Presented by Health Board of surgery			N 0 D 35	0%	N 2 D 105	1.9%	N 2 D 140	1.4%	
	Cryotherapy treatment	<2	N 0 D 1	0%	N 0 D 2	0%	N 0 D 0	N/A	N 0 D 3	0%	N 0 D 6	0%
	RFA treatment	<2	N 0 D 0	N/A	N 0 D 0	N/A	N 0 D 0	N/A	N 0 D 0	N/A	N 0 D 0	N/A
QPI 8 Proportion of patients who die within 90 days of treatment for RCC.	Surgery	<2	Presented by Health Board of surgery			N 0 D 33	0%	N 2 D 103	1.9%	N 2 D 136	1.5%	
	Cryotherapy treatment	<2	N 0 D 1	0%	N 0 D 2	0%	N 0 D 0	N/A	N 0 D 3	0%	N 0 D 6	0%
	RFA treatment	<2	N 0 D 0	N/A	N 0 D 0	N/A	N 0 D 0	N/A	N 0 D 0	N/A	N 0 D 0	N/A
QPI 9 Advanced and/or metastatic RCC who have SACT in 12 months of diagnosis.		40	N 2 D 2	100%	N 3 D 6	50.0%	N 3 D 7	42.9%	N 17 D 23	73.9%	N 25 D 38	65.8%
QPI 10 Patients with metastatic RCC who are assigned a valid prognostic score following diagnosis		90	N 3 D 3	100%	N 7 D 8	87.5%	N 2 D 7	28.6%	N 14 D 28	50.0%	N 26 D 46	56.5%
QPI 11 Patients with clear cell RCC who are assigned a Leibovich score following radical nephrectomy.		100	Presented by Health Board of surgery			N 0 D 23	0%	N 69 D 70	98.6%	N 69 D 93	74.2%	

Renal Cancer QPI Attainment Summary 2019	Target %	Borders	D&G	Fife	Lothian	SCAN
QPI 12 Number of renal surgical resections performed by a surgeon over a 1 year period.	>12	4 of 5 Surgeons within SCAN performed 15 or more surgeries within the cohort year				
QPI 13 Partial nephrectomy (T1a RCC) who achieve trifecta (Cold ischaemia time < 25min, -ve margins, no complications)	50	Presented by Health Board of surgery		N 3 D 4 75.0%	N 6 D 8 75.0%	N 9 D 12 75.0%
QPI 14 Clinical Trials. N = patients consented to SCRN trials/studies. D= 5 year cancer registry incidence	15	N 8 D 21 38.1%	N 13 D 30 43.3%	N 6 D 64 9.4%	N 59 D 154 38.3%	N 86 D 269 32.0%

Introduction and Methods

Cohort

This report covers patients newly diagnosed with renal cancer in SCAN between 01/01/2019 and 31/12/2019. The results contained within this report have been 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, Public Health Scotland, 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 Public Health Scotland 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 renal cancer was implemented from 01/01/2012. Following year 6 results the Renal QPIs were subject to a second formal review and revised documents for data collection were published in August 2019. This is the 8th publication of QPI results for renal cancer within SCAN which encompasses most of the changes made at both formal reviews.

The following QPIs were updated:

QPI 1 – Radiological Diagnosis –

- MRI added as valid imaging modality in staging cases prior to active treatment.

QPI 2 – Histological Diagnosis –

- Exclusion added to the measurement of this QPI to exclude cases where inherited genetic renal cancer was present at diagnosis.

QPI 7 – Nephron Sparing Treatment –

- This QPI measurement now measures all nephron sparing treatment modalities. Not just nephron sparing surgery but also includes Cryotherapy and RFA.
- The target for this QPI has been changed to 50%
- Exclusion to the measurement has been added for cases of best supportive care, and active surveillance.

QPI 8 – 30 / 90 Day Mortality –

- Now only measures surgery, Cryotherapy and RFA. The SACT part of this QPI was removed and QPI 15 added to measure survival of this specific criterion separately.

QPI 10 – Prognostic Scoring in Metastatic Disease –

- In year 8 of reporting, this QPI measured the prognostic score assigned to patients meeting the criteria prior to first treatment. In year 9 the QPI will measure the prognostic score assigned to cases meeting this criteria at diagnosis.

QPI 12 – Volume of Cases per Surgeon –

- Target has been updated from 12 cases per surgeon per year, to 15 cases per surgeon per year.

QPI 13 – Trifecta Rate – This QPI now measures Ischaemia time as part of the calculation. (Not differentiating between cold and warm ischaemia time).

The following new QPIs were added:

QPI 15 – 30 Day Mortality following Systemic Anti-Cancer Therapy (SACT)

NB. The archiving of QPIs 5 and 6 mean that the QPI numbering is no longer consecutive.

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 Public Health Scotland. 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 for all health boards.

Oncology data is obtained either from the clinical records (electronic systems and case notes) or by downloads from Aria and from the Department of Clinical Oncology database within the Edinburgh Cancer Centre (ECC).

Only 2 hospitals provide surgery and chemotherapy but radiotherapy is provided centrally in Edinburgh Cancer Centre. Patients living closer to either Carlisle or Dundee may opt to have oncology treatment outwith the SCAN region. Collecting complete audit data for these patients remains a challenge.

Clinical Sign-Off: This report compares analysed data from individual Health Boards within SCAN and signed off as accurate following review by the lead clinicians from each board. The collated SCAN results were reviewed 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 Edward Mains	Leanne Robinson
NHS Dumfries & Galloway	Dumfries & Galloway Royal Infirmary	Miss Maria Bews-Hair	Campbell Wallis
NHS Fife	Queen Margaret Hospital	Mr A Chapman	Alison Robertson
SCAN & NHS Lothian	St Johns Hospital and Western General Hospital	Mr S Leung/ Mr A Laird Dr J Malik	Adam Steenkamp

Data Quality

Estimate of Case Ascertainment

An estimate of case ascertainment (the percentage of the population with renal 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 01/01/2019 to 31/12/2019

	Borders	D&G	Fife	Lothian	SCAN
Renal Cancer	17	38	61	175	291

Estimate of Case Ascertainment: Calculated using the average of the most recent five years of Cancer Registry Data 2014 to 2018

	Borders	D&G	Fife	Lothian	SCAN
Cases from Audit	17	38	61	175	291
Cancer Registry 5 Year Average	21	30	64	154	269
Case Ascertainment %	81%	127%	95%	114%	108%

Extract taken from PHS Cancer Registry website (05/10/2020) <http://www.isdscotland.org/Health-Topics/Cancer/Cancer-Audit/>

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.
- Clinical Leads Sign off meeting took place on Friday 27/11/2020.
- Final draft report was sent to SCAN group for sign off and comments in December 2020.
- Final report circulated to SCAN Urology Group and Audit Reporting Governance Framework in January 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.

QPI 1: Radiological Diagnosis – Target = 95%

Title: Patients with renal cancer should have cross sectional imaging for staging of Renal Cell Carcinoma (RCC).

Numerator = Number of patients receiving active treatment with a diagnosis of RCC who undergo cross-sectional imaging (CT or MRI) of the chest, abdomen +/- pelvis (or CTU + chest with contrast) before first treatment.

Denominator = All RCC patients receiving active treatment (no exclusions).

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2019 cohort	17	38	61	175	291
Ineligible for analysis	4	17	22	94	139
Exclusion from analysis	0	0	0	0	0
Numerator:	12	19	38	76	145
Not recorded for numerator	1	0	0	1	2
Denominator:	13	21	39	81	154
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	0	0	1	1
% Performance	92.3	90.5	97.4	93.8	94.2

Comments:

Borders: The QPI target was not met showing a shortfall of 2.7% (1 case) Patient had not started active treatment at time of reporting (on waiting list for cryotherapy).

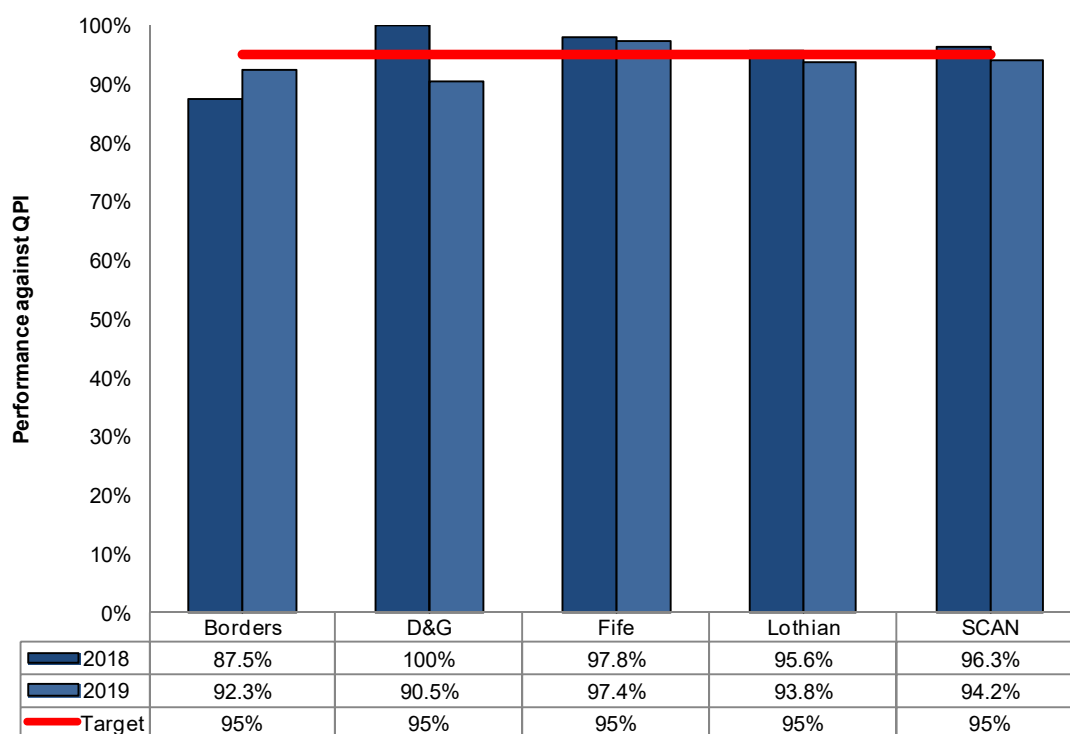
D&G: The QPI target was not met showing a shortfall of 4.5% (2 cases) 1 had complete staging but did not have contrast for CT thorax. 1 had synchronous prostate primary and did not receive CT thorax prior to renal cancer treatment but was imaged pre and post treatment although outwith timescales for this QPI.

Lothian: The QPI target was not met showing a shortfall of 1.2% (5 cases) In all cases the CT chest imaging was not done to complete staging prior to first/definitive treatment

SCAN: The cases where the target has not been met, these refer to small renal masses. No clinical concerns identified.

Action: None identified.

QPI 1: Radiological Diagnosis 2018 to 2019



QPI 2i: Histological Diagnosis – Target = 90%

Title: Patients with renal cancer not undergoing surgery should have a histological diagnosis prior to commencing treatment.

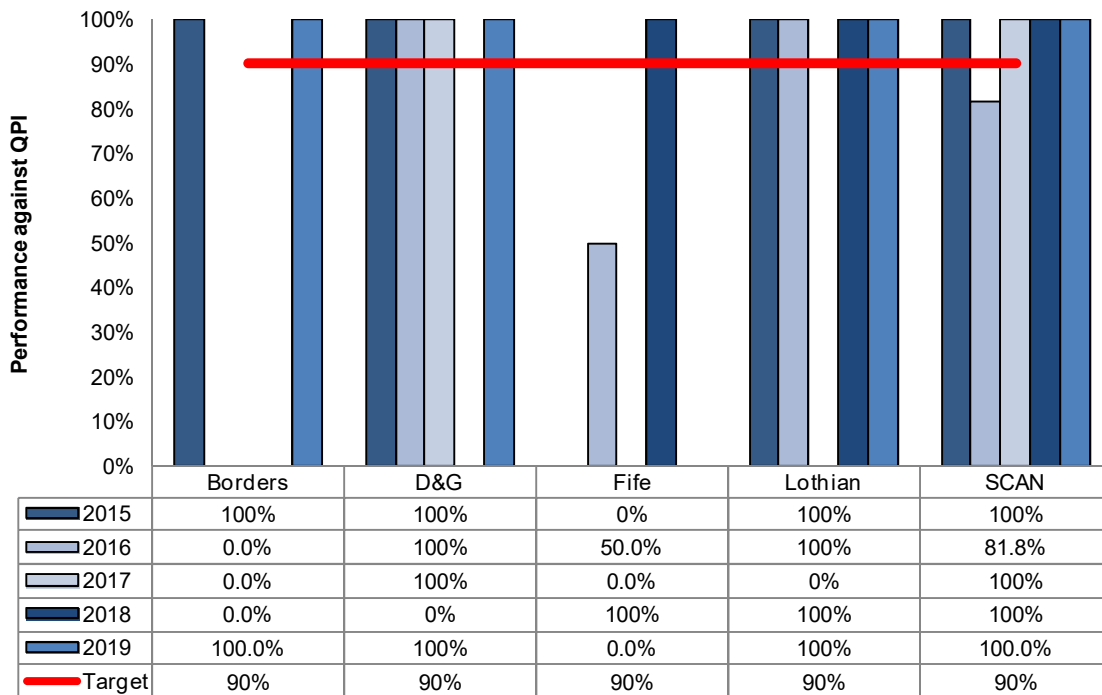
Numerator = Number of patients with RCC for whom surgery is not first treatment who have a histological diagnosis (confirmed by biopsy) before Cryotherapy or Radiofrequency ablation as first treatment.

Denominator = All patients with RCC undergoing cryotherapy or radiofrequency ablation as their first treatment (no exclusions).

Exclusion = Patients with inherited genetic renal cancer.

Target 90%	Borders	D&G	Fife	Lothian	SCAN
2019 cohort	17	38	61	175	291
Ineligible for analysis	16	36	61	172	285
Exclusion from analysis	0	0	0	1	1
Numerator:	1	2	0	2	5
Not recorded for numerator	0	0	0	0	0
Denominator:	1	2	0	2	5
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	100	100	N/A	100	100

QPI 2i: Histological Diagnosis 2015 to 2019



QPI 2ii: Histological Diagnosis – Target = 90%

Title: Patients with renal cancer not undergoing surgery should have a histological diagnosis prior to commencing treatment.

Numerator = Number of patients with RCC for whom surgery is not first treatment who have a histological diagnosis (confirmed by biopsy) before SACT as first treatment.

Denominator = All patients with RCC undergoing SACT as their first treatment

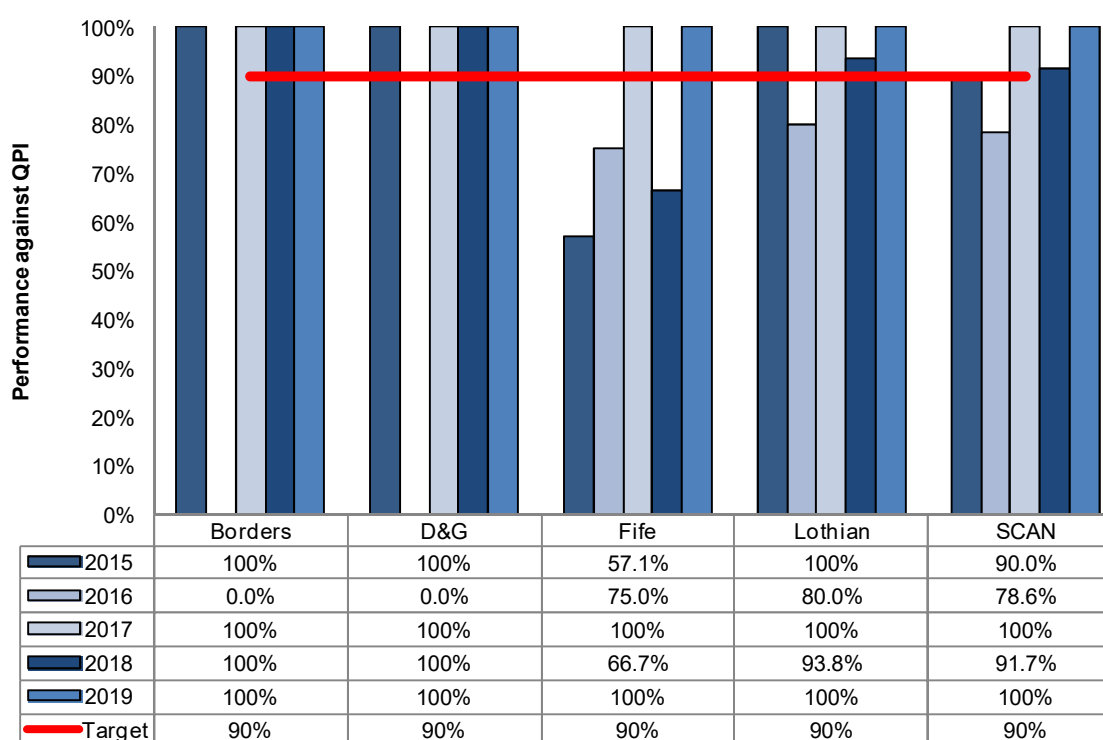
Exclusion = None

Target 90%	Borders	D&G	Fife	Lothian	SCAN
2019 cohort	17	38	61	175	291
Ineligible for analysis	15	37	57	162	271
Exclusion from analysis	0	0	0	0	0
Numerator:	2	1	4	13	20
Not recorded for numerator	0	0	0	0	0
Denominator:	2	1	4	13	20
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	0	0	1	1
% Performance	100	100	100	100	100

Comments:

Target met in all health boards.

QPI 2ii: Histological Diagnosis 2015 to 2019



QPI 3: Clinical Staging - TNM – Target = 98%

Title: The TNM staging system should be used to stage patients with Renal Cell Carcinoma (RCC).

Numerator = Number of patients diagnosed with RCC who were clinically staged using TNM staging system before first treatment.

Denominator = All patients diagnosed with RCC (no exclusions)

Target 98%	Borders	D&G	Fife	Lothian	SCAN
2019 cohort	17	38	61	175	291
Ineligible for analysis	0	0	0	0	0
Exclusion from analysis	0	0	0	0	0
Numerator:	17	27	56	168	268
Not recorded for numerator	0	11	0	7	18
Denominator:	17	38	61	175	291
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	0	5	0	5
% Performance	100	71.1	91.8	96.0	92.1

Comments:

D&G: The QPI target was not met showing a shortfall of 26.9% (11 cases). None had TNM fully recorded at MDM.

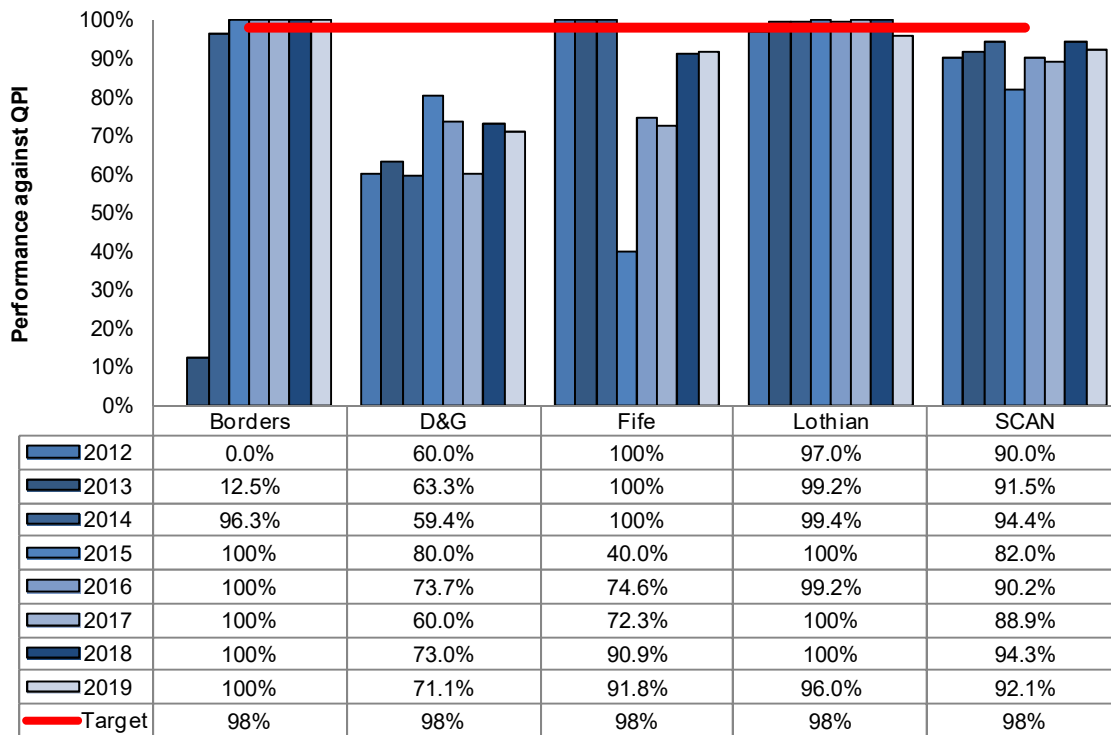
Fife: The QPI target was not met showing a shortfall of 6.2% (5 cases). None had TNM fully recorded at MDM.

Lothian: The QPI target was not met showing a shortfall of 2% (7 cases) 5 had incomplete staging, 2 images were indeterminate for metastatic disease.

SCAN: In cases with small tumours, the imaging was found to be incomplete and therefore complete TNM staging was not possible. After clinical review of these cases, no metastatic disease was missed.

Action: Add TNM (and plan) to MDM outcome sheet. Suggest to radiologist to update radiology reports post MDM for all boards involved in the Lothian MDM.

QPI 3: Clinical Staging TNM 2012 to 2019



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

Title: Patients with renal cell carcinoma should be discussed by a multidisciplinary team prior to definitive treatment.

Numerator = Number of patients with renal cancer discussed at the MDT before definitive treatment.

Denominator = All patients diagnosed with RCC.

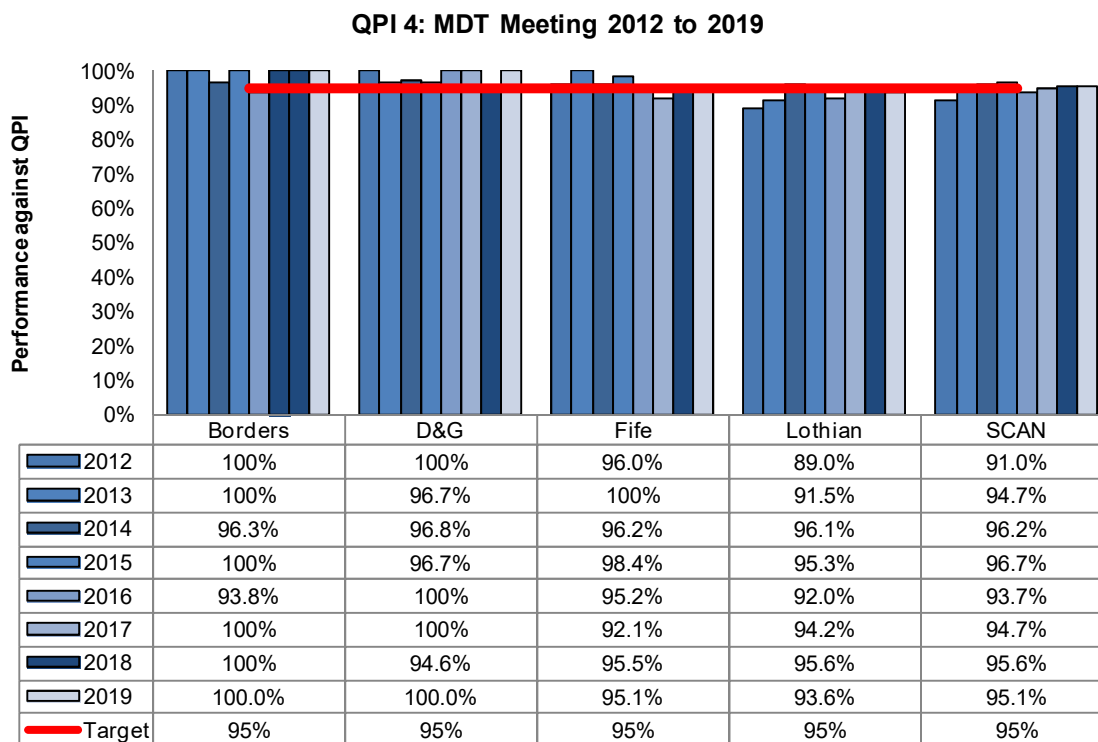
Exclusion = Patients who died before first treatment.

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2019 cohort	17	38	61	175	291
Ineligible for analysis	0	0	0	0	0
Exclusion from analysis	1	0	0	4	5
Numerator:	16	38	58	160	272
Not recorded for numerator	0	0	0	1	1
Denominator:	16	38	61	171	286
Not recorded for exclusion	0	0	0	1	1
Not recorded for denominator	0	0	0	0	0
% Performance	100	100	95.1	93.6	95.1

Comments:

Lothian: The QPI target was not met showing a shortfall of 1.4% (10 cases) 5 had no MDM discussion. 3 had Active Surveillance confirmed prior to MDM discussion. 1 started SACT as an emergency and MDM discussion followed after definitive treatment. 1 had renal surgery at the same time as anterior resection, MDM discussion followed with the result of surgery.

Action: None identified.



QPI 7: Nephron Sparing Treatment – Target = 50%

Title: Patients with T1a renal cancer should receive Nephron Sparing treatment (Cryotherapy, RFA or robotic / laparoscopic / open partial nephrectomy).

Numerator = Number of patients with T1a N0 M0 RCC undergoing Nephron Sparing treatment (Cryotherapy, RFA or robotic / laparoscopic / open partial nephrectomy)

Denominator = All patients with T1a N0 M0. RCC

Exclusion = Patients who refuse treatment, Patients receiving supportive care only (not for active treatment), Patients receiving active surveillance (no active treatment), Patients who died before treatment.

Data presented by Health board of Diagnosis to reflect treatment decisions by MDM.

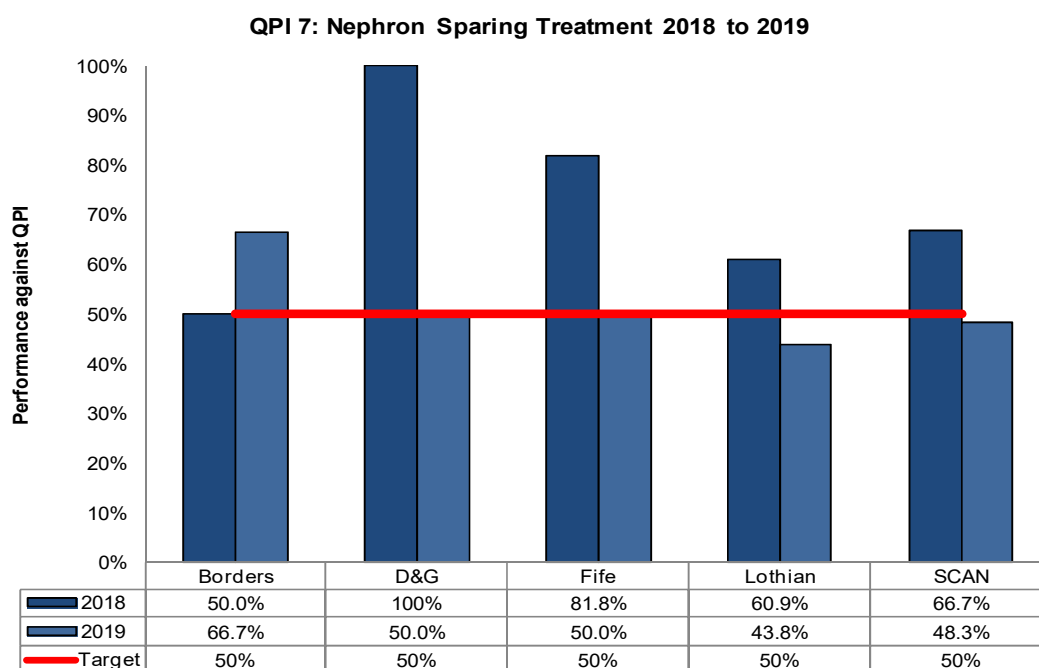
Target 50%	Borders	D&G	Fife	Lothian	SCAN
2019 cohort	17	38	61	175	291
Ineligible for analysis	11	33	39	91	174
Exclusion from analysis	3	3	14	68	88
Numerator:	2	1	4	7	14
Not recorded for numerator	0	0	0	1	1
Denominator:	3	2	8	16	29
Not recorded for exclusion	0	0	0	1	1
Not recorded for denominator	0	5	2	1	8
% Performance	66.7	50.0	50.0	43.8	48.3

All Surgical procedures for Borders and D&G patients are performed in Lothian

Comments:

Lothian: The QPI target was not met showing a shortfall of 6.2% (9 cases) 8 had radical nephrectomies rather than partial nephrectomies. Clinically appropriate decisions were taken when deciding not to proceed with partial nephrectomies. These decisions also included patient choice. 1 case was still awaiting treatment at time of reporting. No definitive treatment options possible in 1 case due travel restrictions/shielding due to COVID 19.

Action: None identified.



QPI 8: 30/90 Day Mortality – Target = Surgery, Cryotherapy and RFA <2%

Title: Proportion of patients who die within 30 or 90 days of first treatment (Surgery, Cryotherapy and RFA) for RCC.

Numerator = Number of patients who undergo minimally invasive RFA, Cryotherapy or operative treatment as first treatment for RCC who die within 30 / 90 days of first treatment.

Denominator = All patients who undergo minimally invasive RFA, Cryotherapy or operative treatment as first treatment for RCC.

Exclusion = Patients who undergo emergency surgery (radical nephrectomy).

QPI 8i 30 day Mortality

Presented by Board of Surgery

Target <2% Surgery	Borders	D&G	Fife	Lothian	SCAN
2019 cohort	17	38	61	177	293
Ineligible for analysis	6	20	26	103	155
Exclusion from analysis	0	0	0	0	0
Numerator – Surgery	-	-	0	2	2
Denominator – Surgery	-	-	35	105	140
% Performance	N/A	N/A	0	1.9	1.4

Presented by Board of Diagnosis

Target <2% Cryotherapy	Borders	D&G	Fife	Lothian	SCAN
2019 cohort	17	38	61	175	291
Ineligible for analysis	16	36	61	172	285
Exclusion from analysis	0	0	0	0	0
Numerator	0	0	0	0	0
Denominator	1	2	0	3	6
% Performance	0	0	N/A	0	0

Presented by Board of Diagnosis

Target <2% RFA	Borders	D&G	Fife	Lothian	SCAN
2019 cohort	17	38	61	175	291
Ineligible for analysis	17	38	61	175	291
Exclusion from analysis	0	0	0	0	0
Numerator	0	0	0	0	0
Denominator	0	0	0	0	0
% Performance	N/A	N/A	N/A	N/A	N/A

QPI 8ii: 90 Day Mortality

Presented by Board of Surgery

Target <2% Surgery	Borders	D&G	Fife	Lothian	SCAN
2019 cohort	17	38	61	177	293
Ineligible for analysis	6	20	28	106	160
Exclusion from analysis	0	0	0	0	0
Numerator – Surgery	-	-	0	2	2
Denominator – Surgery	-	-	33	103	136
% Performance	N/A	N/A	0	1.9	1.5

Presented by Board of Diagnosis

Target <2% Cryotherapy	Borders	D&G	Fife	Lothian	SCAN
2019 cohort	17	38	61	175	291
Ineligible for analysis	16	36	61	0	113
Exclusion from analysis	0	0	0	0	0
Numerator	0	0	0	0	0
Denominator	1	2	0	3	6
% Performance	0	0	N/A	0	0

Presented by Board of Diagnosis

Target <2% RFA	Borders	D&G	Fife	Lothian	SCAN
2019 cohort	17	38	61	175	291
Ineligible for analysis	17	38	61	175	291
Exclusion from analysis	0	0	0	0	0
Numerator	0	0	0	0	0
Denominator	0	0	0	0	0
% Performance	N/A	N/A	N/A	N/A	N/A

QPI 9: Systemic Therapy – Target = 70%

Title: Patients with advanced and/or metastatic renal cell carcinoma (RCC) should receive systemic therapy between diagnosis and death.

Numerator = Number of patients with RCC which is advanced and / or metastatic at time of diagnosis where at least 12 months have elapsed since diagnosis irrespective of whether or not they have died who receive first treatment with SACT, within 12 months of diagnosis. (Advanced/ metastatic disease is defined as T4 N (any) M (any); T (any) N (any) M1)

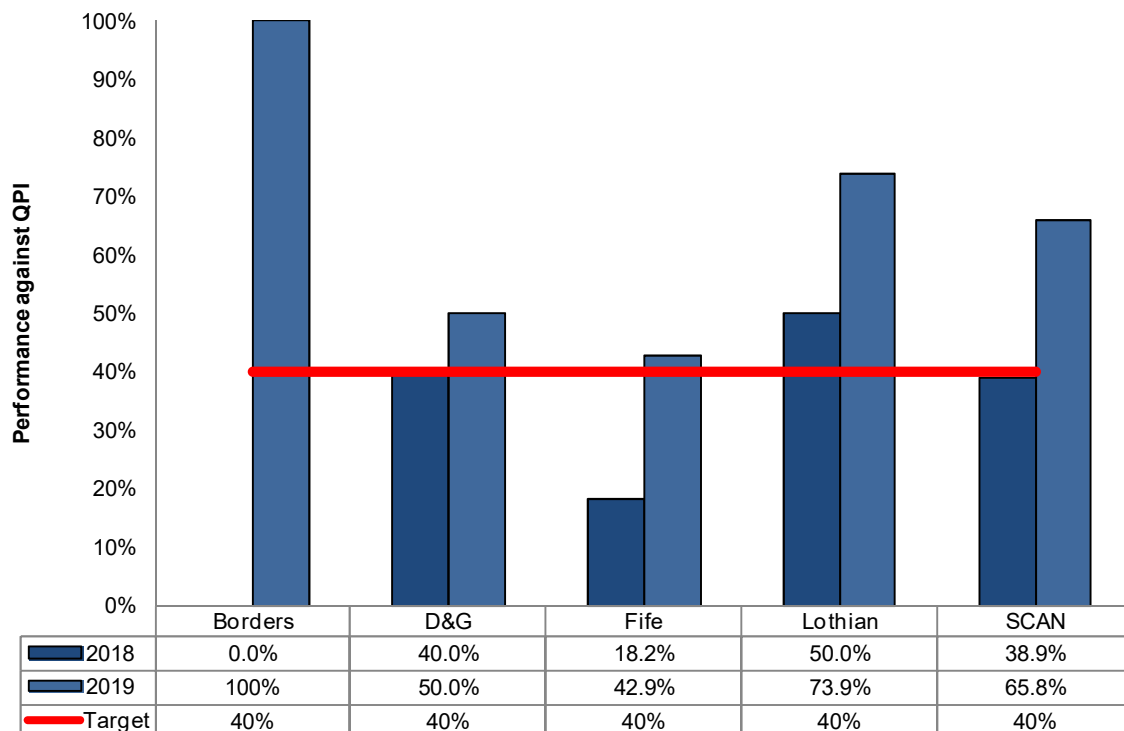
Denominator = All patients with RCC which is advanced and / or metastatic at time of diagnosis where at least 12 months have elapsed since diagnosis irrespective of whether or not they have died

Exclusions = Patients documented to have performance status 2, 3 or 4 at time of diagnosis, Patients documented to have declined systemic treatment, Patients enrolled in clinical trials.

Target 40%	Borders	D&G	Fife	Lothian	SCAN
2018 cohort	9	41	66	168	284
Ineligible for analysis	7	33	52	132	224
Exclusion from analysis	0	2	3	13	18
Numerator:	2	3	3	17	25
Not recorded for numerator	0	0	0	0	0
Denominator:	2	6	7	23	38
Not recorded for exclusion	0	2	2	12	16
Not recorded for denominator	0	7	4	0	11
% Performance	100	50.0	42.9	73.9	65.8

Reported 12 months retrospectively

QPI 9: Systemic Therapy 2018 to 2019



QPI 10: Prognostic Scoring for Metastatic Disease – Target = 90%

Title: Patients with metastatic Renal Cell Carcinoma (RCC) should be assigned a valid prognostic score following diagnosis.

Numerator = Number of patients with metastatic RCC who are assigned a valid prognostic score following diagnosis.

Denominator = All patients diagnosed with metastatic RCC (no exclusions)

Target 90%	Borders	D&G	Fife	Lothian	SCAN
2019 cohort	17	38	61	175	291
Ineligible for analysis	14	30	51	147	242
Exclusion from analysis	0	0	0	0	0
Numerator:	3	7	2	14	26
Not recorded for numerator	0	1	6	14	21
Denominator:	3	8	7	28	46
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	2	3	7	12
% Performance	100	87.5	28.6	50.0	56.5

Comments:

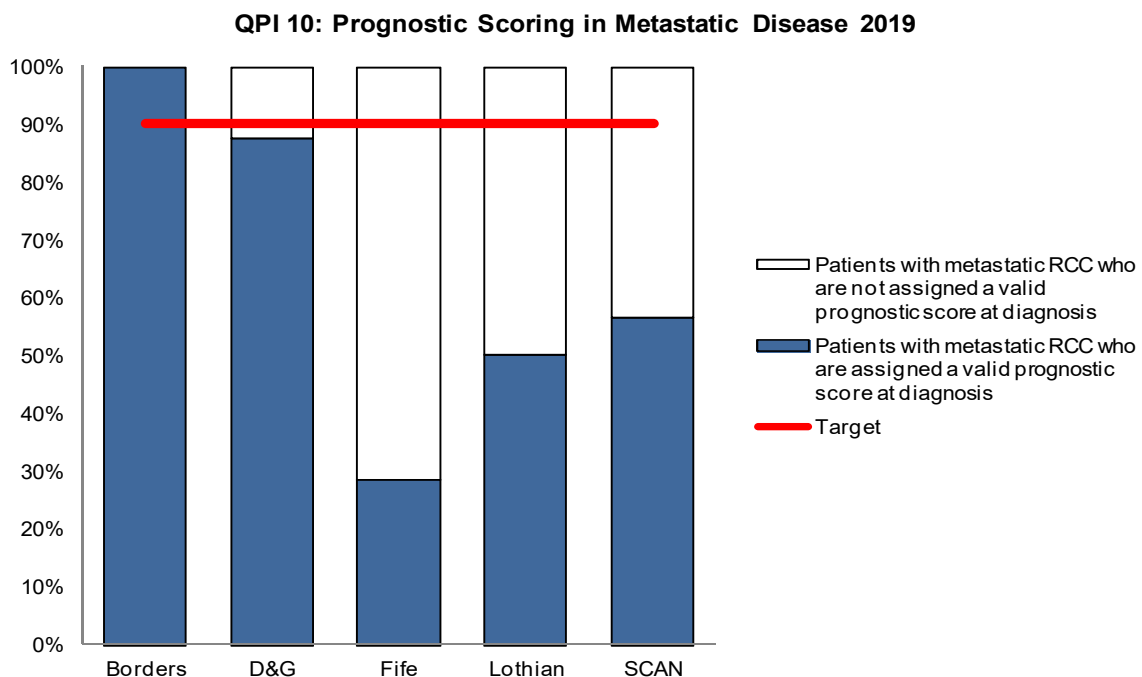
D&G: The QPI target was not met showing a shortfall of 2.5% (1 case) No prognostic score.

Fife: The QPI target was not met showing a shortfall of 61.4% (5 cases) No prognostic scores recorded.

Lothian: The QPI target was not met showing a shortfall of 40% (14 cases) 9 had no prognostic score recorded although seen and in some cases treated. 5 had no MDM discussion and were not seen or treated in the Urology service.

SCAN: Patients, who are not fit for treatment and should have palliative care at the outset, should perhaps not need a prognostic score. As we cannot alter the measurement until the next review. The QPI in many cases measures patients who are too unwell to be assigned a prognostic score.

Action: An improvement is expected in the 2020 report on this QPI.



QPI 11: Leibovich Score – Target = 100%

Title: Patients with Clear Cell Renal Cell Carcinoma (RCC) should be assigned a Leibovich score following radical nephrectomy.

Numerator = Number of patients with Clear Cell RCC who undergo radical nephrectomy and are assigned a Leibovich score following surgery.

Denominator = All patients with Clear Cell RCC who undergo radical nephrectomy.

Exclusion = Patients with metastatic disease (TanyNanyM1).

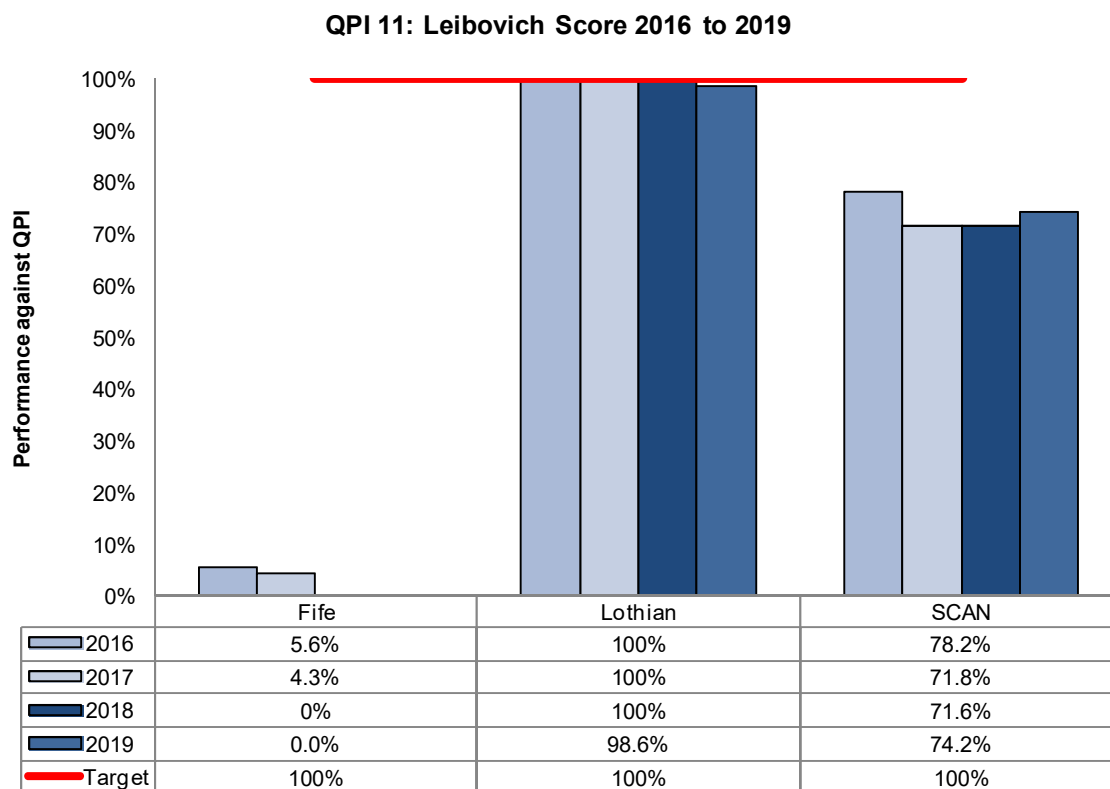
Data presented by Health board of Surgery

Target 100%	Borders	D&G	Fife	Lothian	SCAN
2019 cohort	17	38	61	177	293
Ineligible for analysis	6	24	35	42	88
Exclusion from analysis	2	3	3	28	36
Numerator:	-	-	0	69	69
Not recorded for numerator	-	-	23	0	23
Denominator:	-	-	23	70	93
Not recorded for exclusion	-	-	0	1	1
Not recorded for denominator	-	-	0	0	0
% Performance	N/A	N/A	0	98.6	74.2

Comments:

Fife: The QPI target was not met showing a shortfall of 100% (23 cases) Leibovich score is not used as a risk stratification tool in NHS Fife, despite repeated requests to comply with this QPI.

Action: To clarify if Prof McNeill got a response from NHS Fife.



QPI 12: Volume of cases per Surgeon – Target = ≥ 15

Title: Renal surgical resection should be performed by surgeons who perform the procedures routinely.

“SMR01 data will be used to support reporting and monitoring of this QPI rather than clinical audit. This will maximise the use of data which are already collected and remove the need for any duplication of data collection. Standard reports are currently being specified and direct access for each Board to run these reports are being investigated to ensure nationally consistent analysis and reporting.”

Exclusion = No Exclusions

Number of Radical Nephrectomy procedures by surgeon in 2019					
	A	B	C	D	E
ISD Figures 2019	51	19	63	72	7
ISD Figures 2018	38	11	65	77	

Target: Minimum 15 procedures per surgeon in a 1 year period.

This is a minimum target level and is designed to ensure that all surgeons performing renal surgery perform a minimum of 15 procedures per year. Varying evidence exists regarding the most appropriate target level for surgical case volume. In order to ensure that the target level takes account of level 1 evidence and will drive continuous quality improvement as intended this performance indicator must be kept under regular review.

It is recommended that where two consultants operate together on the same patient the case should be counted under the Lead Surgeon.

QPI 13: Trifecta Rate – Ischaemia Time – Target = 50%

Title: Trifecta Rate in Partial Nephrectomy T1a Renal Cell Carcinoma (RCC) patients.

Numerator = Number of patients with T1a RCC undergoing partial nephrectomy under cold ischaemic conditions who have cold ischaemia time less than 25 minutes, negative surgical margins and no complications (length of stay ≤ 7 days).

Denominator = All patients with T1a RCC undergoing partial nephrectomy (no exclusions)

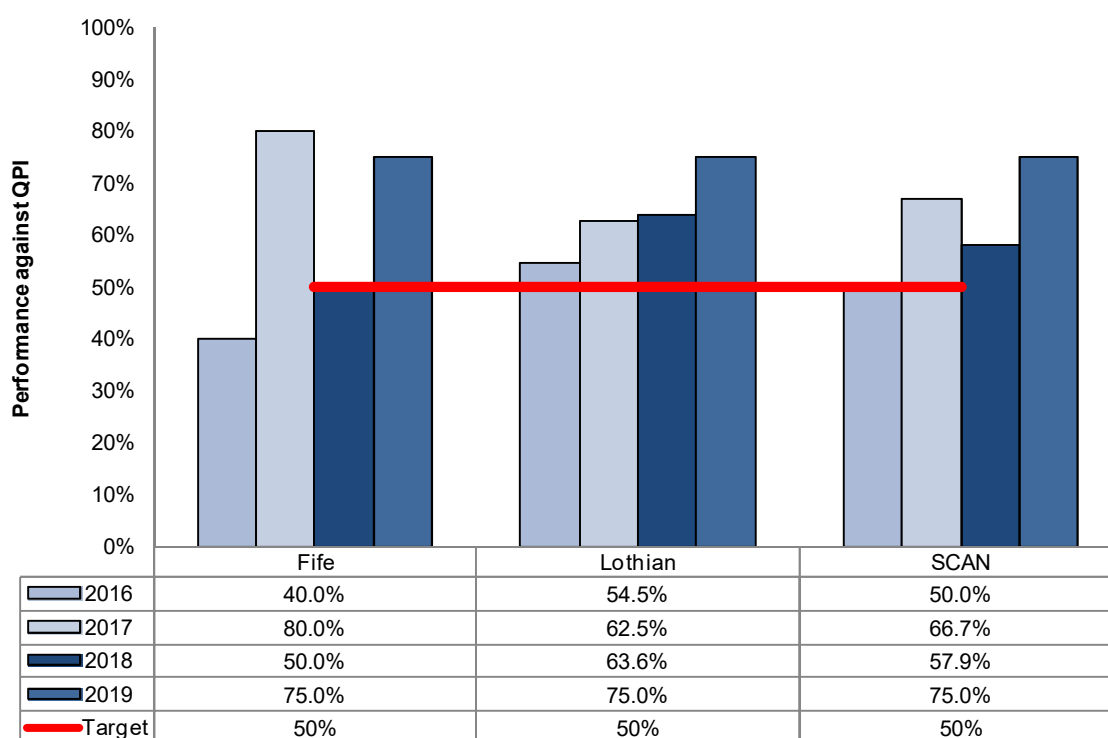
Data presented by Health board of Surgery

Target 50%	Borders	D&G	Fife	Lothian	SCAN
2019 cohort	17	38	61	177	293
Ineligible for analysis	16	37	57	169	279
Exclusion from analysis	0	0	0	0	0
Numerator:	-	-	3	6	9
Not recorded for numerator	-	-	1	0	1
Denominator:	-	-	4	8	12
Not recorded for exclusion	-	-	0	0	0
Not recorded for denominator	-	-	0	1	1
% Performance	N/A	N/A	75.0	75.0	75.0

Comments:

Met by all Health Boards

QPI 13: Trifecta Rate 2016 to 2019



QPI 14: Clinical Trial and Research Study Access – Target = 15%

Title: Proportion of patients diagnosed with renal cancer who are consented for a clinical trial / research study.

Numerator = Number of patients with renal cancer consented to a clinical trial (Data from SCR database EDGE).

Denominator = Average 5 year incidence from Cancer Registry (2014 – 2018)

Exclusions = None.

Target 15%	Borders	D&G	Fife	Lothian	SCAN
Numerator	8	13	6	59	86
Denominator	21	30	64	154	269
% Performance	38.1	43.3	9.4	38.3	32.0

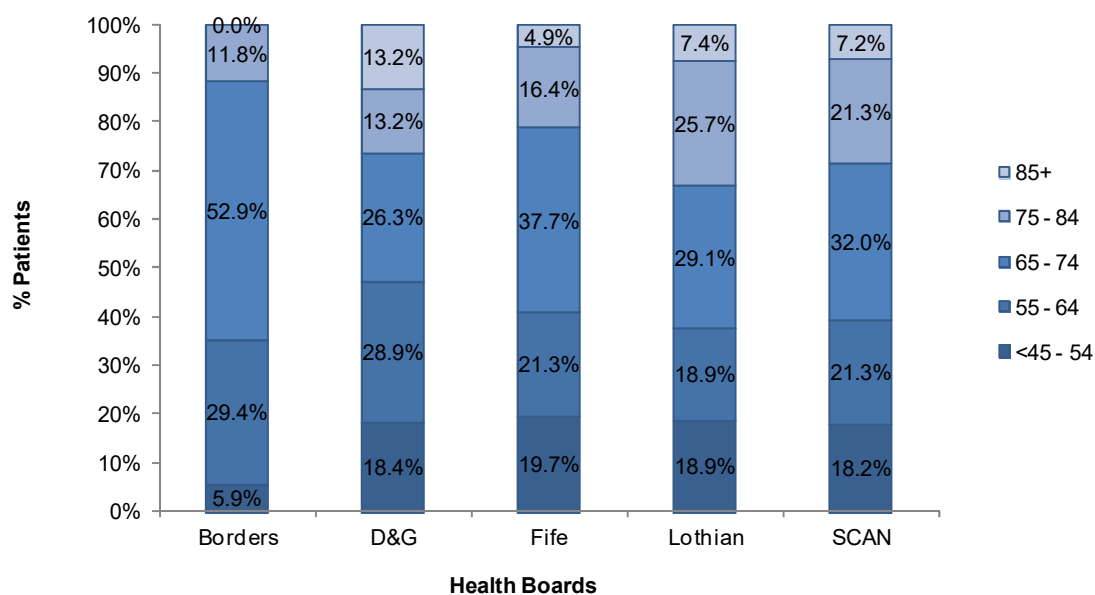
Open Trials and Research 2018	Numbers consented
Cell Free DNA	65
Placebo-Controlled Trial-Adjuvant MK-3475	6
PRISM	8
CALYPSO	1
NAXIVA	3
ENeRgy	1
RAMPART	2

Action: None identified

Age and Gender Analysis

Age and Gender Analysis		Borders	D&G	Fife	Lothian	SCAN
Under 45	M	0	1	0	8	9
	F	0	1	1	4	6
45 - 49	M	0	0	3	7	10
	F	0	1	3	2	6
50 - 54	M	1	2	3	9	15
	F	0	2	2	3	7
55 - 59	M	0	4	4	7	15
	F	1	3	3	5	12
60 - 64	M	3	3	4	13	23
	F	1	1	2	8	12
65 - 69	M	2	2	7	14	25
	F	0	1	6	11	18
70 - 74	M	1	4	7	19	31
	F	6	3	3	7	19
75 - 79	M	1	4	1	17	23
	F	0	0	3	12	15
80 - 84	M	1	0	4	4	9
	F	0	1	2	12	15
85+	M	0	3	2	6	11
	F	0	2	1	7	10
Total	M	9	23	35	104	171
	F	8	15	26	71	120

Age at Diagnosis 2019



APPENDIX

Renal Cancer QPI Attainment Summary 2018		Target %	Borders		D&G		Fife		Lothian		SCAN	
QPI 1 Patients with RCC who undergo pre-treatment cross-sectional imaging of chest, abdomen +/- pelvis or MRI.		95	N 7 D 8	87.5%	N 17 D 17	100%	N 45 D 46	97.8%	N 87 D 91	95.6%	N 156 D 162	96.3%
QPI 2 Patients with RCC who have a histological diagnosis via biopsy before Non-surgical primary treatment.	Cryotherapy / RFA	90	N 0 D 0	N/A	N 0 D 0	N/A	N 1 D 1	100%	N 7 D 7	100%	N 8 D 8	100%
	SACT	90	N 1 D 1	100%	N 4 D 4	100%	N 2 D 3	66.7%	N 15 D 16	93.8%	N 22 D 24	91.7%
QPI 3 Patients whose RCC is staged pre-treatment using the TNM staging system.		98	N 9 D 9	100%	N 27 D 37	73.0%	N 60 D 66	90.9%	N 167 D 167	100%	N 263 D 279	94.3%
QPI 4 Patients with RCC who are discussed at MDT meeting before definitive treatment.		95	N 9 D 9	100%	N 35 D 37	94.6%	N 63 D 66	95.5%	N 153 D 160	95.6%	N 260 D 272	95.6%
QPI 7 T1aN0M0 RCC who have nephron sparing treatment (Cryotherapy, RFA or robotic/lap/open partial nephrectomy)		50	N 2 D 4	50%	N 1 D 1	100%	N 9 D 11	81.8%	N 14 D 23	60.9%	N 26 D 39	66.7%
QPI 8 Proportion of patients who die within 30 days of treatment for RCC.	Surgery	<2	Presented by Health Board of surgery			N 0 D 42	0%	N 0 D 89	0%	N 0 D 131	0%	
	Cryotherapy treatment	<2	N 0 D 0	N/A	N 0 D 0	N/A	N 0 D 0	N/A	N 0 D 6	0%	N 0 D 6	0%
	RFA treatment	<2	N 0 D 0	N/A	N 0 D 0	N/A	N 0 D 1	0%	N 0 D 0	N/A	N 0 D 1	0%
QPI 8 Proportion of patients who die within 90 days of treatment for RCC.	Surgery	<2	Presented by Health Board of surgery			N 0 D 42	0%	N 0 D 89	0%	N 0 D 131	0%	
	Cryotherapy treatment	<2	N 0 D 0	N/A	N 0 D 0	N/A	N 0 D 0	0%	N 0 D 6	0%	N 0 D 6	0%
	RFA treatment	<2	N 0 D 0	N/A	N 0 D 0	N/A	N 0 D 1	0%	N 0 D 0	N/A	N 0 D 1	0%
QPI 9 Advanced and/or metastatic RCC who have SACT in 12 months of diagnosis.		40	N 0 D 0	N/A	N 2 D 5	40.0%	N 2 D 11	18.2%	N 10 D 20	50.0%	N 14 D 36	38.9%
QPI 10 Patients with metastatic RCC who are assigned a valid prognostic score following diagnosis		90	N 1 D 3	33.3%	N 0 D 8	0%	N 1 D 11	9.1%	N 14 D 31	45.2%	N 16 D 53	30.2%
QPI 11 Patients with clear cell RCC who are assigned a Leibovich score following radical nephrectomy.		100	Presented by Health Board of surgery			N 0 D 23	0%	N 58 D 58	100%	N 58 D 81	71.6%	
QPI 12 Number of renal surgical resections performed by a surgeon over a 1 year period.		>12	3 of 4 Surgeons within SCAN performed 15 or more surgeries within the cohort year									

Renal Cancer QPI Attainment Summary 2018		Target %	Borders	D&G	Fife	Lothian	SCAN
QPI 13 Partial nephrectomy (T1a RCC) who achieve trifecta (Cold ischaemia time < 25min, -ve margins, no complications)		50	Presented by Health Board of surgery		N 4 50.0% D 8	N 7 63.6% D 11	N 11 57.9% D 19
QPI 14 Clinical Trial + Research study access - Consented in Trials and held on SCRN database.	Clinical Trial/ Research	15	N 1 5.3% D 19	N 8 30.8% D 26	N 4 6.3% D 63	N 48 31.6% D 152	N 61 23.5% D 260