

## **SOUTH EAST SCOTLAND CANCER NETWORK PROSPECTIVE CANCER AUDIT**

# Renal Cancer 2021 Comparative Audit Report

Patients diagnosed 1st January 2021 to 31st December 2021

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Report number: **SA U11/22W**

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## Document History

| Version | Circulation   | Date       | Comments                                     |
|---------|---|------------|--|
| 1       | Lead Clinicians sign off group  | 20/09/2022 | Actions agreed, clinical comment added.      |
| 2       | SCAN Renal Lead Clinician & SCAN Regional Leads Sign off group          | 01/11/2022 | For approval and Lead Clinician's commentary |
| 3       | SCAN Urology Group  | 16/11/2022 | For final SCAN Group approval                |
| 4       | SCAN Group<br>SCAN Governance Framework<br>SCAN Action Plan Board Leads | 20/12/2022 | Assessed for disclosure                      |
| 4W      | Published to SCAN Website   | June 2024  |  |

## Clinical Lead's Summary

In 2021, many hospitals across the region were still facing operational challenges as a result of the COVID-19 pandemic. What remains clear is the continued teamwork between all members of the surgical and oncology teams during these challenging times leading to high quality outcomes for our patients. This is reflected in this year's annual QPI report, which I am pleased to present.

We demonstrate good performance against QPI 1 which describes the percentage of patients undergoing full cross sectional imaging prior to treatment. We continue to make adjustments to our MDT outcome proforma to ensure timely capture of TNM staging at the time of MDT discussion, which is the focus of QPI 3.

QPI 7 describes the percentage of patients with renal cancers less than 4cm in size receiving nephron sparing treatment such as surgery, thermal ablation or radiotherapy. There is a reduction in patients undergoing such treatment options in NHS Fife, but careful analysis have shown that patient choice and tumour factors contributed to appropriate decision making in these cases.

If we take QPI 13, a marker of the quality of nephron sparing surgery, we see that the trifecta of ischaemic time, negative margins and no post-op complications has significantly improved from last year. Both teams in NHS Fife and NHS Lothian continue to develop their robotic renal surgery programme and therefore, 93.3% of patients achieving this QPI is a reflection of the high quality of surgical care delivered.

Overall, the oncology QPI 9 and 10 have shown better progress and we note there is gradual improvement in documentation of IMDC risk groups. There are some gaps where patients who are too unfit and felt suitable for Best Supportive Care only, did not have IMDC risk groups documented, as this was unlikely to change their management and outcome. However, amendments to our MDT proforma are planned to allow capture of IMDC and Leibovich scores, that will assist in the decision making and management of these patients.

QPI 11 relates to the assignment of the prognostic Leibovich Score in patients with Clear Cell Renal Cell Carcinoma following radical nephrectomy. We note that NHS Fife have assigned a Leibovich score to cases that are likely to benefit from oncology input and progress continues to be made in this area.

I wish to thank the SCAN audit team and all members of the clinical 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 during these challenging times.

Mr Steve Leung  
SCAN Clinical Lead in Renal Cancer  
October 2022

### Clinical Recommendations 2021

| QPI    | Action required  | Lead                                  | Date for Action Plan returns |
|--------|--|---------------------------------------|------------------------------|
| QPI 3  | Consideration is given to include the TNM staging field in the outcomes of the regional Lothian MDM. Dr Taylor (radiology lead clinician in Lothian) reminded the radiology team responsible for MDM reviews to assign a valid TNM staging in their MDM review preparation notes for all patients with suspected renal cancer. The outcomes to be published on TRAK and SCI Store. | Dr J Taylor / Dr J Brush / Mr S Leung | 16/01/2023                   |
| QPI 10 | For patients with suspected metastatic renal cancer, amendments to the MDM proforma, to capture the components of the IMDC score should be made, to assist with decision making and management of these patients.  | Mr S Leung / All Surgeons + Trainees  | 16/01/2023                   |

### Clinical Recommendations 2020

| QPI    | Action required   | Lead         | Progress   |
|--------|---|--------------|--|
| QPI 3  | Suggest a new section in the MDM list with TNM prompt required to ensure that TNM is recorded at MDM.                 | Steve Leung  | Action still to be implemented. Consideration is given to including the TNM staging field in the outcomes of the regional Lothian MDM.   |
| QPI 10 | Oncology colleagues to be reminded of this QPI requirement and prognostic scoring should be noted at MDM if possible. | Tony Elliott | Marginal improvement in performance. The Lothian Oncology service is committed to add the prognostic score to all relevant patients. All registrars on rotation will be reminded of this requirement at induction. A work in progress. |
| QPI 14 | NHS Fife to explore why NHS Fife are not involved in the tissue banking studies currently available.                  | Alex Chapman | The Trials QPI has been removed from the QPI suite. No further action required.  |

| Renal Cancer QPI Attainment Summary 2021  |                       | 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 13<br>D 13                         | 100%  | N 10<br>D 10 | 100%        | N 41<br>D 45 | 91.1%        | N 84<br>D 84   | 100%         | N 148<br>D 152 | 97.4% |
| QPI 2 Patients with RCC who have a histological diagnosis via biopsy before Non-surgical primary treatment.         | Cryotherapy / RFA     | 90       | N 2<br>D 2                           | 100%  | N 1<br>D 1   | 100%        | N 1<br>D 2   | 50.0%        | N 0<br>D 0     | N/A          | N 4<br>D 5     | 80.0% |
|   | SACT                  | 90       | N 0<br>D 0                           | N/A   | N 0<br>D 0   | N/A         | N 5<br>D 5   | 100%         | N 10<br>D 10   | 100%         | N 15<br>D 15   | 100%  |
| QPI 3 Patients whose RCC is staged pre-treatment using the TNM staging system.                                      |                       | 98       | N 16<br>D 16                         | 100%  | N 13<br>D 20 | 65.0%       | N 66<br>D 75 | 88.0%        | N 158<br>D 171 | 92.4%        | N 253<br>D 282 | 89.7% |
| QPI 4 Patients with RCC who are discussed at MDT meeting before definitive treatment.                               |                       | 95       | N 16<br>D 16                         | 100%  | N 20<br>D 20 | 100%        | N 72<br>D 74 | 97.3%        | N 162<br>D 167 | 97.0%        | N 270<br>D 277 | 97.5% |
| QPI 7 T1aN0M0 RCC who have nephron sparing treatment Cryotherapy, RFA, SABR or robotic/lap/open partial nephrectomy |                       | 50       | N 3<br>D 4                           | 75.0% | N 1<br>D 1   | 100%        | N 2<br>D 7   | 28.6%        | N 11<br>D 17   | 64.7%        | N 17<br>D 29   | 58.6% |
| QPI 8 Proportion of patients who die within 30 days of treatment for RCC.   | Surgery               | <2       | Presented by Health Board of surgery |       |              | N 0<br>D 38 | 0%           | N 0<br>D 95  | 0%             | N 0<br>D 133 | 0%             |       |
|   | Cryotherapy treatment | <2       | N 0<br>D 2                           | 0%    | N 0<br>D 1   | 0%          | N 0<br>D 1   | 0%           | N 0<br>D 0     | N/A          | N 0<br>D 4     | 0%    |
|   | RFA treatment         | <2       | N 0<br>D 0                           | N/A   | N 0<br>D 0   | N/A         | N 0<br>D 1   | 0%           | N 0<br>D 0     | N/A          | N 0<br>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<br>D 38 | 0%           | N 1<br>D 94  | 1.1%           | N 1<br>D 132 | 0.8%           |       |
|   | Cryotherapy treatment | <2       | N 0<br>D 2                           | 0%    | N 0<br>D 1   | 0%          | N 0<br>D 1   | 0%           | N 0<br>D 0     | N/A          | N 0<br>D 4     | 0%    |
|   | RFA treatment         | <2       | N 0<br>D 0                           | N/A   | N 0<br>D 0   | N/A         | N 0<br>D 1   | 0%           | N 0<br>D 0     | N/A          | N 0<br>D 1     | 0%    |
| QPI 9 Advanced and/or metastatic RCC who have SACT in 12 months of diagnosis.                                       |                       | 40       | N 1<br>D 1                           | 100%  | N 4<br>D 6   | 66.7%       | N 9<br>D 13  | 69.2%        | N 10<br>D 16   | 62.5%        | N 24<br>D 36   | 66.7% |
| QPI 10 Patients with metastatic RCC who are assigned a valid prognostic score following diagnosis                   |                       | 90       | N 2<br>D 3                           | 66.7% | N 0<br>D 1   | 0%          | N 7<br>D 11  | 63.6%        | N 21<br>D 29   | 72.4%        | N 30<br>D 44   | 68.2% |
| QPI 11 Patients with clear cell RCC who are assigned a Leibovich score following radical nephrectomy.               |                       | 100      | Presented by Health Board of surgery |       |              | N 7<br>D 24 | 29.2%        | N 59<br>D 59 | 100%           | N 66<br>D 83 | 79.5%          |       |

| <b>Renal Cancer QPI Attainment Summary 2021</b>  | <b>Target %</b> | <b>Borders</b>   | <b>D&amp;G</b> | <b>Fife</b> | <b>Lothian</b> | <b>SCAN</b> |              |       |
|--|-----------------|--|----------------|-------------|----------------|-------------|--------------|-------|
| QPI 12 Number of renal surgical resections performed by a surgeon over a 1 year period.                            | ≥15             | 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 2<br>D 2     | 100%        | N 12<br>D 13   | 92.3%       | N 14<br>D 15 | 93.3% |

## Introduction and Methods

### Cohort

This report covers patients newly diagnosed with renal cancer in SCAN between 01/01/2021 and 31/12/2021. 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-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 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 9 results the Renal QPIs were subject to a third formal review and revised documents for data collection were published in June 2022. This is the 9<sup>th</sup> 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 | Change  | Year for reporting |
|-----|---|--------------------|
| 1   | Radiological Diagnosis - Added SABR as an active treatment to be included within the denominator.   | 2021               |
| 2   | Histological Diagnosis – Add Stereotactic Ablative Radiotherapy (SABR) as a treatment option within specification (i).  | 2021               |
| 7   | Nephron Sparing Treatment – Added SABR as a further nephron sparing treatment within the QPI.   | 2021               |
| 10  | Prognostic Scoring in Metastatic Disease – QPI changed to specify scoring from one standardised tool across Scotland – the International Metastatic RCC Database Consortium Risk Score (IMDC) / (Heng) scoring tool.  | 2021               |
| 11  | Leibovich Score – Add exclusion for neoadjuvant SACT. Retained the 100% target  | 2022               |
| 13  | Trifecta Rate – QPI has been amended to account for cold and selective ischaemia time. Numbers are too small to split into 2 groups therefore remain as one specification but amend to account for all ischaemia conditions (warm <25 mins) or (cold or selective clamping – time documented but no optimal timing measured). | 2022               |

- The archiving of QPIs 5 – Histological Grading and QPI 6 – Surgical Treatment, mean that the QPI numbering is no longer consecutive.
- QPIs 14 - Clinical Trial & Research Study Access and QPI 15 - 30 Day Mortality for Systemic Anti-Cancer Therapy (SACT) has been archived after the latest formal review.



**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.                          |  |

<sup>1</sup> QPI documents are available at [www.healthcareimprovementscotland.org](http://www.healthcareimprovementscotland.org)

<sup>2</sup> Datasets and measurability documents are available at [www.isdscotland.org](http://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 and pathologists, 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          | Suzanne Tunmore    |
| NHS Dumfries & Galloway | Dumfries & Galloway Royal Infirmary            | Miss Maria Bews-Hair     | Campbell Wallis    |
| NHS Fife                | Queen Margaret Hospital                        | Mr A Chapman             | Michelle MacDonald |
| SCAN & NHS Lothian      | St Johns Hospital and Western General Hospital | Mr S Leung<br>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 2016 to 2020. 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 | Borders | D&G | Fife | Lothian | SCAN |
|-----------------------------------|---------|-----|------|---------|------|
| 2021                              | 16      | 20  | 75   | 171     | 282  |
| 2020                              | 20      | 23  | 67   | 156     | 266  |
| 2019                              | 17      | 38  | 61   | 175     | 291  |
| 2018                              | 9       | 37  | 66   | 167     | 279  |

**Estimate of Case Ascertainment:** Calculated using the average of the most recent five years of Cancer Registry Data 2016 to 2020

|                                | Borders     | D&G         | Fife         | Lothian      | SCAN         |
|--------------------------------|-------------|-------------|--------------|--------------|--------------|
| Cases from Audit in 2021       | 16          | 20          | 75           | 171          | 282          |
| Cancer Registry 5 Year Average | 19          | 27          | 50           | 124          | 220          |
| <b>Case Ascertainment %</b>    | <b>84.2</b> | <b>74.1</b> | <b>150.0</b> | <b>137.9</b> | <b>128.2</b> |

Extract taken from PHS Cancer Registry website (25/07/2022) <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 20 September 2022
- Final draft report was sent to SCAN group for sign off and comments 16/11/2022
- Final report circulated to SCAN Urology Group and Audit Reporting Governance Framework 20/12/2022

## 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.

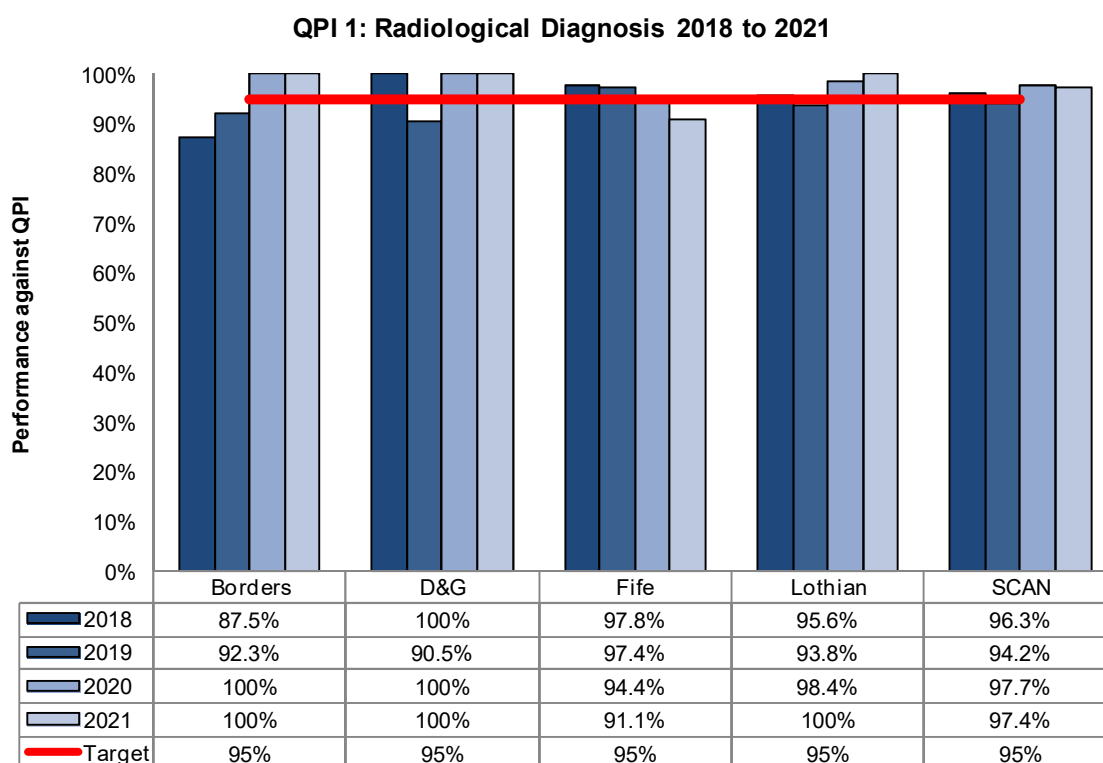
Denominator = All RCC patients receiving active treatment (no exclusions).

| Target 95%                   | Borders    | D&G        | Fife        | Lothian    | SCAN        |
|------------------------------|------------|------------|-------------|------------|-------------|
| 2021 cohort                  | 16         | 20         | 75          | 171        | 282         |
| Ineligible for analysis      | 3          | 10         | 30          | 87         | 130         |
| Exclusion from analysis      | 0          | 0          | 0           | 0          | 0           |
| Numerator:                   | 13         | 10         | 41          | 84         | 148         |
| Not recorded for numerator   | 0          | 0          | 0           | 0          | 0           |
| Denominator:                 | 13         | 10         | 45          | 84         | 152         |
| Not recorded for exclusion   | 0          | 0          | 0           | 0          | 0           |
| Not recorded for denominator | 0          | 0          | 0           | 0          | 0           |
| <b>% Performance</b>         | <b>100</b> | <b>100</b> | <b>91.1</b> | <b>100</b> | <b>97.4</b> |

### Comments:

**Fife:** The QPI target was not met showing a shortfall of 3.9% (4 cases) 2 did not have imaging with contrast. 2 did not have CT Chest imaging.

**Action:** No action 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 Cryotherapy, Radiofrequency ablation or stereotactic ablative radiotherapy (SABR) as first treatment.

Denominator = All patients with RCC undergoing cryotherapy, radiofrequency ablation or stereotactic ablative radiotherapy (SABR) as their first treatment.

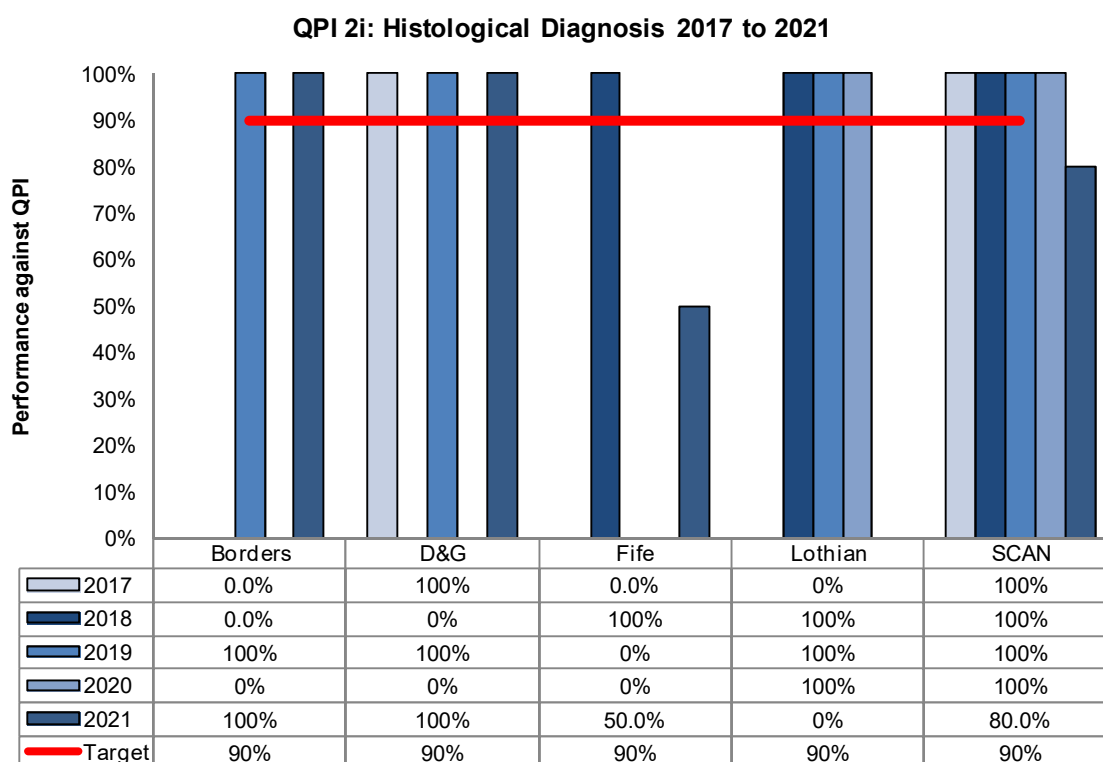
Exclusion = Patients with inherited genetic renal cancer.

| Target 90%                   | Borders    | D&G        | Fife        | Lothian    | SCAN        |
|------------------------------|------------|------------|-------------|------------|-------------|
| 2021 cohort                  | 16         | 20         | 75          | 171        | 282         |
| Ineligible for analysis      | 14         | 19         | 73          | 169        | 275         |
| Exclusion from analysis      | 0          | 0          | 0           | 2          | 2           |
| Numerator:                   | 2          | 1          | 1           | 0          | 4           |
| Not recorded for numerator   | 0          | 0          | 1           | 0          | 1           |
| Denominator:                 | 2          | 1          | 2           | 0          | 5           |
| Not recorded for exclusion   | 0          | 0          | 0           | 0          | 0           |
| Not recorded for denominator | 0          | 0          | 0           | 4          | 4           |
| <b>% Performance</b>         | <b>100</b> | <b>100</b> | <b>50.0</b> | <b>N/A</b> | <b>80.0</b> |

### Comments:

**Fife:** The QPI target was not met showing a shortfall of 40% (1 case) 1 did not have a biopsy prior to RFA treatment.

**SCAN Comment:** Small numbers cause large percentage changes.



## QPI 2ii: Histological Diagnosis – Target = 90%

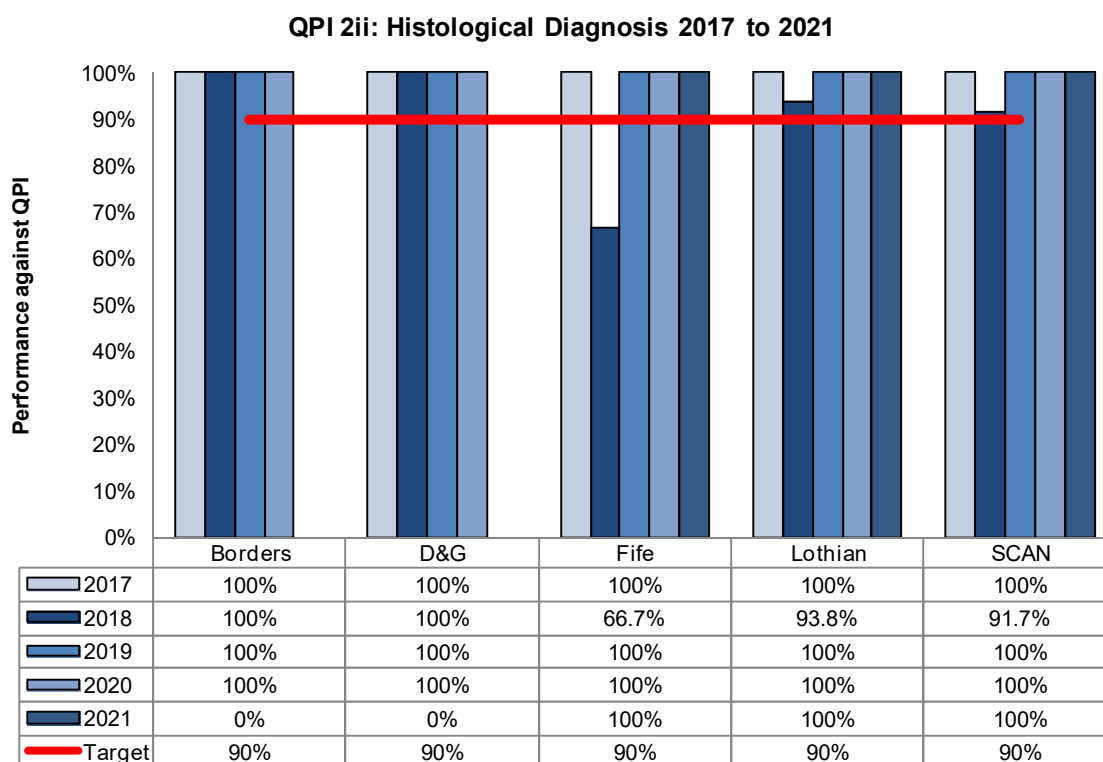
Title: Patients with renal cancer not undergoing surgery should have a histological diagnosis prior to commencing treatment.

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       |
|------------------------------|------------|------------|------------|------------|------------|
| 2021 cohort                  | 16         | 20         | 75         | 171        | 282        |
| Ineligible for analysis      | 16         | 20         | 70         | 161        | 267        |
| Exclusion from analysis      | 0          | 0          | 0          | 0          | 0          |
| Numerator:                   | 0          | 0          | 5          | 10         | 15         |
| Not recorded for numerator   | 0          | 0          | 0          | 0          | 0          |
| Denominator:                 | 0          | 0          | 5          | 10         | 15         |
| Not recorded for exclusion   | 0          | 0          | 0          | 0          | 0          |
| Not recorded for denominator | 0          | 0          | 0          | 4          | 4          |
| <b>% Performance</b>         | <b>N/A</b> | <b>N/A</b> | <b>100</b> | <b>100</b> | <b>100</b> |

Comments: QPI met across all health boards.



### 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        |
|------------------------------|------------|-------------|-------------|-------------|-------------|
| 2021 cohort                  | 16         | 20          | 75          | 171         | 282         |
| Ineligible for analysis      | 0          | 0           | 0           | 0           | 0           |
| Exclusion from analysis      | 0          | 0           | 0           | 0           | 0           |
| Numerator:                   | 16         | 13          | 66          | 158         | 253         |
| Not recorded for numerator   | 0          | 7           | 9           | 13          | 29          |
| Denominator:                 | 16         | 20          | 75          | 171         | 282         |
| Not recorded for exclusion   | 0          | 0           | 0           | 0           | 0           |
| Not recorded for denominator | 0          | 0           | 0           | 0           | 0           |
| <b>% Performance</b>         | <b>100</b> | <b>65.0</b> | <b>88.0</b> | <b>92.4</b> | <b>89.7</b> |

#### Comments:

**D&G:** The QPI target was not met showing a shortfall of 33% (7 cases) 4 had no TNM staging recorded 3 had incomplete TNM staging recorded at MDM.

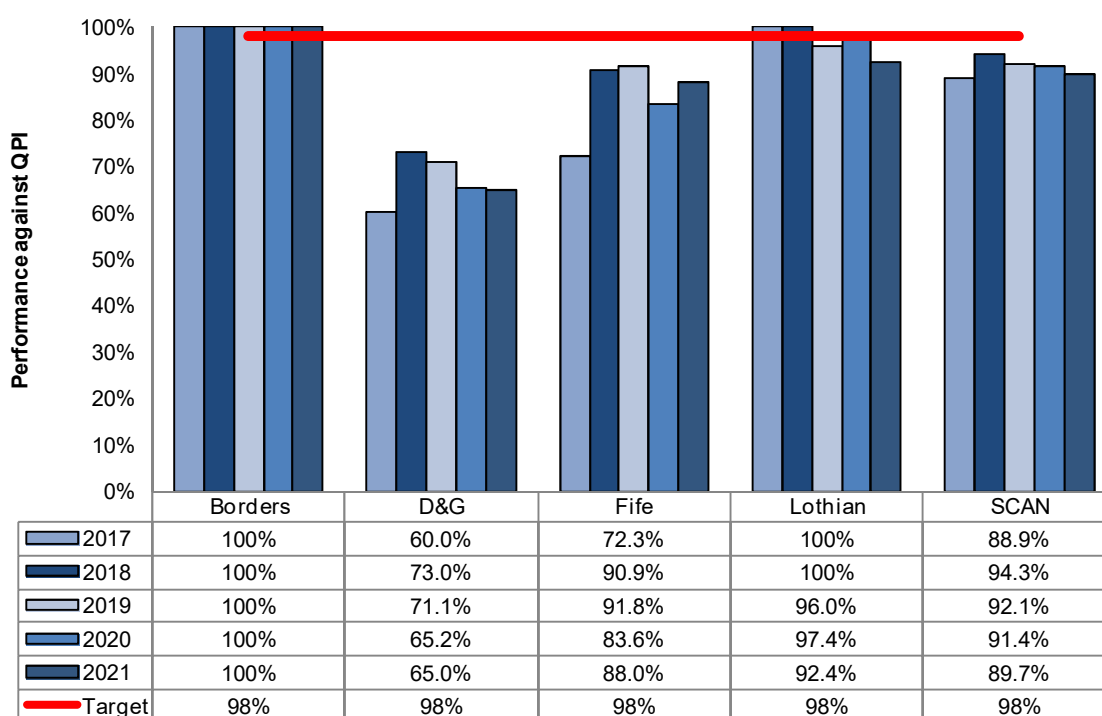
**Fife:** The QPI target was not met showing a shortfall of 10% (9 cases) only partial TNM staging was recorded.

**Lothian:** The target was not met showing a shortfall of 5.6% (13 cases) 13 had cM not recorded due to a lack of CT chest scans to complete staging protocol.

**SCAN:** TNM should be documented at the time of MDM where possible. If staging is incomplete, then TNM should be documented clearly in clinical notes prior to treatment.

**Action:** Consideration is given to include the TNM staging field in the outcomes of the regional Lothian MDM. Dr Taylor (radiology lead clinician in Lothian) reminded the radiology team responsible for MDM reviews to assign a valid TNM staging in their MDM review preparation notes for all patients with suspected renal cancer. The outcomes to be published on TRAK and SCI Store.

### QPI 3: Clinical Staging TNM 2017 to 2021



### 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.

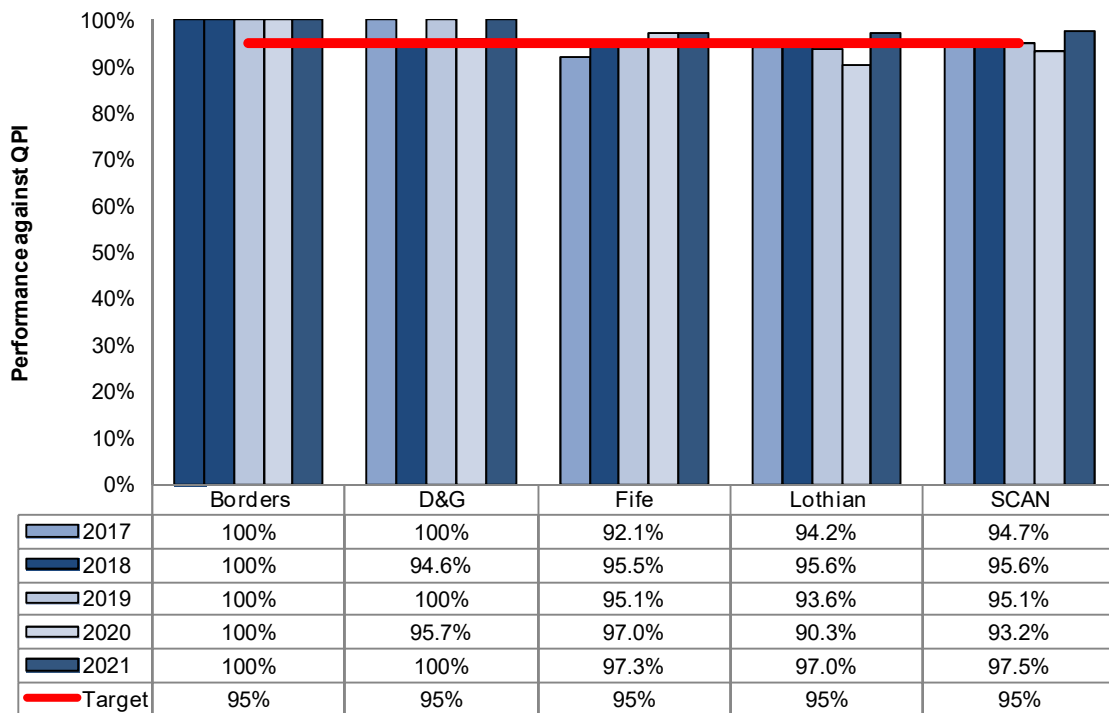
Denominator = All patients diagnosed with RCC.

Exclusion = Patients who died before first treatment.

| Target 95%                   | Borders    | D&G        | Fife        | Lothian     | SCAN        |
|------------------------------|------------|------------|-------------|-------------|-------------|
| 2021 cohort                  | 16         | 20         | 75          | 171         | 282         |
| Ineligible for analysis      | 0          | 0          | 0           | 0           | 0           |
| Exclusion from analysis      | 0          | 0          | 1           | 4           | 5           |
| Numerator:                   | 16         | 20         | 72          | 162         | 270         |
| Not recorded for numerator   | 0          | 0          | 1           | 4           | 5           |
| Denominator:                 | 16         | 20         | 74          | 167         | 277         |
| Not recorded for exclusion   | 0          | 0          | 0           | 4           | 4           |
| Not recorded for denominator | 0          | 0          | 0           | 0           | 0           |
| <b>% Performance</b>         | <b>100</b> | <b>100</b> | <b>97.3</b> | <b>97.0</b> | <b>97.5</b> |

**Actions:** No actions identified.

### QPI 4: MDT Meeting 2017 to 2021



### QPI 7: Nephron Sparing Treatment – Target = 50%

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

Numerator = Number of patients with T1a N0 M0 RCC undergoing Nephron Sparing treatment (Cryotherapy, RFA, SABR 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.

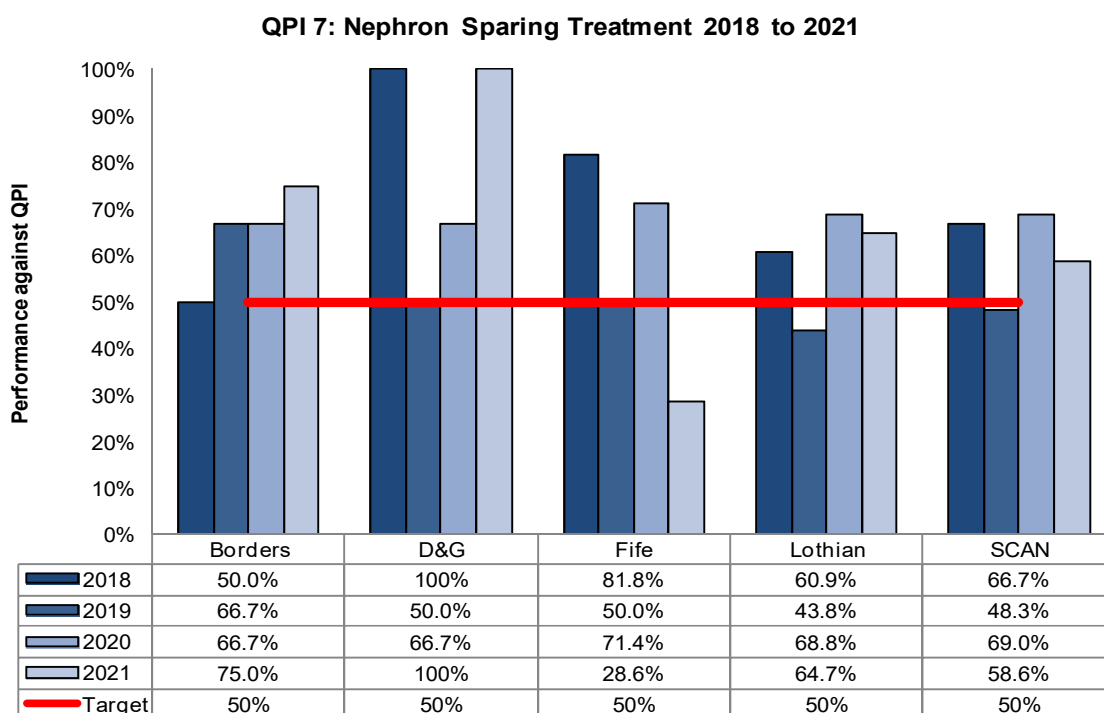
| Target 50%                   | Borders     | D&G        | Fife        | Lothian     | SCAN        |
|------------------------------|-------------|------------|-------------|-------------|-------------|
| 2021 cohort                  | 16          | 20         | 75          | 171         | 282         |
| Ineligible for analysis      | 12          | 9          | 52          | 119         | 192         |
| Exclusion from analysis      | 0           | 10         | 16          | 35          | 61          |
| Numerator:                   | 3           | 1          | 2           | 11          | 17          |
| Not recorded for numerator   | 0           | 0          | 0           | 2           | 2           |
| Denominator:                 | 4           | 1          | 7           | 17          | 29          |
| Not recorded for exclusion   | 0           | 0          | 0           | 2           | 2           |
| Not recorded for denominator | 0           | 0          | 4           | 0           | 4           |
| <b>% Performance</b>         | <b>75.0</b> | <b>100</b> | <b>28.6</b> | <b>64.7</b> | <b>58.6</b> |

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



**Comments:**

**Fife:** The QPI target was not met showing a shortfall of 21.4% (5 cases) 5 were treated with radical nephrectomy. (1 was converted from partial to radical nephrectomy. 1 declined the option of a partial nephrectomy. 1 could not have a partial nephrectomy due to tumour positioning. 1 removed a non-functioning kidney. 1 had no documented reason as to why only a radical nephrectomy was offered)



**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     |
|-------------------------|------------|------------|----------|----------|----------|
| 2021 cohort             | 16         | 20         | 75       | 171      | 282      |
| Ineligible for analysis | 5          | 11         | 36       | 96       | 148      |
| Exclusion from analysis | 0          | 0          | 1        | 0        | 1        |
| Numerator – Surgery     | -          | -          | 0        | 0        | 0        |
| Denominator – Surgery   | -          | -          | 38       | 95       | 133      |
| <b>% Performance</b>    | <b>N/A</b> | <b>N/A</b> | <b>0</b> | <b>0</b> | <b>0</b> |

Presented by Board of Diagnosis

| <b>Target &lt;2% Cryotherapy</b> | <b>Borders</b> | <b>D&amp;G</b> | <b>Fife</b> | <b>Lothian</b> | <b>SCAN</b> |
|----------------------------------|----------------|----------------|-------------|----------------|-------------|
| 2021 cohort                      | 16             | 20             | 75          | 171            | 282         |
| Ineligible for analysis          | 14             | 19             | 74          | 171            | 278         |
| Exclusion from analysis          | 0              | 0              | 0           | 0              | 0           |
| Numerator                        | 0              | 0              | 0           | 0              | 0           |
| Denominator                      | 2              | 1              | 1           | 0              | 4           |
| <b>% Performance</b>             | <b>0</b>       | <b>0</b>       | <b>0</b>    | <b>N/A</b>     | <b>0</b>    |

Presented by Board of Diagnosis

| <b>Target &lt;2% RFA</b> | <b>Borders</b> | <b>D&amp;G</b> | <b>Fife</b> | <b>Lothian</b> | <b>SCAN</b> |
|--------------------------|----------------|----------------|-------------|----------------|-------------|
| 2021 cohort              | 16             | 20             | 75          | 171            | 282         |
| Ineligible for analysis  | 16             | 20             | 74          | 171            | 281         |
| Exclusion from analysis  | 0              | 0              | 0           | 0              | 0           |
| Numerator                | 0              | 0              | 0           | 0              | 0           |
| Denominator              | 0              | 0              | 1           | 0              | 1           |
| <b>% Performance</b>     | <b>N/A</b>     | <b>N/A</b>     | <b>0</b>    | <b>N/A</b>     | <b>0</b>    |

## QPI 8ii: 90 Day Mortality

Presented by Board of Surgery

| Target <2% Surgery      | Borders    | D&G        | Fife     | Lothian    | SCAN       |
|-------------------------|------------|------------|----------|------------|------------|
| 2021 cohort             | 16         | 20         | 75       | 171        | 282        |
| Ineligible for analysis | 5          | 12         | 36       | 98         | 151        |
| Exclusion from analysis | 0          | 0          | 1        | 0          | 1          |
| Numerator – Surgery     | -          | -          | 0        | 1          | 1          |
| Denominator – Surgery   | -          | -          | 38       | 94         | 132        |
| <b>% Performance</b>    | <b>N/A</b> | <b>N/A</b> | <b>0</b> | <b>1.1</b> | <b>0.8</b> |

**SCAN Comment:** The M&M (Morbidity and Mortality) meeting for this one case has been concluded, with no actions identified.

Presented by Board of Diagnosis

| Target <2% Cryotherapy  | Borders  | D&G      | Fife     | Lothian    | SCAN     |
|-------------------------|----------|----------|----------|------------|----------|
| 2021 cohort             | 16       | 20       | 75       | 171        | 282      |
| Ineligible for analysis | 14       | 19       | 74       | 171        | 278      |
| Exclusion from analysis | 0        | 0        | 0        | 0          | 0        |
| Numerator               | 0        | 0        | 0        | 0          | 0        |
| Denominator             | 2        | 1        | 1        | 0          | 4        |
| <b>% Performance</b>    | <b>0</b> | <b>0</b> | <b>0</b> | <b>N/A</b> | <b>0</b> |

Presented by Board of Diagnosis

| Target <2% RFA          | Borders    | D&G        | Fife     | Lothian    | SCAN     |
|-------------------------|------------|------------|----------|------------|----------|
| 2021 cohort             | 16         | 20         | 75       | 171        | 282      |
| Ineligible for analysis | 16         | 20         | 74       | 171        | 281      |
| Exclusion from analysis | 0          | 0          | 0        | 0          | 0        |
| Numerator               | 0          | 0          | 0        | 0          | 0        |
| Denominator             | 0          | 0          | 1        | 0          | 1        |
| <b>% Performance</b>    | <b>N/A</b> | <b>N/A</b> | <b>0</b> | <b>N/A</b> | <b>0</b> |

## QPI 9: Systemic Therapy – Target = 40%

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

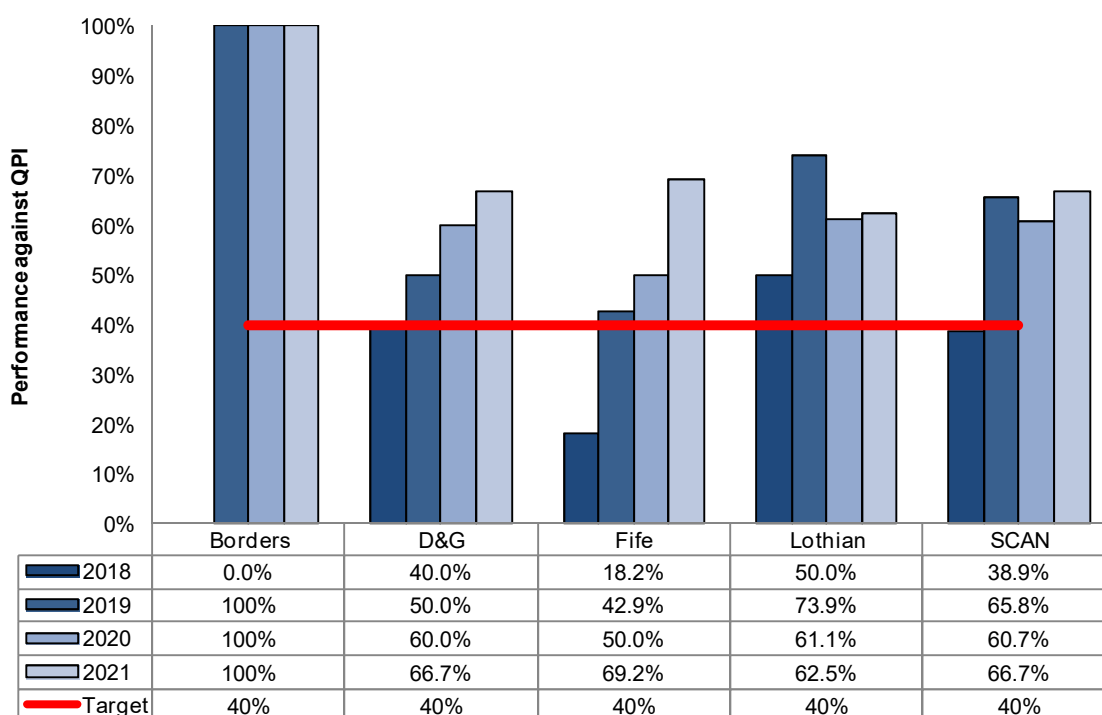
Exclusions = Patients documented to have performance status 2, 3 or 4 at time of diagnosis, Patients documented to have refused systemic treatment, Patients enrolled in clinical trials.

| Target 40%                   | Borders    | D&G         | Fife        | Lothian     | SCAN        |
|------------------------------|------------|-------------|-------------|-------------|-------------|
| 2020 cohort                  | 20         | 23          | 67          | 156         | 266         |
| Ineligible for analysis      | 19         | 17          | 47          | 125         | 208         |
| Exclusion from analysis      | 0          | 0           | 2           | 15          | 17          |
| Numerator:                   | 1          | 4           | 9           | 10          | 24          |
| Not recorded for numerator   | 0          | 2           | 0           | 0           | 2           |
| Denominator:                 | 1          | 6           | 13          | 16          | 36          |
| Not recorded for exclusion   | 0          | 0           | 10          | 5           | 15          |
| Not recorded for denominator | 0          | 4           | 5           | 0           | 9           |
| <b>% Performance</b>         | <b>100</b> | <b>66.7</b> | <b>69.2</b> | <b>62.5</b> | <b>66.7</b> |

\*Reported 12 months retrospectively i.e., patients diagnosed in 2020

**SCAN Comment:** No actions required.

### QPI 9: Systemic Therapy 2018 to 2021



## 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        |
|------------------------------|-------------|----------|-------------|-------------|-------------|
| 2021 cohort                  | 16          | 20       | 75          | 171         | 282         |
| Ineligible for analysis      | 13          | 19       | 64          | 142         | 238         |
| Exclusion from analysis      | 0           | 0        | 0           | 0           | 0           |
| Numerator:                   | 2           | 0        | 7           | 21          | 30          |
| Not recorded for numerator   | 1           | 1        | 4           | 8           | 14          |
| Denominator:                 | 3           | 1        | 11          | 29          | 44          |
| Not recorded for exclusion   | 0           | 0        | 0           | 0           | 0           |
| Not recorded for denominator | 0           | 7        | 9           | 13          | 27          |
| <b>% Performance</b>         | <b>66.7</b> | <b>0</b> | <b>63.6</b> | <b>72.4</b> | <b>68.2</b> |

### Comments:

**BGH:** The QPI target was not met showing a shortfall of 23.3% (1 case) all treatment options were declined.

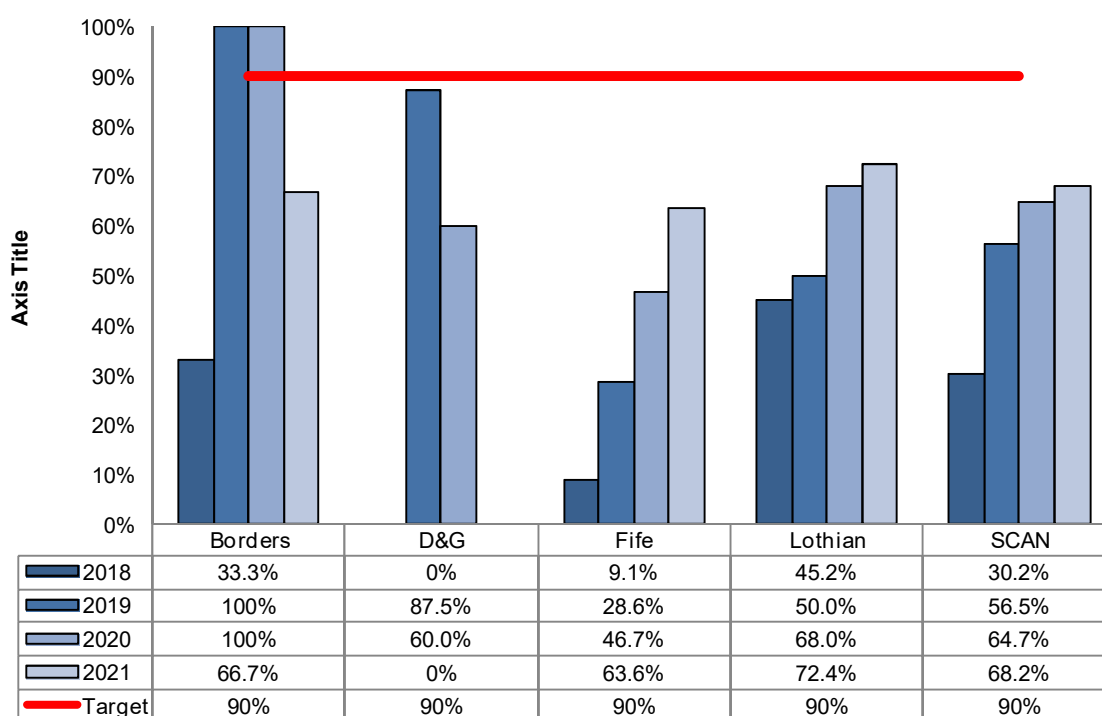
**D&G:** The QPI target was not met showing a shortfall of 90% (1 case) prognostic scoring not recorded.

**Fife:** The QPI target was not met showing a shortfall of 26.4% (4 cases) 4 did not have a prognostic score recorded.

**Lothian:** The QPI target was not met showing a shortfall of 17.6% (8 cases) 5 were deemed for Supportive care only from MDT discussion. 2 had Cytoreductive Nephrectomies only with no Prognostic scores recorded. 1 died prior to any diagnosis discussion or treatment discussion.

**SCAN:** For patients with suspected metastatic renal cancer, amendments to the MDM proforma, to capture the components of the IMDC score should be made, to assist with decision making and management of these patients.

### QPI 10: Prognostic Scoring in Metastatic Disease 2018 to 2021



### 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.) Patients undergoing neoadjuvant systemic anti-cancer therapy (SACT).

Data presented by Health board of Surgery

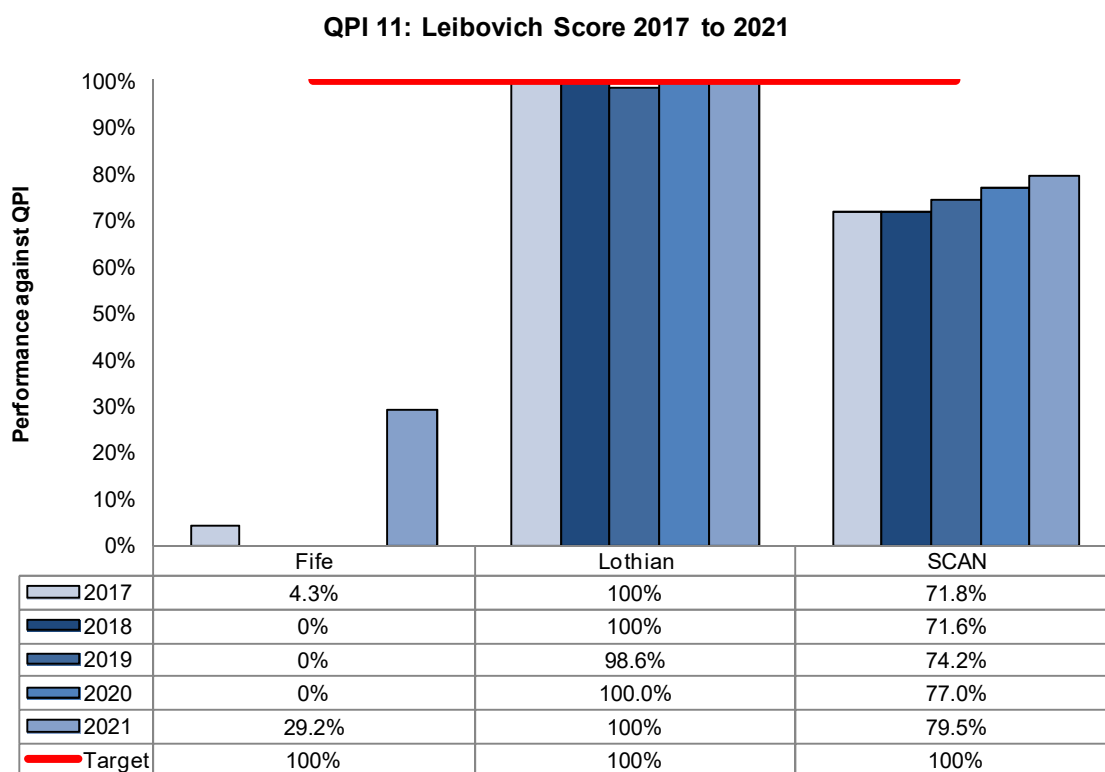
| Target 100%                  | Borders    | D&G        | Fife        | Lothian    | SCAN        |
|------------------------------|------------|------------|-------------|------------|-------------|
| 2021 cohort                  | 16         | 20         | 75          | 171        | 282         |
| Ineligible for analysis      | 7          | 14         | 51          | 122        | 194         |
| Exclusion from analysis      | 0          | 0          | 0           | 5          | 5           |
| Numerator:                   | -          | -          | 7           | 59         | 66          |
| Not recorded for numerator   | -          | -          | 17          | 0          | 17          |
| Denominator:                 | -          | -          | 24          | 59         | 83          |
| Not recorded for exclusion   | -          | -          | 1           | 1          | 2           |
| Not recorded for denominator | -          | -          | 0           | 0          | 0           |
| <b>% Performance</b>         | <b>N/A</b> | <b>N/A</b> | <b>29.2</b> | <b>100</b> | <b>79.5</b> |

**Comments:**

**Fife:** The QPI target was not met showing a shortfall of 70.8% (17 cases) the lead clinician in Fife is committed to retrospectively assign a Leibovich score to cases. Particularly those that might benefit from Oncology input.

**SCAN:** Leibovich score is not routinely used as a risk stratification tool in NHS Fife. However, the lead renal surgeon in Fife is committed to using the Leibovich scoring tool to risk stratify all cases.

**Action:** None identified



**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 is 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 have been specified and each Board has direct access to run these reports to ensure nationally consistent analysis and reporting.”

Exclusion = No Exclusions

| Number of Radical Nephrectomy procedures by GMC number in 2021 |    |    |    |    |
|--|----|----|----|----|
|  | A  | B  | C  | D  |
| SMR01 Figures 2021   | 33 | 45 | 61 | 24 |
| SMR01 Figures 2020   | 55 | 35 | 43 | 11 |
| SMR01 Figures 2019   | 51 | 63 | 72 | 7  |

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 ≤7days).

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

Data presented by Health board of Surgery

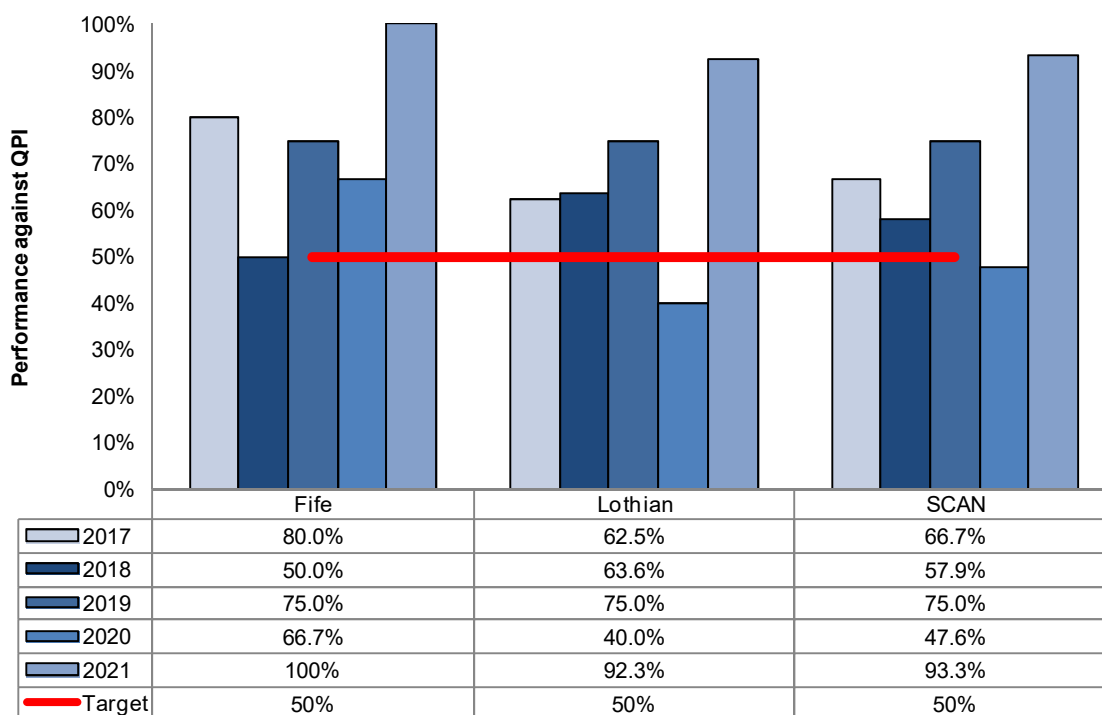
| <b>Target 50%</b>            | <b>Borders</b> | <b>D&amp;G</b> | <b>Fife</b> | <b>Lothian</b> | <b>SCAN</b> |
|------------------------------|----------------|----------------|-------------|----------------|-------------|
| 2021 cohort                  | 16             | 20             | 75          | 171            | 282         |
| Ineligible for analysis      | 15             | 19             | 72          | 160            | 266         |
| Exclusion from analysis      | 0              | 0              | 0           | 0              | 0           |
| Numerator:                   | -              | -              | 2           | 12             | 14          |
| Not recorded for numerator   | -              | -              | 0           | 0              | 0           |
| Denominator:                 | -              | -              | 2           | 13             | 15          |
| Not recorded for exclusion   | -              | -              | 0           | 0              | 0           |
| Not recorded for denominator | -              | -              | 1           | 0              | 1           |
| <b>% Performance</b>         | <b>N/A</b>     | <b>N/A</b>     | <b>100</b>  | <b>92.3</b>    | <b>93.3</b> |

\* Ischaemia conditions are as follows: warm ischaemia time of less than 25 minutes, or cold ischaemia (time documented), or selective clamping (time documented).

**Action:** None identified



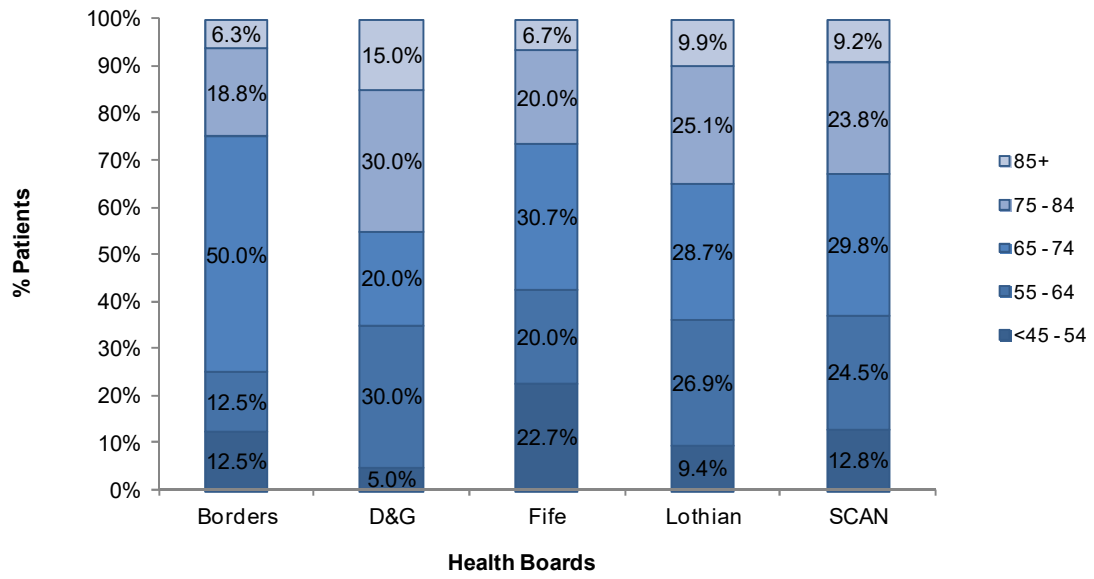
**QPI 13: Trifecta Rate 2017 to 2021**



**Age and Gender Analysis**

| Age and Gender Analysis |   | Borders | D&G | Fife | Lothian | SCAN |
|-------------------------|---|---------|-----|------|---------|------|
| Under 45                | M | 0       | 1   | 2    | 4       | 7    |
|                         | F | 0       | 0   | 2    | 1       | 3    |
| 45 - 49                 | M | 0       | 0   | 2    | 3       | 5    |
|                         | F | 0       | 0   | 1    | 2       | 3    |
| 50 - 54                 | M | 2       | 0   | 6    | 5       | 13   |
|                         | F | 0       | 0   | 4    | 1       | 5    |
| 55 - 59                 | M | 1       | 0   | 7    | 14      | 22   |
|                         | F | 1       | 1   | 3    | 10      | 15   |
| 60 - 64                 | M | 0       | 3   | 4    | 17      | 24   |
|                         | F | 0       | 2   | 1    | 5       | 8    |
| 65 - 69                 | M | 5       | 2   | 6    | 18      | 31   |
|                         | F | 1       | 1   | 3    | 2       | 7    |
| 70 - 74                 | M | 2       | 1   | 9    | 15      | 27   |
|                         | F | 0       | 0   | 5    | 14      | 19   |
| 75 - 79                 | M | 0       | 4   | 7    | 13      | 24   |
|                         | F | 1       | 1   | 4    | 8       | 14   |
| 80 - 84                 | M | 1       | 0   | 2    | 15      | 18   |
|                         | F | 1       | 1   | 2    | 7       | 11   |
| 85+                     | M | 1       | 0   | 2    | 10      | 13   |
|                         | F | 0       | 3   | 3    | 7       | 13   |
| Total                   | M | 12      | 11  | 47   | 114     | 184  |
|                         | F | 4       | 9   | 28   | 57      | 98   |

### Age at Diagnosis 2021



## APPENDIX

| Renal Cancer QPI Attainment Summary 2020  |                       | 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 14                                 | 100%  | D 14 | N 15 | 100%  | D 15 | N 34 | 94.4% | D 36 | N 63    | 98.4% | D 64  | N 126 | 97.7% | D 129 |
| QPI 2 Patients with RCC who have a histological diagnosis via biopsy before Non-surgical primary treatment.     | Cryotherapy / RFA     | 90       | N 0                                  | N/A   | D 0  | N 0  | N/A   | D 0  | N 0  | N/A   | D 0  | N 2     | 100%  | D 2   | N 2   | 100%  | D 2   |
|   | SACT                  | 90       | N 5                                  | 100%  | D 5  | N 2  | 100%  | D 2  | N 8  | 100%  | D 8  | N 8     | 100%  | D 8   | N 23  | 100%  | D 23  |
| QPI 3 Patients whose RCC is staged pre-treatment using the TNM staging system.                                  |                       | 98       | N 20                                 | 100%  | D 20 | N 15 | 65.2% | D 23 | N 56 | 83.6% | D 67 | N 152   | 97.4% | D 156 | N 243 | 91.4% | D 266 |
| QPI 4 Patients with RCC who are discussed at MDT meeting before definitive treatment.                           |                       | 95       | N 19                                 | 100%  | D 19 | N 22 | 95.7% | D 23 | N 65 | 97.0% | D 67 | N 139   | 90.3% | D 154 | N 245 | 93.2% | D 263 |
| QPI 7 T1aN0M0 RCC who have nephron sparing treatment (Cryotherapy, RFA or robotic/lap/open partial nephrectomy) |                       | 50       | N 2                                  | 66.7% | D 3  | N 2  | 66.7% | D 3  | N 5  | 71.4% | D 7  | N 11    | 68.8% | D 16  | N 20  | 69.0% | D 29  |
| QPI 8 Proportion of patients who die within 30 days of treatment for RCC.                                       | Surgery               | <2       | Presented by Health Board of surgery |       |      | N 0  | 0%    | D 28 | N 0  | 0%    | D 86 | N 0     | 0%    | D 114 | N 0   | 0%    | D 114 |
|   | Cryotherapy treatment | <2       | N 0                                  | N/A   | D 0  | N 0  | N/A   | D 0  | N 0  | N/A   | D 0  | N 0     | 0%    | D 3   | N 0   | 0%    | D 3   |
|   | RFA treatment         | <2       | N 0                                  | N/A   | D 0  | N 0  | N/A   | D 0  | N 0  | N/A   | D 0  | N 0     | N/A   | D 0   | N 0   | N/A   | D 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  | 0%    | D 28 | N 0  | 0%    | D 83 | N 0     | 0%    | D 111 | N 0   | 0%    | D 111 |
|   | Cryotherapy treatment | <2       | N 0                                  | N/A   | D 0  | N 0  | N/A   | D 0  | N 0  | N/A   | D 0  | N 0     | 0%    | D 2   | N 0   | 0%    | D 2   |
|   | RFA treatment         | <2       | N 0                                  | N/A   | D 0  | N 0  | N/A   | D 0  | N 0  | N/A   | D 0  | N 0     | N/A   | D 0   | N 0   | N/A   | D 0   |
| QPI 9 Advanced and/or metastatic RCC who have SACT in 12 months of diagnosis.                                   |                       | 40       | N 1                                  | 100%  | D 1  | N 3  | 60.0% | D 5  | N 2  | 50.0% | D 4  | N 11    | 61.1% | D 18  | N 17  | 60.7% | D 28  |
| QPI 10 Patients with metastatic RCC who are assigned a valid prognostic score following diagnosis               |                       | 90       | N 6                                  | 100%  | D 6  | N 3  | 60.0% | D 5  | N 7  | 46.7% | D 15 | N 17    | 68.0% | D 25  | N 33  | 64.7% | D 51  |
| 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  | 0%    | D 14 | N 47 | 100%  | D 47 | N 47    | 100%  | D 61  | N 47  | 77.0% | D 61  |

| <b>Renal Cancer QPI Attainment Summary 2020</b>  | Target % | <b>Borders</b>   | <b>D&amp;G</b>       | <b>Fife</b>         | <b>Lothian</b>         | <b>SCAN</b>            |
|--|----------|--|----------------------|---------------------|------------------------|------------------------|
| QPI 12 Number of renal surgical resections performed by a surgeon over a 1 year period.                            | ≥15      | 3 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<br>D 6<br>66.7% | N 6<br>D 15<br>40.0%   | N 10<br>D 21<br>47.6%  |
| QPI 14 Clinical Trial + Research study access - Consented in Trials and held on SCRN database.                     | 15       | N 8<br>D 20<br>40.0%   | N 7<br>D 33<br>21.2% | N 3<br>D 62<br>4.8% | N 49<br>D 147<br>33.3% | N 67<br>D 262<br>25.6% |