

SOUTH EAST SCOTLAND CANCER NETWORK PROSPECTIVE CANCER AUDIT

Renal Cancer 2018 Comparative Audit Report

Patients diagnosed 1st January 2018 to 31st December 2018

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Document History

Version	Circulation	Date	Comments
1	Lead Clinicians sign off group	29/11/2019	Actions agreed, clinical comment added.
2	SCAN Renal Lead Clinician Steve Leung & Leads Sign off group	04/12/2019	For approval and Lead Clinician's commentary
3	SCAN Urology Group	29/01/2020	For final SCAN Group approval and Lead Clinician's commentary
4	SCAN Group SCAN Governance Framework SCAN Action Plan Board Leads	07/02/2020	Board approved action plans due on 06/03/2020
4W	Published to SCAN Website	2022	

Clinical Lead's Summary

I am pleased to introduce the annual report of the renal cancer audit QPI results for SCAN. This report is the first annual report following a review and re-definition of the renal cancer QPIs in 2019. There are many areas of excellent practice that I would highlight in this report.

QPI 1 describes the percentage of patients that have received full staging investigations in the form of CT or MRI prior to treatment. QPI 3 describes the percentage of patients staged using the TNM staging prior to treatment. I am very pleased to note that we have achieved the highest compliance with these targets since the QPI initiative began in 2012.

QPI 7 describes the percentage of patients with renal cancers less than 4cm in size receiving nephron sparing surgery or cryotherapy. In our review in 2019, we raised the target to 50%. Our results this year demonstrate 66.7% of our patients received renal preserving interventions, which is excellent for our patients with small renal cancers. We continue to show good performance in QPI 13, which measures outcomes from nephron sparing surgery.

QPI 9 is 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. There is still work to be done to improve the prognostic scoring of patients with metastatic disease in QPI 10.

We have had several renal cancer interventional trials opened in 2017 and a translational study commenced in 2018 and we see a significant improvement in the enrolment of patients into clinical trials and research study access as reflected in QPI 14.

I would like to thank all the members of the teams across the region who have contributed to this piece of work. In particular, the audit teams who have collected a significant amount of data, performed the analysis and generated these reports. This report demonstrates the continued commitment to providing the highest quality of care for our renal cancer patients.

Mr Steve Leung
SCAN Clinical Lead in Renal Cancer

Clinical Recommendations 2018

QPI	Action required	Lead	Date for Action Plan returns
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	6 th March 2020
9	Performance status and prognostic scoring should be documented for metastatic patients.	J Malik	6 th March 2020
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	6 th March 2020
11	SCAN Chair to write to NHS Fife requesting compliance with this nationally agreed requirement to use the Leibovich score.	Alan McNeill	6 th March 2020

Clinical Recommendations 2017

QPI	Action required	Lead	Progress
1	QPI to be reviewed at formal review in 2019	Lorna Bruce	Complete
1	9 patients in SCAN received no chest CT prior to surgery. Leads to review cases in order to provide reasons and to ensure complete imaging is provided to renal patients in SCAN	Ben Thomas Maria Bews-Hair Alex Chapman Steve Leung	BGH – DGRI – All renal patients registered by Cancer Trackers for Urology MDM will be reviewed prior to submission to Lothian to ensure full CT Staging has been completed or requested. Fife – To highlight at MDM where CT Chest has not been carried out pre operatively. Lothian – CT scans always reviewed at MDM prior to treatment. Ensuring complete imaging has been done and reviewed as a priority. Checked at review stage for completeness.
3	Clinical TNM to be added to the outcome sheet for the MDM and MDM chair to ensure a verbal summary is given at the meeting.	Maria Bews-Hair Steve Leung	DGRI – This is a regional action and cannot be progressed locally. Fife – All patients being discussed at MDT with a suspicion of Renal Cancer will have a TNM recorded.

			Lothian – TNM staging to be verbalised at MDM review and added to MDM outcome, to form part of the published outcome.
4	4 patients in SCAN were discussed after treatment and 8 renal patients were not discussed at MDM at all. 4 of those not discussed (Fife cases) were patients with advanced disease identified through death data from GRO). 2 surgical patients in Lothian were not discussed. All patients should be registered with the MDM and action is required to improve this.	Alex Chapman / Sarah Scobie Steve Leung	Fife – To ensure that patients diagnosed during an inpatient episode are registered at MDM prior to treatment. Lothian –
8	With respect to SACT mortality, QPI 8 requires to be reassessed at the QPI Formal Review in 2019. Currently it reflects appropriate treatment selection but the target does not reflect the subset of patients being treated with SACT within the audit cohort. Chemocare mortality reports may be a better way to address this QPI.	Lorna Bruce	Complete
9	This QPI measures SACT within 12 months for renal patients with advanced disease and is not reflecting the true requirements for this cohort of patients. This QPI requires careful scrutiny and re-assessment at the Formal Review in 2019	Lorna Bruce	Complete
10	Prognostic scoring is required to be recorded in 90% of all renal patients diagnosed with metastatic disease at presentation. Only 12.5% of patients in scan were assigned a score. Action is required to improve documentation of prognostic scoring.	Ben Thomas Steve Leung Alex Chapman / Sarah Scobie Maria Bews-Hair	BGH – DGRI – This is a regional action and cannot be progressed locally. Fife – All new metastatic patients will be flagged at MDT for LDH testing in order for a Motzer score to be assigned. Lothian – Prognostic score combined with performance status to be better verbalised and recorded as part of the MDM outcome for cases meeting this criteria.
11	NHS Fife pathologists are required to record the Leibovich Score. Where there are no nodes in the sample the N stage should be assumed to be zero.	Maeve Rahilly	Fife – No action taken due to using UISS Risk Stratification in line with European Association of Urology Guidelines.
Trials	Investigators need to ensure that trials are registered with SCRN on their EDGE database.	Trial Principal Investigators	

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 T1a RCC undergoing nephron sparing treatment (cryotherapy, RFA / 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%						

Renal Cancer QPI Attainment Summary 2018	Target %	Borders	D&G	Fife	Lothian	SCAN
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				
QPI 13 Partial nephrectomy (T1a RCC) who achieve Trifecta (Ischaemia time < 25min, -ve margins, no complications)	50	Presented by Health Board of surgery		N 4 D 8 50.0%	N 7 D 11 63.6%	N 11 D 19 57.9%
QPI 14 Clinical Trial / Research study access. N: consented on SCRN database D: 5 year cancer registry average.	15	N 1 D 19 5.3%	N 8 D 26 30.8%	N 4 D 63 6.3%	N 48 D 152 31.6%	N 61 D 260 23.5%

Introduction and Methods

Cohort

This report covers patients newly diagnosed with renal cancer in SCAN between 01/01/2018 and 31/12/2018. 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, Information Services Division (ISD), 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-centered 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 ISD 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 seventh publication of QPI results for renal cancer within SCAN which encompasses most of the changes made at both formal reviews, changes to QPIs 2i and 10 will be reported next year (year 8).

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 2i to exclude cases where inherited genetic renal cancer was present at diagnosis which will be fully reported in year 8.

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% and exclusion to of cases for best supportive care and active surveillance.

QPI 8 – 30 / 90 Day Mortality – The SACT part of this QPI was removed and QPI 15 added to measure survival of this specific criterion through Chemocare reports

QPI 10 – Prognostic Scoring in Metastatic Disease. This QPI currently measures the prognostic score assigned to metastatic patients prior to first active treatment. In year 8 this will measure all metastatic cases assigned a prognostic score at diagnosis, rather than only those undergoing active treatment.

QPI 12 – Volume of Cases per Surgeon. The 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) (change to reporting methodology)

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 ISD. 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 Ben Thomas	Leanne Robinson
NHS Dumfries & Galloway	Dumfries & Galloway Royal Infirmary	Miss Maria Bews-Hair	Martin Keith
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 2013 to 2017. 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 01/01/2018 to 31/12/2018

	Borders	D&G	Fife	Lothian	SCAN
Renal Cancer	9	37	66	167	279

Estimate of Case Ascertainment: Calculated using the average of the most recent five years of Cancer Registry Data 2013 to 2017

	Borders	D&G	Fife	Lothian	SCAN
Cases from Audit	9	37	66	167	279
Cancer Registry 5 Year Average	19	26	63	152	260
Case Ascertainment %	47	142	105	110	107

Extract taken from ISD Cancer Registry website (October 2018) <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 29/11/2019
- Final draft report was sent to SCAN group for sign off and comments on 29th January 2020.
- Final report circulated to SCAN Urology Group and Audit Reporting Governance Framework on 7th February 2020.

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 Results pages:

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. Active treatment is defined as partial or radical nephrectomy, cryotherapy, radio frequency ablation or systemic therapy (no exclusions).

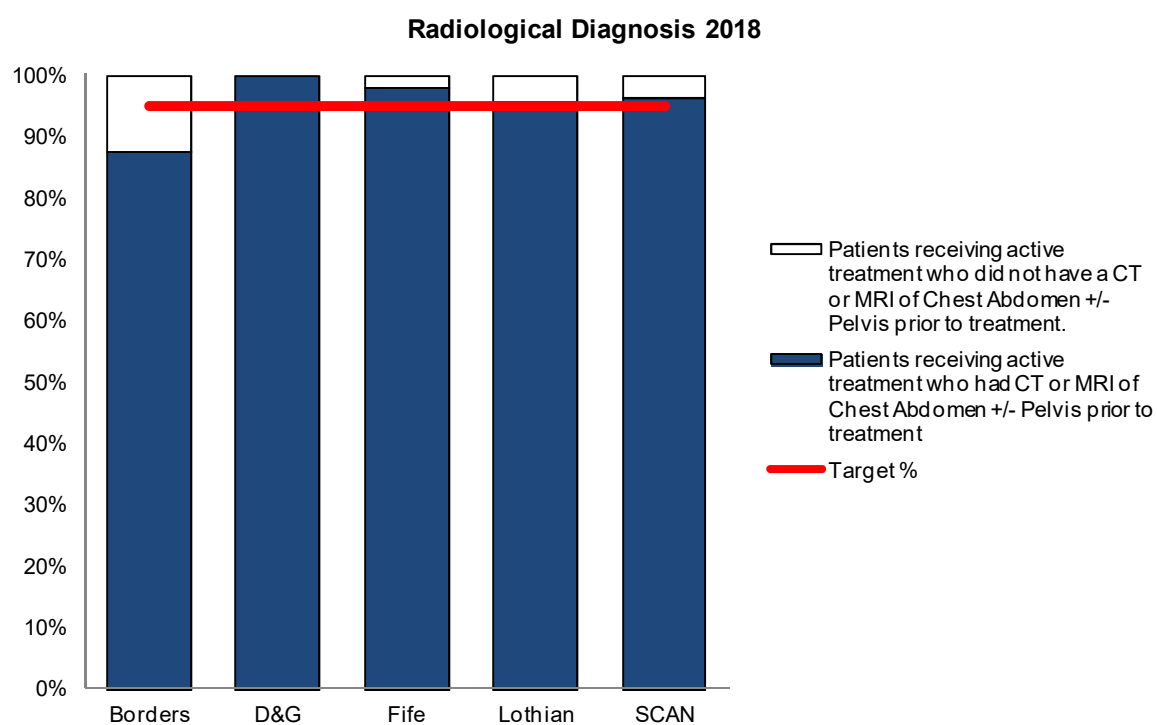
Target 95%	Borders	D&G	Fife	Lothian	SCAN
2018 cohort	9	37	66	167	279
Ineligible for analysis	1	20	20	76	117
Exclusion from analysis	0	0	0	0	0
Numerator:	7	17	45	87	156
Not recorded for numerator	0	0	0	0	0
Denominator:	8	17	46	91	162
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	87.5	100	97.8	95.6	96.3

The addition to valid imaging modality of MRI, make this year's data not comparable with data from previous years.

Comments:

Borders: The QPI target was not met showing a shortfall of 7.5% (1 case). CT chest was not completed, the lesion was small and needed biopsy for definitive diagnosis.

Action: None identified.



QPI 2i: Histological Diagnosis – Target = 90%

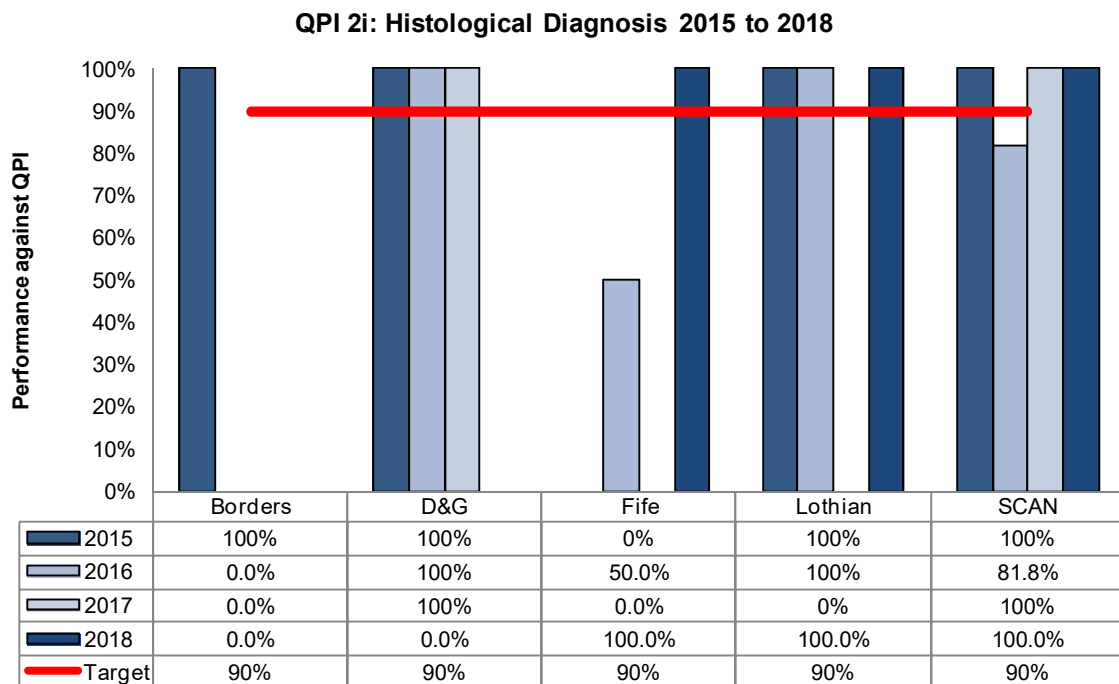
Title: Patients with renal cancer not undergoing surgery should have a histological diagnosis prior to commencing treatment.

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

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

(Patients with inherited genetic renal cancer will be excluded from this QPI in next year's report)

Target 90%	Borders	D&G	Fife	Lothian	SCAN
2018 cohort	9	37	66	167	279
Ineligible for analysis	9	37	65	160	271
Exclusion from analysis	0	0	0	0	0
Numerator:	0	0	1	7	8
Not recorded for numerator	0	0	0	0	0
Denominator:	0	0	1	7	8
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	N/A	N/A	100	100	100



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.

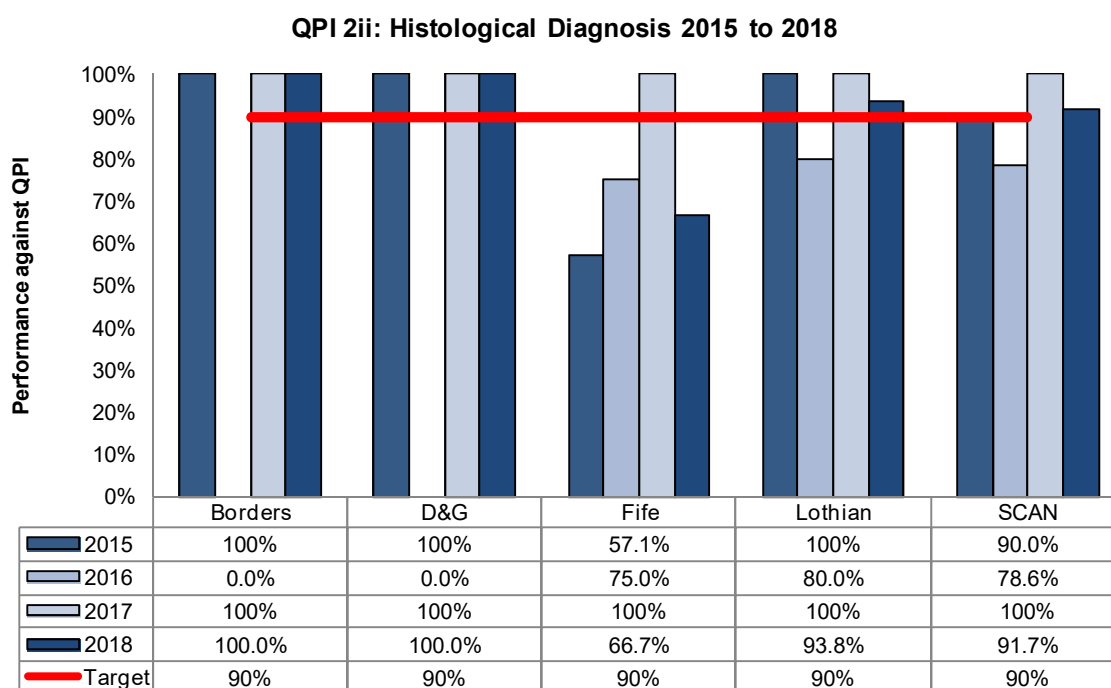
Denominator = All patients with RCC undergoing SACT as their first treatment (no exclusions)

Target 90%	Borders	D&G	Fife	Lothian	SCAN
2018 cohort	9	37	66	167	279
Ineligible for analysis	8	33	63	151	255
Exclusion from analysis	0	0	0	0	0
Numerator:	1	4	2	15	22
Not recorded for numerator	0	0	0	0	0
Denominator:	1	4	3	16	24
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	100	100	66.7	93.8	91.7

Comments:

Fife: The QPI target was not met showing a shortfall of 23.3% (1 case) Clinical decision was made not to perform a biopsy prior to starting treatment.

Action: None identified.



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
2018 cohort	9	37	66	167	279
Ineligible for analysis	0	0	0	0	0
Exclusion from analysis	0	0	0	0	0
Numerator:	9	27	60	167	263
Not recorded for numerator	0	0	6	0	6
Denominator:	9	37	66	167	279
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	100	73.0	90.9	100	94.3

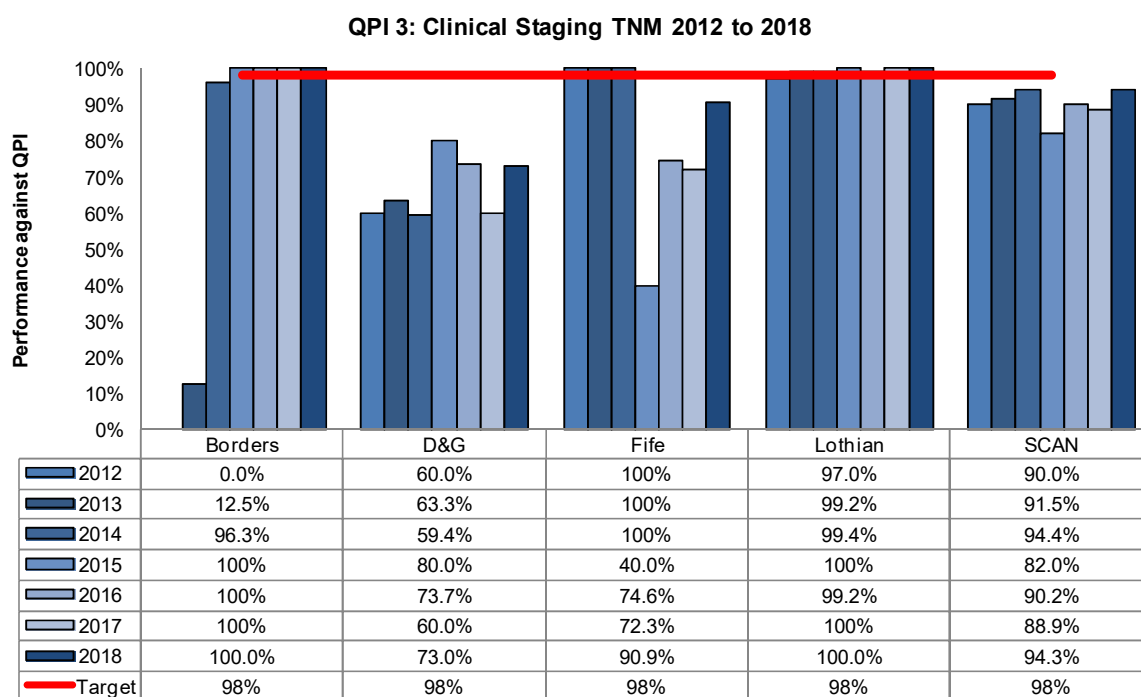
Comments:

D&G: The QPI target was not met showing a shortfall of 25% (10 cases). Full staging was not recorded in 6 cases and 4 had missing T stages.

Fife: The QPI target was not met showing a shortfall of 7.1% (6 cases) full TNM staging was not recorded.

SCAN: In Lothian, cases where TNM was not recorded at time of MDM are reviewed retrospectively and data items completed. SCAN is not meeting the target for this QPI but the overall trend is showing improvement.

Action: 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.



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.

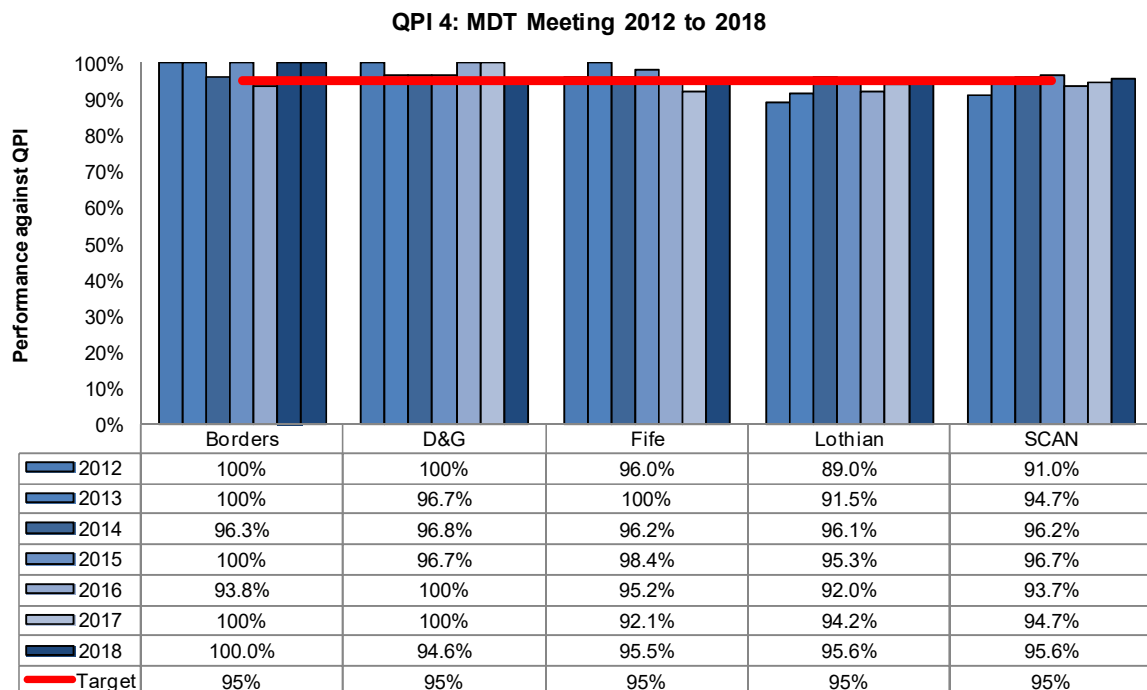
Exclusion = Patients who died before first treatment.

Target 95%	Borders	D&G	Fife	Lothian	SCAN
2018 cohort	9	37	66	167	279
Ineligible for analysis	0	0	0	0	0
Exclusion from analysis	0	0	0	7	7
Numerator:	9	35	63	153	260
Not recorded for numerator	0	0	0	0	0
Denominator:	9	37	66	160	272
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	0	0	0	0
% Performance	100	94.6	95.5	95.6	95.6

Comments:

D&G: The QPI target was not met showing a shortfall of 0.4% (2 cases) 1 discussed post emergency radiotherapy for spinal cord compression and 1 was unknown to the urology service, with widespread disease at presentation.

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

Exclusions = Patients who decline 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.

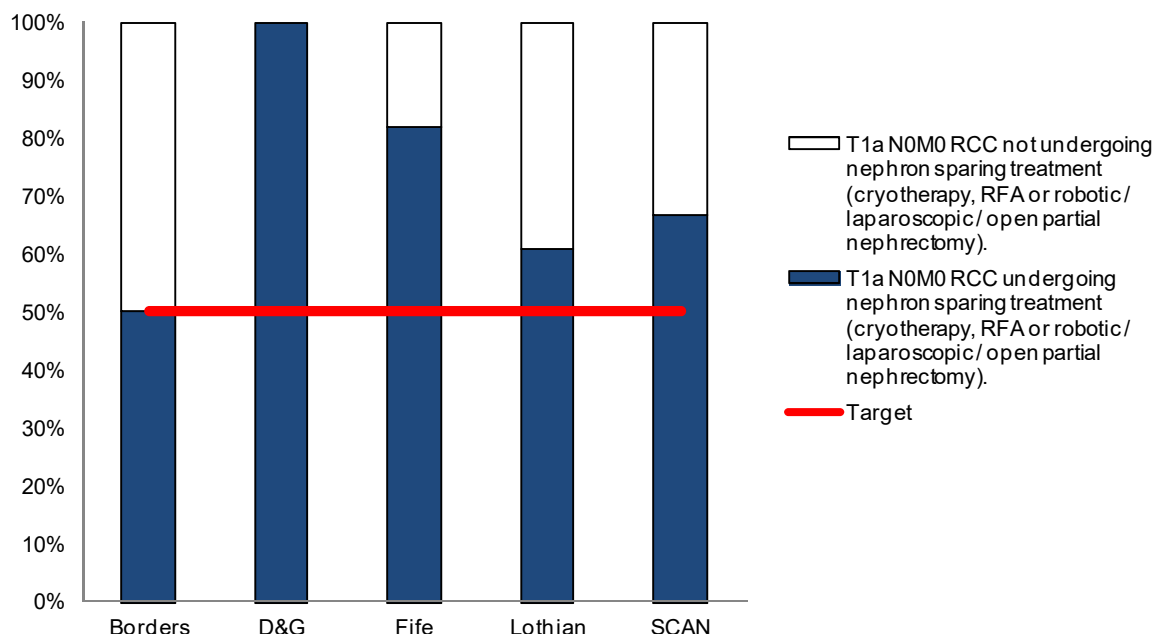
Target 50%	Borders	D&G	Fife	Lothian	SCAN
2018 cohort	9	37	66	167	279
Ineligible for analysis	5	34	47	80	166
Exclusion from analysis	0	0	6	64	70
Numerator:	2	1	9	14	26
Not recorded for numerator	0	0	0	0	0
Denominator:	4	1	11	23	39
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	2	2	0	4
% Performance	50.0	100	81.8	60.9	66.7

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

Comments:

Action: Target achieved in all Boards. No action required.

QPI 7: Nephron Sparing Treatment 2018



QPI 8: 30/90 Day Mortality – Target <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
2018 cohort	9	37	66	167	279
Ineligible for analysis	2	25	24	96	147
Exclusion from analysis	0	0	0	1	1
Numerator – Surgery	-	-	0	0	0
Denominator – Surgery	-	-	42	89	131
% Performance	N/A	N/A	0	0	0

Presented by Board of Diagnosis

Target <2% Cryotherapy	Borders	D&G	Fife	Lothian	SCAN
2018 cohort	9	37	66	167	279
Ineligible for analysis	9	37	66	161	273
Exclusion from analysis	0	0	0	0	0
Numerator	0	0	0	0	0
Denominator	0	0	0	6	6
% Performance	N/A	N/A	N/A	0	0

Presented by Board of Diagnosis

Target <2% RFA	Borders	D&G	Fife	Lothian	SCAN
2018 cohort	9	37	66	167	279
Ineligible for analysis	9	37	65	167	273
Exclusion from analysis	0	0	0	0	0
Numerator	0	0	0	0	0
Denominator	0	0	1	0	1
% Performance	N/A	N/A	0	N/A	0

Comments: Target achieved in all boards.

QPI 8ii: 90 Day Mortality

Presented by Board of Surgery

Target <2% Surgery	Borders	D&G	Fife	Lothian	SCAN
2018 cohort	9	37	66	167	279
Ineligible for analysis	2	25	24	96	147
Exclusion from analysis	0	0	0	1	1
Numerator – Surgery	-	-	0	0	0
Denominator – Surgery	-	-	42	89	131
% Performance	N/A	N/A	0	0	0

Presented by Board of Diagnosis

Target <2% Cryotherapy	Borders	D&G	Fife	Lothian	SCAN
2018 cohort	9	37	66	167	279
Ineligible for analysis	9	37	66	161	273
Exclusion from analysis	0	0	0	0	0
Numerator	0	0	0	0	0
Denominator	0	0	0	6	6
% Performance	N/A	N/A	N/A	0	0

Presented by Board of Diagnosis

Target <2% RFA	Borders	D&G	Fife	Lothian	SCAN
2018 cohort	9	37	66	167	279
Ineligible for analysis	9	37	65	167	273
Exclusion from analysis	0	0	0	0	0
Numerator	0	0	0	0	0
Denominator	0	0	1	0	1
% Performance	N/A	N/A	0	N/A	0

Comments: Target achieved in all boards.

QPI 9: Systemic Therapy – Target = 40%

Title: Patients with advanced and/or metastatic renal cell carcinoma (RCC) should receive systemic therapy in the first year after diagnosis.

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
2017 cohort	21	25	65	142	253
Ineligible for analysis	21	19	44	114	198
Exclusion from analysis	0	0	5	6	11
Numerator:	0	2	2	10	14
Not recorded for numerator	0	0	0	0	0
Denominator:	0	5	11	20	36
Not recorded for exclusion	0	2	7	6	15
Not recorded for denominator	1	3	5	0	9
% Performance	N/A	40.0	18.2	50.0	38.9

Reported 12 months in arrears.

Comments:

Borders: 1 case was not included in the denominator because the clinical TNM stage was not recorded and the patient performance status was not recorded.

D&G: 2 cases were not recorded for exclusion because the patient performance status was not recorded. 3 cases were included in the denominator due to the TNM staging being not recorded.

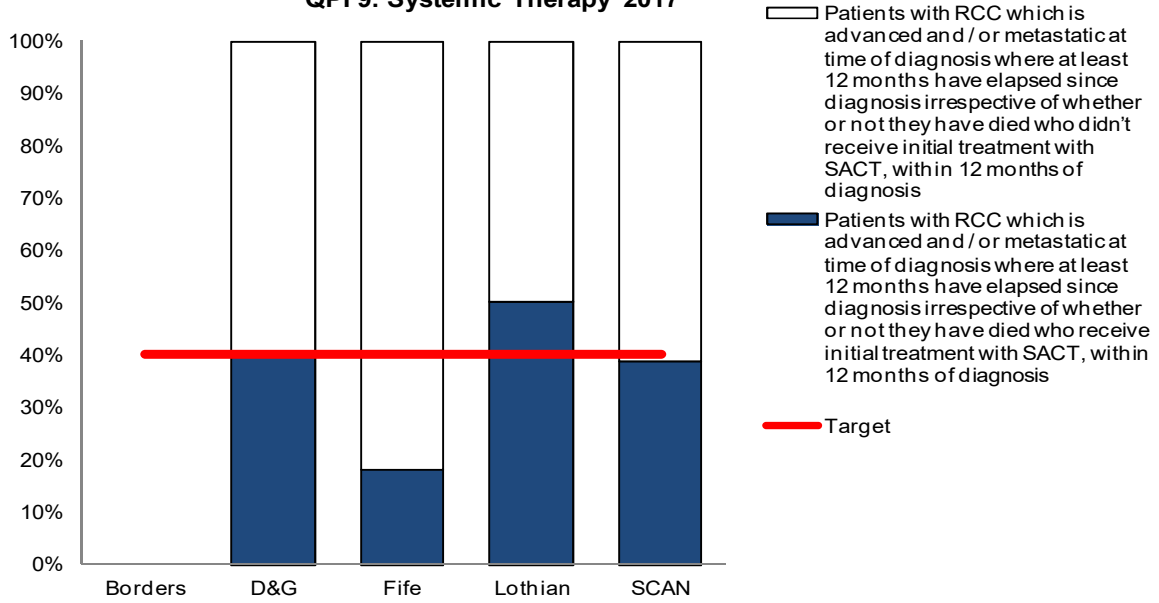
Fife: The QPI target was not met showing a shortfall of 21.8% (9 cases). 5 were for best supportive care due to frailty and other co-morbidities. 2 received palliative radiotherapy and 2 were on active surveillance (asymptomatic and not requiring TKI at this time).

7 cases were not recorded for exclusion with no recorded patient performance status. 5 cases were not included in the denominator due to the clinical T and M stages being not recorded.

Lothian: 6 cases were not recorded for exclusion with no recorded patient performance status

Action: Performance status and prognostic scoring should both be documented for metastatic patients.

QPI 9: Systemic Therapy 2017



Note: QPI has changed and is not directly comparable with previous years.

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

Title: Patients with metastatic Renal Cell Carcinoma (RCC) should be assigned a valid prognostic score prior to treatment

Numerator = Number of patients with metastatic RCC who are assigned a valid prognostic score prior to treatment

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

Next year's report will include the changes made at formal review which are not possible to report this year, namely prognostic scoring assigned following diagnosis (rather than prior to treatment).

Target 90%	Borders	D&G	Fife	Lothian	SCAN
2018 cohort	9	37	66	167	279
Ineligible for analysis	6	23	51	136	216
Exclusion from analysis	0	0	0	0	0
Numerator:	1	0	1	14	16
Not recorded for numerator	0	0	0	0	0
Denominator:	3	8	11	31	53
Not recorded for exclusion	0	0	0	0	0
Not recorded for denominator	0	6	4	0	10
% Performance	33.3	0	9.1	45.2	30.2

Comments:

Borders: The QPI target was not met showing a shortfall of 56.7% (2 cases). Only 1 score was documented during the audit period.

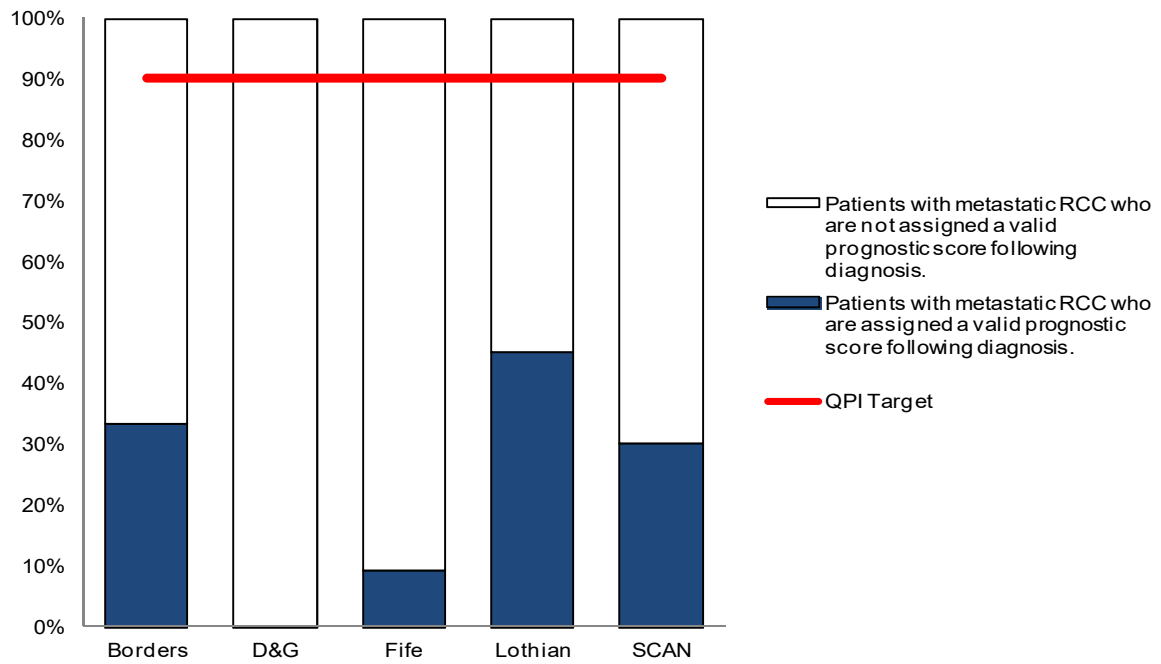
D&G: The QPI target was not met in all 8 cases. No scores were noted during audit period. (6 cases were not recorded for denominator with no clinical M stage recorded.)

Fife: The QPI target was not met showing a shortfall of 80.9% (10 cases) Only 1 prognostic score was assigned during the audit period (4 cases were not recorded for denominator with no clinical M stage recorded).

Lothian: The QPI target was not met showing a shortfall of 44.8% (17 cases) Recording of Prognostic score pre treatment remains problematic with 14 documented in Lothian during the audit period..

Action: Prognostic score should be recorded along with PS

Prognostic Scoring in Metastatic Disease 2018



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
2018 cohort	9	37	66	167	279
Ineligible for analysis	2	28	41	91	162
Exclusion from analysis	3	0	2	31	36
Numerator:	-	-	0	58	58
Not recorded for numerator	-	-	0	0	0
Denominator:	-	-	23	58	81
Not recorded for exclusion	-	-	0	0	0
Not recorded for denominator	-	-	0	0	0
% Performance	N/A	N/A	0	100	71.6

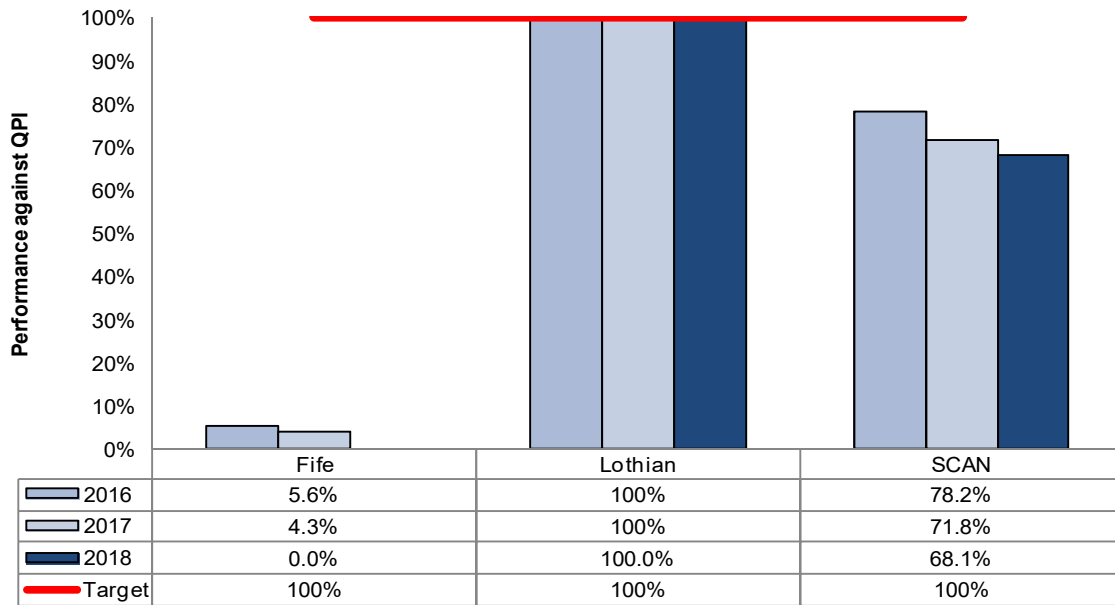
Comments:

Fife: The QPI target was not met showing a shortfall of 100% (23 cases) NHS Fife use UISS Risk Stratification in preference to Leibovich and remain the only Board in Scotland not yet using Leibovich score.

SCAN Comment: Studies have shown that the Leibovich model is superior to the UISS model in estimating survival outcomes in patients with non-metastatic clear cell RCC following nephrectomy.

Action: SCAN Chair to write to NHS Fife requesting compliance with this national requirement to record Leibovich score.

QPI 11: Leibovich Score 2016 to 2018



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 2018				
	A	B	C	D
ISD Figures 2018	38	11	65	77
ISD Figures 2017	41	17	110	0

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.

Comment:

B: This is an experienced surgeon who performs open nephrectomies as part of the wider urological service.

No action was identified.

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 ≤7days).

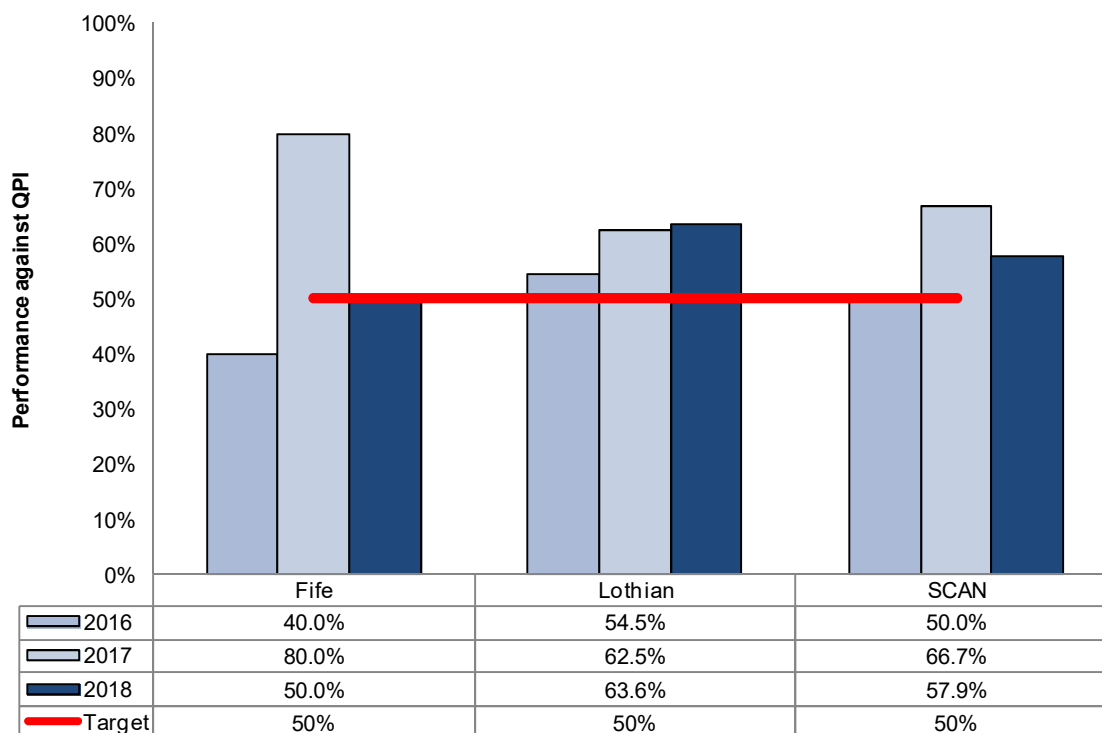
Denominator = All patients with T1a RCC undergoing partial nephrectomy.

Exclusion = None

Data presented by Health board of Surgery

Target 50%	Borders	D&G	Fife	Lothian	SCAN
2018 cohort	9	37	66	167	279
Ineligible for analysis	7	36	53	159	255
Exclusion from analysis	0	0	0	0	0
Numerator:	-	-	4	7	11
Not recorded for numerator	-	-	0	0	0
Denominator:	-	-	8	11	19
Not recorded for exclusion	-	-	0	0	0
Not recorded for denominator	-	-	0	0	0
% Performance	N/A	N/A	50.0	63.6	57.9

QPI 13: Trifecta Rate 2016 to 2018



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 SCRN database EDGE).

Denominator = Average 5 year incidence from Cancer Registry (2013 – 2017)

Exclusions = None.

Target 15%	Borders	D&G	Fife	Lothian	SCAN
Numerator	1	8	4	48	61
Denominator	19	26	63	152	260
% Performance	5.3	30.8	6.3	31.6	23.5

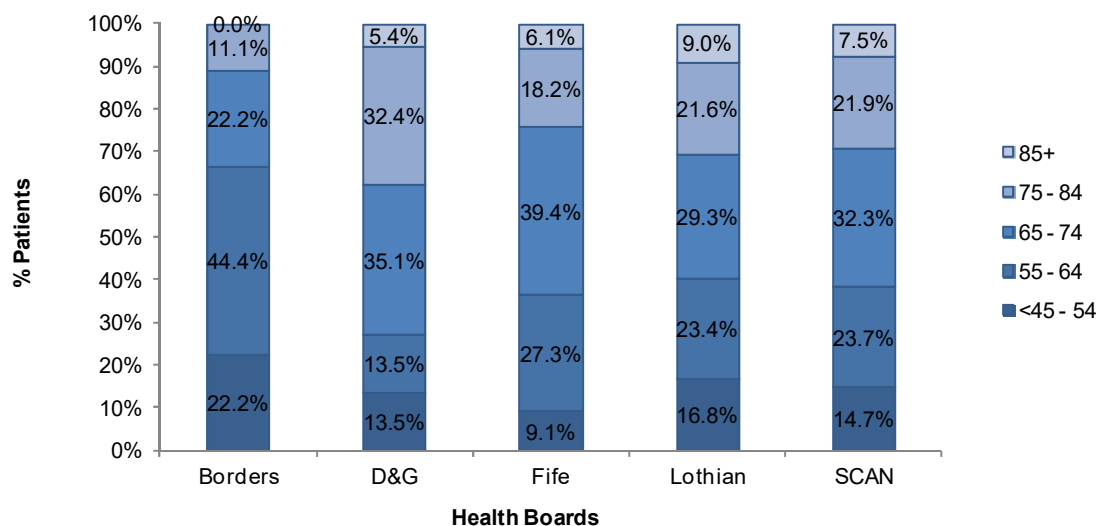
Open Trials and Research 2018	Numbers consented
Cell Free DNA	42
Placebo-Controlled Trial-Adjuvant MK-3475	9
Keynote-427	1
OPTIMA	1
FOCUS 4	1
NAXIVA	3
ICON9	1
E7080-G000-307(CLEAR)	3

Action: None identified

Age and Gender Analysis

Age and Gender Analysis		Borders	D&G	Fife	Lothian	SCAN
Under 45	M	0	0	1	7	8
	F	0	2	0	3	5
45 - 49	M	0	0	1	6	7
	F	0	0	2	1	3
50 - 54	M	0	2	2	8	12
	F	2	1	0	3	6
55 - 59	M	1	1	7	8	17
	F	1	1	3	9	14
60 - 64	M	1	2	3	11	17
	F	1	1	5	11	18
65 - 69	M	0	4	6	13	23
	F	0	3	4	10	17
70 - 74	M	1	4	12	20	37
	F	1	2	4	6	13
75 - 79	M	1	5	4	9	19
	F	0	1	2	10	13
80 - 84	M	0	4	3	9	16
	F	0	2	3	8	13
85+	M	0	2	4	6	12
	F	0	0	0	9	9
Total	M	4	24	43	97	168
	F	5	13	23	70	111

Age at Diagnosis 2018



APPENDIX

Renal Cancer QPI Attainment Summary 2017		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 8 D 13	61.5%	N 5 D 17	29.4%	N 26 D 36	72.2%	N 43 D 78	55.1%	N 82 D 144	56.9%
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 1 D 1	100%	N 0 D 0	N/A	N 0 D 0	N/A	N 1 D 1	100%
	SACT	90	N 2 D 2	100%	N 1 D 1	100%	N 2 D 2	100%	N 9 D 9	100%	N 14 D 14	100%
QPI 3 Patients whose RCC is staged pre-treatment using the TNM staging system.		98	N 21 D 21	100%	N 15 D 25	60.0%	N 47 D 65	72.3%	N 142 D 142	100%	N 225 D 253	88.9%
QPI 4 Patients with RCC who are discussed at MDT meeting before definitive treatment.		95	N 21 D 21	100%	N 25 D 25	100%	N 58 D 63	92.1%	N 130 D 138	94.2%	N 234 D 247	94.7%
QPI 7 Patients with T1aN0M0 RCC who undergo nephron sparing surgery (laparoscopic partial or open partial nephrectomy).		40	N 1 D 4	25.0%	N 1 D 2	50.0%	N 5 D 9	55.6%	N 11 D 28	39.3%	N 18 D 43	41.9%
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 32	0%	N 1 D 100	1.0%	N 1 D 132	0.8%	
	Cryotherapy treatment	<2	N 0 D 0	N/A	N 0 D 1	0%	N 0 D 0	N/A	N 0 D 0	N/A	N 0 D 1	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
	Systemic anti cancer treatment	<5	N 0 D 2	0%	N 0 D 3	0%	N 1 D 5	20.0%	N 2 D 13	15.4%	N 3 D 23	13.0%
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 32	0%	N 1 D 100	1.0%	N 1 D 132	0.8%	
	Cryotherapy treatment	<2	N 0 D 0	N/A	N 0 D 1	0%	N 0 D 0	N/A	N 0 D 0	N/A	N 0 D 1	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
	Systemic anti cancer treatment	<5	N 0 D 2	0%	N 1 D 3	33.3%	N 2 D 5	40.0%	N 4 D 13	30.8%	N 7 D 23	30.4%
QPI 9 Patients presenting with advanced and/or metastatic RCC who receive SACT within 12 months of diagnosis.		70	N 0 D 0	N/A	N 1 D 3	33.3%	N 5 D 13	38.5%	N 4 D 7	57.1%	N 10 D 23	43.5%

Renal Cancer QPI Attainment Summary 2017		Target %	Borders		D&G		Fife		Lothian		SCAN	
QPI 10 Patients with metastatic RCC who are assigned a valid prognostic score prior to commencing treatment		90	N 0	N/A	N 0	0%	N 0	0%	N 6	21.4%	N 6	12.5%
			D 0		D 6		D 14		D 28		D 48	
QPI 11 Patients with clear cell RCC who are assigned a Leibovich score following radical nephrectomy.		100	Presented by Health Board of surgery			N 1	4.3%	N 55	100%	N 56	71.8%	
						D 23		D 55		D 78		
QPI 12 Number of renal surgical resections performed by a surgeon over a 1 year period.		>12	All surgeons who were in SCAN for the whole of 2017 achieved the target									
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	80.0%	N 10	62.5%	N 14	66.7%	
						D 5		D 16		D 21		
QPI Clinical Trials - N: patients consented in Trials and held on SCRN database. D: 5 year avg, CR		15	N 1	5.9%	N 1	4.0%	N 3	5.0%	N 6	4.1%	N 11	4.5%
Interventional			D 17		D 25		D 60		D 145		D 247	