Renal Cancer

Measurability of Quality Performance Indicators
Version 3.4

To be read in conjunction with:
- Renal Cancer Clinical Quality Performance Indicators
- Renal Cancer Data Definitions (latest published version)
Measurability of Quality Performance Indicators for Renal Cancer

Please refer to the Renal Cancer Quality Performance Indicators published by Healthcare Improvement Scotland for a full description of individual QPIs.

Please refer to the Renal Cancer QPI Dataset published by ISD Scotland for a full description of individual data items.

Document control:

This version:

<table>
<thead>
<tr>
<th>Title</th>
<th>Renal Cancer Measurability of QPIs</th>
<th>Version/Issue Number</th>
<th>3.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective From</td>
<td>01/01/2015 (where amended or new QPIs require new data items for measurement, this will apply for patients diagnosed from 1st January 2016)</td>
<td>Author</td>
<td>Hazel Paterson, ISD</td>
</tr>
<tr>
<td>Document Type</td>
<td>Guidance</td>
<td>Document status</td>
<td>Final</td>
</tr>
<tr>
<td>Document Purpose</td>
<td>To support changes made to the dataset out-with review.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summary of changes</td>
<td>Changes outwith review</td>
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</tbody>
</table>

V3.4 August 2018 Final

Should be reported 1 year in arrears

In addition to reporting by Hospital of Diagnosis, the following QPIs should also be reported by Hospital of Surgery

11, 13

(Surgery Only)

In addition to reporting by Hospital of Diagnosis, the following QPIs should also be reported by Board of Diagnosis/Surgery

8

Revision History:

<table>
<thead>
<tr>
<th>Version</th>
<th>Status</th>
<th>Summary of Changes</th>
<th>QPI (s)</th>
</tr>
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<tr>
<td>0.1 Feb 2012</td>
<td>Draft</td>
<td>Update following comments from Iona Scott</td>
<td>All</td>
</tr>
<tr>
<td>0.2 Mar 2012</td>
<td>Draft</td>
<td>Updated following public engagement comments and clarifications from Iona Scott, to reflect changes to QPIs and dataset, and reformatted to agreed convention</td>
<td>All</td>
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<tr>
<td>1.0 Jan 2013</td>
<td>Final</td>
<td>V1.0 reformatted to agreed convention as per May 2012 meeting, and Not recorded specification updated as agreed with Roger Black Jan 2013, and checked against published QPIs and dataset.</td>
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<tr>
<td>1.1 Mar 2013</td>
<td>Final</td>
<td>Amendments made as per agreed changes following 9 month review, updated with new MDT QPI, and checked against published QPIs and dataset.</td>
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<tr>
<td>2.0 Sep 2013</td>
<td>Final</td>
<td>Amendments made out-with review, incorporating additional data item into the dataset updating the MDT QPI.</td>
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<td>2.1 June 2014</td>
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<td>Date</td>
<td>Status</td>
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<td>2.2 Jan 2015</td>
<td>Draft</td>
<td>Baseline review changes made</td>
<td>1,4,6,7,9</td>
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<td>2.2 April 2015</td>
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<td>Baseline review changes agreed and published</td>
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<tr>
<td>2.3 June 2015</td>
<td>Final</td>
<td>Amendment to QPI 4 outwith review</td>
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<tr>
<td>2.4 Nov 2015</td>
<td>Final</td>
<td>Amendment outwith review</td>
<td>1,3,5,7,8,9</td>
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<tr>
<td>3.0 Nov 2016</td>
<td>Final</td>
<td>Amendments made as per changes following Formal Review.</td>
<td>1,2,4,5,6,7,8,9,10,11,12,13</td>
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<tr>
<td>3.1 Dec 2016</td>
<td>Final</td>
<td>Amendment outwith review</td>
<td>8</td>
</tr>
<tr>
<td>3.2 Feb 2017</td>
<td>Final</td>
<td>Amendment outwith review</td>
<td>8</td>
</tr>
<tr>
<td>3.3 Sept 2017</td>
<td>Final</td>
<td>Amendment outwith review</td>
<td>13</td>
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<td>3.4 Aug 2018</td>
<td>Final</td>
<td>Amendment outwith review</td>
<td>1,13</td>
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## Updates from Previous Version

### QPI Summary of changes (excluding formatting changes) (August 2017)

<table>
<thead>
<tr>
<th>Num</th>
<th>Description</th>
<th>Numerator</th>
<th>Denominator</th>
</tr>
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<tbody>
<tr>
<td>13</td>
<td><strong>Query 1435</strong> – <strong>Numerator</strong>: inserted ‘under warm ischaemic conditions’; <strong>Denominator</strong>: inserted ‘under warm ischaemic conditions’, ‘AND Warm Ischaemia Time not coded as ‘not applicable’’ – AND [ISCTIME &lt;= 1010]; <strong>NR Numerator</strong>: removed [TRIFECTA = 99]; <strong>NR Denominator</strong>: inserted OR [ISCTIME = 99]</td>
<td></td>
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<tr>
<td>13</td>
<td><strong>Query 1441</strong> – <strong>Numerator</strong>: amended from AND [DISCDATE – SURGDATE ≤ 7] to AND [0 ≤ DISCDATE – SURGDATE ≤ 7] with the text ‘Date of Discharge [Cancer Surgery]’ minus ‘Date of Definitive Surgery’ is greater than or equal to zero days and less than or equal to seven days</td>
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### QPI Summary of changes (excluding formatting changes) (February 2017)

<table>
<thead>
<tr>
<th>Num</th>
<th>Description</th>
<th>Numerator</th>
<th>Denominator</th>
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<tbody>
<tr>
<td>8</td>
<td><strong>Query 1363</strong> - <strong>Denominator</strong>: changed from Surgical Presentation Type’ not coded as ‘Emergency’; AND ‘Definitive Operative Procedure’ coded as ‘Radical Nephrectomy’ or ‘Partial Nephrectomy’ or ‘Nephrectomy &amp; excision of perirenal tissue’ or ‘Bilateral Nephrectomy’ AND Type of First Cancer Treatment (FIRSTTREATMODE) not Radiofrequency Ablation,[SURGDATE &lt;&gt; 10/10/1010] AND [MORPHOL = 8260/3 OR 8310/3 OR 8312/3 OR 8316/3 OR 8317/3 OR 8318/3 OR 8319/3 OR 6666/6] AND NOT ([PRESENT = 2] AND [OPCODE1 = M02.5 OR M03.9 OR M02.1 OR M02.3 OR M02.4]) AND FIRSTTREATMODE &lt;&gt; ‘15’ to ‘Surgical Presentation Type’ not coded as ‘Emergency’, AND ‘Definitive Operative Procedure’ coded as ‘Radical Nephrectomy’ or ‘Partial Nephrectomy’ or ‘Nephrectomy &amp; excision of perirenal tissue’ or ‘Bilateral Nephrectomy’ or Nephroureterectomy NEC [MORPHOL = 8260/3 OR 8310/3 OR 8312/3 OR 8316/3 OR 8317/3 OR 8318/3 OR 8319/3 OR 6666/6] AND NOT ([PRESENT = 2] AND [OPCODE1 = M02.5 OR M03.9 OR M02.1 OR M02.3 OR M02.4]); <strong>NR Numerator</strong>: add ‘AND OPCODE1 = 99’; <strong>NR Denominator</strong>: add ‘AND SURGDATE = 09/09/0909’ OR [FIRSTTREATMODE = 99] insert ‘OR [OPCODE1 = 99]’</td>
<td></td>
<td></td>
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### QPI Summary of changes (excluding formatting changes) (December 2016)

<table>
<thead>
<tr>
<th>Num</th>
<th>Description</th>
<th>Numerator</th>
<th>Denominator</th>
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### QPI Summary of changes (excluding formatting changes) (November 2016)

<table>
<thead>
<tr>
<th>Num</th>
<th>Description</th>
<th>Numerator</th>
<th>Denominator</th>
</tr>
</thead>
</table>
| 1   | **Description**: add ‘receiving active treatment’, delete ‘and’ and delete ‘and’; **Numerator text**: add footnote to ‘active treatment’, add ‘or MRI’ and add ‘; AND ‘Contrast Agent Administered Status (Pre-treatment)’ coded as ‘Imaging with contrast’; **Denominator text**: delete ‘(partial or radical nephrectomy, cryotherapy, radio frequency ablation or systemic therapy)’; add ‘No exclusions’)’, delete ‘Excluding Patients who refuse treatment; Patients who underwent cross sectional imaging (CT) without intra venous (IV) contrast; and Patients who died before first treatment’, delete ‘AND ‘Type of First Cancer Treatment’ not coded as ‘Patient refused all therapies’ or ‘Patient died before treatment’; AND ‘Contrast Agent Administered Status’ not coded as ‘Imaging without contrast agent’; **Denominator calculation text**: delete ‘AND [FIRSTTREATMODE <> (14 OR 95)] AND [CONAGENT <> 1]’; **Not recorded for exclusion**: add text ‘N/A’, delete text ‘NB Patients not recorded for FIRSTTREATMODE are excluded from the denominator’; **Footnote**:
add ‘Active treatment is defined as partial or radical nephrectomy, cryotherapy, radio frequency ablation or systemic therapy’.

2 **Description:** add text ‘Please note: the specifications of this QPI are separated to ensure clear measurement of patients undergoing the following treatments: (i) Cryotherapy / Radiofrequency ablation (ii) Systemic Anti-Cancer Therapy (SACT); Numerator: add ‘(i)’ Numerator text: add text ‘undergoing cryotherapy or radiofrequency ablation as their first treatment’, delete text ‘for whom surgery is not first treatment’, add text ‘commencing’, delete text ‘first’. **Denominator:** add ‘(i)’ Denominator text: add text ‘undergoing cryotherapy or radiofrequency ablation as their first treatment’, delete text ‘for whom surgery is not first treatment’, add text ‘Excluding Patients who refuse treatment; Patients receiving supportive care only (not for active treatment); Patients receiving active treatment before surgery; Patients receiving active treatment before surgery, and surgery is not first treatment’, delete text ‘(MDT)’. Description: add text ‘(RCC)’, delete text ‘renal cancer’. Numerator text: add text ‘(RCC)’, delete text ‘renal cancer’. Denominator text: add text ‘diagnosed’, add text ‘(MDT)’.

3 **QPI Title:** delete text ‘newly diagnosed’, add text ‘Cell Carcinoma (RCC)’, delete text ‘cancer’, add text ‘(MDT)’. Description: add text ‘(RCC)’, delete text ‘renal cancer’. Numerator text: add text ‘(RCC)’, delete text ‘renal cancer’. Denominator text: add text ‘diagnosed’, add text ‘(RCC)’, delete text ‘renal cancer’.

4 **Histological Grading - QPI has been archived**

5 **Surgical Treatment - QPI has been archived**

7 **Denominator calculation text:** delete text ‘8 OR ’.

8 **QPI Heading:** add text ‘/ 90 ’. **QPI title:** add text ‘/ 90’. **Description:** add text ‘or 90’, delete text ‘first’. **Numerator text:** add text ‘with RCC’, delete text ‘as first treatment for RCC’, add text ‘/ 90’, delete text ‘first’, delete ‘Date of Death’ minus ‘Date of First Cancer Treatment’ less than or equal to 30 days; AND; add text ‘; (for separate denominators), Date of Death minus Date of Definitive Surgery is less than or equal to 30/90; OR Date of Death minus Date of Cryotherapy is less than or equal to 30/90; OR Date of Death minus Date of First Treatment is less than or equal to 30/90; OR Date of Death minus Date Treatment Completed (Systemic Anti-Cancer Therapy) is less than or equal to 30/90’. Add separate **Numerator** – see main document for detail. Note: **SYSTDATE** – new data item in dataset with a start date of 1st Jan ’16. **Denominator:** add text ‘with RCC’, delete text ‘as first treatment for RCC’, delete text ‘AND ‘Surgical Presentation Type’ not coded as ‘Emergency’; AND ‘Definitive Operative Procedure’ coded as ‘Radical Nephrectomy’ or ‘Partial Nephrectomy’ or ‘Nephrectomy & excision of perirenal tissue’ or ‘Bilateral Nephrectomy’; AND ‘Type of First Cancer Treatment’ not coded as ‘Supportive Care Only’ or ‘Patient refused all therapies’ or ‘Active Surveillance’ or ‘Patient died before treatment’; AND ‘Morphology of tumour’ not coded as ‘Clinical/Radiological only diagnosis of renal cell carcinoma, not assessable or negative’. **Denominator (i) calculation text:** add text ‘= 15 or 16’, delete text ‘<> 1’, delete text ‘AND [FIRSTTREATMODE <> (7 OR 95 OR 12 OR 14)] AND [MORPHOL <> 6666/6]’. Add **Numerator (ii) and Denominator (ii) – see main document for detail. Not recorded for **Numerator:** add text ‘OR [HDIALG = 09/09/0909]’. Not recorded for **Exclusion:** add text ‘N/A’, delete text ‘NB Patients not recorded for FIRSTTREATMODE and MORPHOL are excluded from the denominator.’

9 **Add (ii)(a),(ii)(b) Not recorded for Numerator:** add text ‘(i)’, delete text ‘undergoing cryotherapy or radiofrequency ablation as their first treatment’, delete text ‘(MDT)’. Description: add text ‘(RCC)’, delete text ‘renal cancer’.

10 **Add (ii)(a), (ii)(b) Not recorded for Exclusion:** add text ‘N/A’, delete text ‘NB Patients not recorded for FIRSTTREATMODE and MORPHOL are excluded from the denominator.’

11 **Add (ii)(a), (ii)(b) Not recorded for Numerator:** add text ‘(i)’, delete text ‘undergoing cryotherapy or radiofrequency ablation as their first treatment’, delete text ‘(MDT)’. Description: add text ‘(RCC)’, delete text ‘renal cancer’.

12 **Add (ii)(a), (ii)(b) Not recorded for Exclusion:** add text ‘N/A’, delete text ‘NB Patients not recorded for FIRSTTREATMODE and MORPHOL are excluded from the denominator.’

13 **Add (ii)(a), (ii)(b) Not recorded for Numerator:** add text ‘(i)’, delete text ‘undergoing cryotherapy or radiofrequency ablation as their first treatment’, delete text ‘(MDT)’. Description: add text ‘(RCC)’, delete text ‘renal cancer’.

14 **Add (ii)(a), (ii)(b) Not recorded for Exclusion:** add text ‘N/A’, delete text ‘NB Patients not recorded for FIRSTTREATMODE and MORPHOL are excluded from the denominator.’

15 **Add (ii)(a), (ii)(b) Not recorded for Numerator:** add text ‘(i)’, delete text ‘undergoing cryotherapy or radiofrequency ablation as their first treatment’, delete text ‘(MDT)’. Description: add text ‘(RCC)’, delete text ‘renal cancer’.

16 **Add (ii)(a), (ii)(b) Not recorded for Exclusion:** add text ‘N/A’, delete text ‘NB Patients not recorded for FIRSTTREATMODE and MORPHOL are excluded from the denominator.’

17 **Add (ii)(a), (ii)(b) Not recorded for Numerator:** add text ‘(i)’, delete text ‘undergoing cryotherapy or radiofrequency ablation as their first treatment’, delete text ‘(MDT)’. Description: add text ‘(RCC)’, delete text ‘renal cancer’.

18 **Add (ii)(a), (ii)(b) Not recorded for Exclusion:** add text ‘N/A’, delete text ‘NB Patients not recorded for FIRSTTREATMODE and MORPHOL are excluded from the denominator.’

19 **Add (ii)(a), (ii)(b) Not recorded for Numerator:** add text ‘(i)’, delete text ‘undergoing cryotherapy or radiofrequency ablation as their first treatment’, delete text ‘(MDT)’. Description: add text ‘(RCC)’, delete text ‘renal cancer’.

20 **Add (ii)(a), (ii)(b) Not recorded for Exclusion:** add text ‘N/A’, delete text ‘NB Patients not recorded for FIRSTTREATMODE and MORPHOL are excluded from the denominator.’
Add text ‘SACT [MORPHOL = 9999/9] OR [SYSTAGENT = 99]’.

**QPI Title:** capitalisation ‘Renal Cell Carcinoma’.

**Prognostic Scoring** – new measurement see main document for detail. **Note:** ‘PROGSCORE’ new data item in dataset with start date of 1st Jan ’16.

**Leibovich Score** – new measurement see main document for detail. **Note:** ‘LEIBOVICH’ new data item in dataset with start date of 1st Jan ’16.

**Volume of Cases per Surgeon** - new measurement see main document for detail.

**Trifecta Rate** - new measurement see main document for detail. **Note:** ‘ISCTIME’ and ‘DISCDATE’ new data items in dataset with start date of 1st Jan ’16.

### QPI Summary of changes (excluding formatting changes) (November 2015)

<table>
<thead>
<tr>
<th>No.</th>
<th>Query</th>
<th>Change</th>
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<tbody>
<tr>
<td>1</td>
<td>1101</td>
<td>CONAGENT=99 moved from NR Exclusions to NR Numerator</td>
</tr>
<tr>
<td>3</td>
<td>1085</td>
<td>Num changed to Clinical Staging - TNM - [cT &lt;&gt; 96] AND [cN &lt;&gt; 96] AND [cM &lt;&gt; 96]</td>
</tr>
<tr>
<td>5</td>
<td>1098</td>
<td>FUHRMAN=99 removed from NR numerator</td>
</tr>
<tr>
<td>8</td>
<td>1085</td>
<td>Nr exclusion remove OPCODE1</td>
</tr>
<tr>
<td>9</td>
<td>1099</td>
<td>Remove SYSTDATE=10/10/1010 and DOD=10/10/1010 from denominator; (Query 717) NR denominator delete T-M from 99 codes, cN=99 deleted</td>
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### QPI Summary of changes (excluding formatting changes) (June 2015)

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<td>4</td>
<td></td>
<td>Numerator amended to [MDTDATE &lt;&gt; 10/10/1010] AND ([MDTDATE ≤ DEFTREATDATE] OR [DEFTREATDATE = 10/10/1010])</td>
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### QPI Summary of changes (excluding formatting changes) (January 2015)

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<th>Change</th>
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<td>1</td>
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<td>changing the numerator to read “CT of the chest and abdomen +/- pelvis”</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>OR [DEFTREATDATE &lt;&gt; 10/10/1010] added to Numerator following comments received.</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>Update denominator for Type of First Cancer Treatment to include ‘or Patient Refused All Therapies’ and deleted ‘patient refused surgery’ from Definitive Operative Procedure. Numerator updated with M02.1 OR M02.2 OR M02.3 OR M02.4 OR as per query 788.</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>Update denominator for Type of First Cancer Treatment to include ‘or Patient Refused All Therapies’ and deleted ‘patient refused surgery’ from Definitive Operative Procedure.</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>Denominator updated with ‘[(SYSTDATE=10/10/1010 and DOD=10/10/1010 AND DATECOMP - DIAGDATE ≥ 365 days) OR (SYSTDATE-DIAGDATE &lt; 365 days)]’ . Numerator updated with [SYSTDATE &lt;&gt; 10/10/1010] AND following comments received.</td>
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### QPI Summary of changes (excluding formatting changes) (June 2014)

<table>
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<td>Amended MDT QPI</td>
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### QPI Summary of changes (excluding formatting changes) (September 2013)

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<td></td>
<td>Amended numerator calculation for complete staging investigations, and added new surgical code to denominator.</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Amended numerator, now based on histological diagnosis and amended denominator code for not assessable.</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>Amended numerator codes for ‘Not applicable’.</td>
</tr>
<tr>
<td></td>
<td>Previously QPI 4. Added new surgical code to denominator.</td>
<td></td>
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<tr>
<td>---</td>
<td>--------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Previously QPI 5. Removed reference to surgical procedure type from denominator calculation and updated not recorded section.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Previously QPI 6. Removed reference to surgical procedure type from denominator calculation and updated not recorded section.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Previously QPI 7. Amended calculation to separate denominator based on first treatment.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Previously QPI 8. Simplified denominator calculation and corrected 'Not recorded' codes.</td>
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### QPI 1 - Radiological Diagnosis

<table>
<thead>
<tr>
<th>QPI Title:</th>
<th>Patients with renal cancer should have cross sectional imaging for staging of Renal Cell Carcinoma (RCC).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>Proportion of patients with RCC receiving active treatment who undergo pre-treatment cross-sectional imaging of the chest, abdomen +/- pelvis.</td>
</tr>
<tr>
<td>Numerator:</td>
<td>Number of patients receiving active treatment with a diagnosis of RCC who undergo cross-sectional imaging (CT or MRI) of the chest, abdomen +/- pelvis (with contrast) before first treatment.</td>
</tr>
</tbody>
</table>

**Date Staging Investigations Complete’ before ‘Date of First Cancer Treatment’, AND ‘Date of First Cancer Treatment’ minus ‘Date Staging Investigations Complete’ is less than or equal to 92 days AND ‘Staging Investigations Complete’ coded as ‘Yes’, AND ‘Contrast Agent Administered Status (Pre-treatment)’ coded as ‘Imaging with contrast’**

\[
[SINVESTDATE < FIRSTTREATDATE] \text{ AND } [FIRSTTREATDATE-SINVESTDATE<=92 \text{ days}] \text{ AND } [\text{SINVEST} = 1] \text{ AND } [\text{CONAGENT} = 2] [\text{SINVESTDATE < FIRSTTREATDATE}]
\]

<table>
<thead>
<tr>
<th>Denominator:</th>
<th>All patients receiving active treatment with a diagnosis of RCC (No exclusions).</th>
</tr>
</thead>
</table>

**Date of Diagnosis [DIAGDATE] in range specified for comparative analysis; AND ‘Morphology of Tumour’ coded as RCC; AND ((‘Type of First Cancer Treatment’ coded as ‘Surgery’ AND ‘Definitive Operative Procedure’ coded as ‘Radical Nephrectomy’ or ‘Partial Nephrectomy’ or ‘Nephrectomy & excision of perirenal tissue’ or ‘Bilateral Nephrectomy’ or ‘Nephroureterectomy NEC’) OR ‘Type of First Cancer Treatment’ coded as ‘Systemic Therapy’ or ‘Radiofrequency Ablation’ or ‘Cryotherapy’);**

\[
[MORPHOL = 8260/3 \text{ OR } 8310/3 \text{ OR } 8312/3 \text{ OR } 8316/3 \text{ OR } 8317/3 \text{ OR } 8318/3 \text{ OR } 8319/3 \text{ OR } 6666/6] \text{ AND ( ( [FIRSTTREATMODE = 1] AND [OPCODE1 = M02.5 \text{ OR } M03.9 \text{ OR } M02.1 \text{ OR } M02.3 \text{ OR } M02.2 ] ) OR [FIRSTTREATMODE = 13 \text{ OR } 15 \text{ OR } 16] )}
\]

<table>
<thead>
<tr>
<th>Not recorded for numerator</th>
<th>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</th>
</tr>
</thead>
</table>
|                            | \[
[SINVESTDATE = 09/09/0909] \text{ OR } [FIRSTTREATDATE = 09/09/0909] \text{ OR } [\text{SINVEST} = 99] \text{ OR } [\text{CONAGENT} = 99]
\]

<table>
<thead>
<tr>
<th>Not recorded for exclusion</th>
<th>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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Not recorded for denominator</th>
<th>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</th>
</tr>
</thead>
</table>
|                             | \[
[MORPHOL = 9999/9] \text{ OR } [FIRSTTREATMODE = 99] \text{ OR } [OPCODE1 = 99]
\]

### QPI 2 - Histological Diagnosis

\*Active treatment is defined as partial or radical nephrectomy, cryotherapy, radio frequency ablation or systemic therapy*
<table>
<thead>
<tr>
<th>QPI Title:</th>
<th>Patients with renal cancer not undergoing surgery should have a histological diagnosis prior to commencing treatment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>Proportion of patients with RCC where surgery is not the primary treatment who have a histological diagnosis before treatment, via biopsy. Please note: the specifications of this QPI are separated to ensure clear measurement of patients undergoing the following treatments: (i) Cryotherapy / Radiofrequency ablation (ii) Systemic Anti-Cancer Therapy (SACT)</td>
</tr>
<tr>
<td>Numerator (i):</td>
<td>Number of patients with RCC undergoing cryotherapy or radiofrequency ablation as their first treatment who have a histological diagnosis (confirmed by biopsy) before commencing treatment. ‘Date of Histological Diagnosis’ before ‘Date of First Cancer Treatment’; AND ‘Most Valid Basis of Diagnosis’ coded as ‘Histology of Primary’ or ‘Histology of Metastases’ [HDIAG &lt; FIRSTTREATDATE] AND [VALID = 7 OR 6]</td>
</tr>
<tr>
<td>Denominator (i):</td>
<td>All patients with RCC undergoing cryotherapy or radiofrequency ablation as their first treatment (No exclusions) Date of Diagnosis [DIAGDATE] in range specified for comparative analysis; AND ‘Type of First Treatment’ coded as ‘Radiofrequency ablation’ or ‘Cryotherapy’ AND ‘Morphology of Tumour’ coded as RCC [FIRSTTREATMODE = 15 or 16] AND [MORPHOL = 8260/3 OR 8310/3 OR 8312/3 OR 8316/3 OR 8317/3 OR 8318/3 OR 8319/3 OR 6666/6]</td>
</tr>
<tr>
<td>Numerator (ii):</td>
<td>Number of patients with RCC undergoing SACT as their first treatment who have a histological diagnosis (confirmed by biopsy) before commencing treatment. ‘Date of Histological Diagnosis’ before ‘Date of First Cancer Treatment’; AND ‘Most Valid Basis of Diagnosis’ coded as ‘Histology of Primary’ or ‘Histology of Metastases’ [HDIAG &lt; FIRSTTREATDATE] AND [VALID = 7 OR 6]</td>
</tr>
<tr>
<td>Denominator (ii):</td>
<td>All patients with RCC undergoing SACT as their first treatment (No exclusions). Date of Diagnosis [DIAGDATE] in range specified for comparative analysis; AND ‘Type of First Treatment’ coded as Systemic Anti-Cancer Therapy (SACT) AND ‘Morphology of Tumour’ coded as ‘RCC’ [FIRSTTREATMODE = 13] AND [MORPHOL = 8260/3 OR 8310/3 OR 8312/3 OR 8316/3 OR 8317/3 OR 8318/3 OR 8319/3 OR 6666/6]</td>
</tr>
<tr>
<td>Not recorded for numerator</td>
<td>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.</td>
</tr>
<tr>
<td>---------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>[FIRSTTREATDATE = 09/09/0909] OR [VALID = 99] OR [HDIAG = 09/09/0909]</td>
</tr>
<tr>
<td>Not recorded for exclusion</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Not recorded for denominator</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>[FIRSTTREATMODE = 99] OR [MORPHOL = 9999/9]</td>
</tr>
</tbody>
</table>
### QPI 3 - Clinical Staging – TNM

<table>
<thead>
<tr>
<th>QPI Title:</th>
<th>The TNM staging system should be used to stage patients with Renal Cell Carcinoma (RCC).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>Proportion of patients whose RCC is staged pre-treatment using the TNM staging system.</td>
</tr>
<tr>
<td>Numerator:</td>
<td>Number of patients diagnosed with RCC who were clinically staged using TNM staging system before first treatment.</td>
</tr>
<tr>
<td></td>
<td>‘TNM Tumour Classification (Clinical) (Kidney) (Pre-treatment)’ NOT coded as ‘Not applicable’; AND ‘TNM Nodal Classification (Clinical) (Kidney) (Pre-treatment)’ NOT coded as ‘Not applicable’; AND ‘TNM Metastasis Classification (Clinical) (Kidney) (Pre-treatment)’ NOT coded as ‘Not applicable’</td>
</tr>
<tr>
<td></td>
<td>[cT &lt;&gt; 96] AND [cN &lt;&gt; 96] AND [cM &lt;&gt; 96]</td>
</tr>
<tr>
<td>Denominator:</td>
<td>All patients diagnosed with RCC (No exclusions).</td>
</tr>
<tr>
<td></td>
<td>Date of Diagnosis [DIAGDATE] in range specified for comparative analysis; AND ‘Morphology of Tumour’ coded as RCC</td>
</tr>
<tr>
<td></td>
<td>[MORPHOL = 8260/3 OR 8310/3 OR 8312/3 OR 8316/3 OR 8317/3 OR 8318/3 OR 8319/3 OR 6666/6]</td>
</tr>
<tr>
<td>Not recorded for numerator</td>
<td>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</td>
</tr>
<tr>
<td></td>
<td>[cT &lt;&gt; 99] OR [cN &lt;&gt; 99] OR [cM &lt;&gt; 99]</td>
</tr>
<tr>
<td>Not recorded for exclusion</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Not recorded for denominator</td>
<td>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</td>
</tr>
<tr>
<td></td>
<td>[MORPHOL = 9999/9]</td>
</tr>
</tbody>
</table>
## QPI 4 – Multi-Disciplinary Team Meeting (MDT)

<table>
<thead>
<tr>
<th>QPI Title:</th>
<th>Patients with Renal Cell Carcinoma (RCC) should be discussed by a multi-disciplinary team (MDT) prior to definitive treatment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>Proportion of patients with RCC who are discussed at MDT meeting before definitive treatment.</td>
</tr>
</tbody>
</table>
| Numerator | Number of patients with RCC discussed at the MDT before definitive treatment.  
Date Discussed by Care Team (MDT) not coded as ‘not applicable’; AND Date Discussed by Care team is before or equal to Date of Definitive Treatment OR Date of Definitive Treatment is coded as ‘not applicable’.  
[MDTDATE <> 10/10/1010] AND ([MDTDATE ≤ DEFTREATDATE] OR [DEFTREATDATE = 10/10/1010]) |
| Denominator | All patients with RCC (excluding patients who died before first treatment).  
Date of Diagnosis [DIAGDATE] in range specified for comparative analysis; AND ‘Morphology of Tumour’ coded as renal cancer; AND ‘Type of First Cancer Treatment not coded as ‘Patient died before treatment’.  
[MORPHOL = 8260/3 OR 8310/3 OR 8312/3 OR 8316/3 OR 8317/3 OR 8318/3 OR 8319/3 OR 6666/6] AND [FIRSTTREATMODE <> 14] |
| 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  
[MDTDATE = 09/09/0909] OR [DEFTREATDATE = 09/09/0909] |
| 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.  
[FIRSTTREATMODE = 99] |
| 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  
[MORPHOL = 9999/9] |
**QPI 7 - Nephron Sparing Surgery**

<table>
<thead>
<tr>
<th>QPI Title:</th>
<th>Patients with T1a renal cancer should receive Nephron Sparing Surgery (NSS).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>Proportion of patients with T1a N0 M0 RCC who undergo NSS (laparoscopic partial nephrectomy or open partial nephrectomy).</td>
</tr>
<tr>
<td>Numerator:</td>
<td>Number of patients with T1a N0 M0 RCC undergoing NSS (laparoscopic partial nephrectomy or open procedure partial nephrectomy).</td>
</tr>
<tr>
<td></td>
<td>‘Definitive Operative Procedure’ coded as ‘Partial nephrectomy’ [OPCODE1 = M03.9]</td>
</tr>
<tr>
<td>Denominator:</td>
<td>All patients with T1a N0 M0 RCC (Excluding Patients who refuse treatment; Patients who receive RFA/Cryotherapy; Patients receiving supportive care only (not for active treatment); Patients receiving active surveillance (no active treatment); Patients who died before treatment).</td>
</tr>
<tr>
<td></td>
<td>Date of Diagnosis [DIAGDATE] in range specified for comparative analysis; AND ‘TNM Tumour Classification (Clinical) (Kidney) (Pre-treatment)’ coded as T1a; AND ‘TNM Nodal Classification (Clinical) (Kidney) (Pre-treatment)’ coded as N0; AND ‘TNM Metastasis Classification (Clinical) (Kidney) (Pre-treatment)’ coded as M0; AND ‘Morphology of Tumour’ coded as RCC; AND ‘Type of First Cancer Treatment’ not coded as ‘Supportive Care Only’ or ‘Active Surveillance’ or ‘Patient died before treatment’ or ‘Radiofrequency Ablation’ or ‘Cryotherapy’ or Patient Refused All Therapies’; [cT = T1a] AND [cN = N0] AND [cM = M0] AND [MORPHOL = 8260/3 OR 8310/3 OR 8312/3 OR 8316/3 OR 8317/3 OR 8318/3 OR 8319/3 OR 6666/6] AND [FIRSTTREATMODE &lt;&gt; 7 OR 12 OR 14 OR 15 OR 16 OR 95]</td>
</tr>
<tr>
<td>Not recorded for numerator</td>
<td>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 [OPCODE1 = 99]</td>
</tr>
<tr>
<td>Not recorded for exclusion</td>
<td>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 [FIRSTTREATMODE = 99]</td>
</tr>
<tr>
<td>Not recorded for denominator</td>
<td>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 [MORPHOL = 9999/9] OR [cT = 99] OR [cN = 99] OR [cM = 99]</td>
</tr>
<tr>
<td>QPI Title:</td>
<td>30 / 90 Day Mortality</td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Description:</td>
<td>Proportion of patients who die within 30 or 90 days of treatment for RCC.</td>
</tr>
</tbody>
</table>
**Numerator:**

Number of patients with RCC who undergo minimally invasive (RFA, Cryotherapy, SACT) or operative treatment who die within 30 / 90 days of treatment.

Date of Death is not coded as Not applicable; AND (for separate denominators), Date of Death minus Date of Definitive Surgery is less than or equal to 30/90; OR Date of Death minus Date of Cryotherapy is less than or equal to 30/90; OR Date of Death minus Date of First Treatment is less than or equal to 30/90; OR Date of Death minus Date Treatment Completed (Systemic Anti-Cancer Therapy) is less than or equal to 30/90.

**30 Day Mortality:**

(i)(a)

SURGERY

[DOD - SURGDATE ≤ 30] AND [DOD <> 10/10/1010]

(ii)(a)

CRYOTHERAPY

[DOD – CRYODATE ≤ 30] AND [DOD <> 10/10/1010]

(iii)(a)

RFA

[DOD – FIRSTTREATDATE ≤ 30] AND [DOD <> 10/10/1010]

(iv)(a)

SACT

[DOD – SYSTENDATE ≤ 30] AND [DOD <> 10/10/1010]

**90 Day Mortality:**

(i)(b)

SURGERY

[DOD - SURGDATE ≤ 90] AND [DOD <> 10/10/1010]

(ii)(b)

CRYOTHERAPY

[DOD – CRYODATE ≤ 90] AND [DOD <> 10/10/1010]

(iii)(b)

RFA

[DOD – FIRSTTREATDATE ≤ 90] AND [DOD <> 10/10/1010]

(iv)(b)

SACT

[DOD – SYSTENDATE ≤ 90] AND [DOD <> 10/10/1010]
Denominator: All patients with RCC who undergo minimally invasive (RFA, cryotherapy, SACT) or operative treatment (Excluding Patients who undergo emergency surgery (nephrectomy)).

Date of Diagnosis [DIAGDATE] in range specified for comparative analysis; AND ‘Morphology of Tumour’ coded as RCC;

SURGERY
‘Surgical Presentation Type’ not coded as ‘Emergency’; AND ‘Definitive Operative Procedure’ coded as ‘Radical Nephrectomy’ or ‘Partial Nephrectomy’ or ‘Nephrectomy & excision of perirenal tissue’ or ‘Bilateral Nephrectomy’ or Nephroureterectomy NEC
[MORPHOL = 8260/3 OR 8310/3 OR 8312/3 OR 8316/3 OR 8317/3 OR 8318/3 OR 8319/3 OR 6666/6] AND ([PRESENT <> 2] AND [OPCODE1 = M02.5 OR M03.9 OR M02.1 OR M02.3 OR M02.2 OR M02.4])

CRYOTHERAPY
‘Type of First Cancer Treatment’ coded as ‘Cryotherapy’
[MORPHOL = 8260/3 OR 8310/3 OR 8312/3 OR 8316/3 OR 8317/3 OR 8318/3 OR 8319/3 OR 6666/6] AND [FIRSTTREATMODE = 16]

RFA
‘Type of First Cancer Treatment’ coded as ‘Radiofrequency Ablation’
[MORPHOL = 8260/3 OR 8310/3 OR 8312/3 OR 8316/3 OR 8317/3 OR 8318/3 OR 8319/3 OR 6666/6] AND [FIRSTTREATMODE = 15]

SACT
‘Systemic Anti Cancer Therapy Agent (Renal Cancer)’ coded as ‘Sunitinib’ or ‘Pazopanib’ or ‘Bevacizumab’ or ‘Interferon’ or ‘Temsirolimus’ or ‘Other’
[MORPHOL = 8260/3 OR 8310/3 OR 8312/3 OR 8316/3 OR 8317/3 OR 8318/3 OR 8319/3 OR 6666/6] AND [SYSTAGENT= 1 OR 2 OR 3 OR 4 OR 5 OR 98]
<table>
<thead>
<tr>
<th>Not recorded for numerator</th>
<th>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</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i)(a), (i)(b)</td>
<td>DOD = '09/09/0909' OR SURGDATE = '09/09/0909'</td>
</tr>
<tr>
<td>(ii)(a),(ii)(b)</td>
<td>DOD = '09/09/0909' OR CRYODATE = '09/09/0909'</td>
</tr>
<tr>
<td>(iii)(a),(iii)(b)</td>
<td>DOD = '09/09/0909' OR FIRSTTREATDATE = '09/09/0909'</td>
</tr>
<tr>
<td>(iv)(a),(iv)(b)</td>
<td>DOD = '09/09/0909' OR SYSTENDATE = '09/09/0909'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Not recorded for exclusion</th>
<th>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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgery</td>
<td>[PRESENT = 99]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Not recorded for denominator</th>
<th>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</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgery</td>
<td>[MORPHOL = 9999/9] OR [OPCODE1 = 99]</td>
</tr>
<tr>
<td>RFA, Cryotherapy</td>
<td>[MORPHOL = 9999/9] OR [FIRSTTREATMODE = 99]</td>
</tr>
<tr>
<td>SACT</td>
<td>[MORPHOL = 9999/9] OR [SYSTAGENT = 99]</td>
</tr>
</tbody>
</table>
**QPI 9 - Systemic Therapy**

<table>
<thead>
<tr>
<th>QPI Title:</th>
<th>Patients with advanced and/or metastatic Renal Cell Carcinoma (RCC) should receive systemic therapy between diagnosis and death.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>Proportion of patients presenting with advanced and/or metastatic RCC who receive systemic anti-cancer therapy (SACT) for RCC within 12 months of diagnosis.</td>
</tr>
</tbody>
</table>
| Numerator: | Number of patients with RCC which is advanced and / or metastatic at time of diagnosis\(^c\) 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.  
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### QPI 10 – Prognostic Scoring

<table>
<thead>
<tr>
<th>QPI Title:</th>
<th>Patients with metastatic Renal Cell Carcinoma (RCC) should be assigned a valid prognostic score prior to commencing treatment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>Proportion of patients with metastatic RCC who are assigned a valid prognostic score prior to commencing treatment.</td>
</tr>
<tr>
<td>Numerator:</td>
<td>Number of patients with metastatic RCC who are assigned a valid prognostic score prior to commencing treatment.</td>
</tr>
<tr>
<td></td>
<td>‘Prognostic Score (Pre-Treatment)’ coded as ‘Yes’</td>
</tr>
<tr>
<td></td>
<td>[PROGSCORE = 1]</td>
</tr>
<tr>
<td>Denominator:</td>
<td>All patients diagnosed with metastatic RCC (No exclusions).</td>
</tr>
<tr>
<td></td>
<td>Date of Diagnosis [DIAGDATE] in range specified for comparative analysis; AND ‘Morphology of Tumour’ coded as RCC; AND ‘TNM Metastasis Classification (Clinical) (Kidney) (Pre-treatment)’ coded as M1</td>
</tr>
<tr>
<td></td>
<td>[MORPHOL = 8260/3 OR 8310/3 OR 8312/3 OR 8316/3 OR 8317/3 OR 8318/3 OR 8319/3 OR 6666/6] AND [cM = M1]</td>
</tr>
<tr>
<td>Not recorded for numerator</td>
<td>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</td>
</tr>
<tr>
<td></td>
<td>[PROGSCORE = 99]</td>
</tr>
<tr>
<td>Not recorded for exclusion</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>NA</td>
</tr>
<tr>
<td>Not recorded for denominator</td>
<td>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</td>
</tr>
<tr>
<td></td>
<td>[MORPHOL = 99] OR [cM = 99]</td>
</tr>
</tbody>
</table>

\[ Valid\ \text{prognostic\ scoring\ can\ be\ assigned\ using\ various\ models\ including\ MSKCC/Motzer,\ or\ Heng\ scoring\ tools ]
### QPI 11 – Leibovich Score

<table>
<thead>
<tr>
<th><strong>QPI Title:</strong></th>
<th>Patients with clear cell Renal Cell Carcinoma (RCC) should be assigned a Leibovich score following radical nephrectomy.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description:</strong></td>
<td>Proportion of patients with clear cell RCC who are assigned a Leibovich score following radical nephrectomy.</td>
</tr>
<tr>
<td><strong>Numerator:</strong></td>
<td>Number of patients with clear cell RCC who undergo radical nephrectomy and are assigned a Leibovich score following surgery 'Leibovich Score' coded as ‘0-2’ or ‘3-5’ or ‘≥6’ [LEIBOVICH = 1 OR 2 OR 3]</td>
</tr>
<tr>
<td><strong>Denominator:</strong></td>
<td>All patients with clear cell RCC who undergo radical nephrectomy (Excluding Patients with metastatic disease (TanyNanyM1) Date of Diagnosis [DIAGDATE] in range specified for comparative analysis; AND ‘Morphology of Tumour’ coded as ‘Clear Cell Renal Cell Carcinoma’; AND ‘Definitive Operative Procedure’ is coded as ‘Nephrectomy &amp; excision of perirenal tissue’ or ‘Nephroureterectomy NEC’ or ‘Bilateral nephrectomy’ or ‘Radical nephrectomy’; AND ‘Definitive Operative Procedure’ is not coded as ‘partial nephrectomy’; AND ‘TNM Metastasis Classification (Clinical) (Kidney) (Pre-treatment)’ not coded as ‘M1’. [MORPHOL = 8310/3] AND [OPCODE1 = M02.1 OR M02.2 OR M02.3 OR M02.5] AND [cM &lt;&gt;M1]</td>
</tr>
</tbody>
</table>

**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

[LEIBOVICH = 99]

**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.

[cM = 99]

**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

[MORPHOL = 9999/9] OR [OPCODE1 = 99]
**QPI 12 – Volume of Cases per Surgeon**

<table>
<thead>
<tr>
<th>QPI Title:</th>
<th>Renal surgical resection&lt;sup&gt;d&lt;/sup&gt; should be performed by surgeons who perform the procedures routinely.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>Number of renal surgical resections performed by a surgeon, over a one year period.</td>
</tr>
<tr>
<td>Specification:</td>
<td>Number of operations (MainOp or Op1 or Op2 or Op3 = { M02.1, M02.2, M02.3, M02.5, M03.9.}) performed by each surgeon where operation date is within time period specified</td>
</tr>
<tr>
<td></td>
<td>Note: This includes all patients undergoing the above procedures and is not restricted to renal cancer patients</td>
</tr>
<tr>
<td></td>
<td>Where two consultants operate together on the same patient the case should be counted under the Lead Surgeon.</td>
</tr>
</tbody>
</table>

<sup>d</sup> Renal surgical resection includes nephrectomy, partial nephrectomy and nephroureterectomy
**QPI 13 – Trifecta Rate**

<table>
<thead>
<tr>
<th><strong>QPI Title:</strong></th>
<th>Trifecta Rate in Partial Nephrectomy T1a Renal Cell Carcinoma (RCC) patients.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description:</strong></td>
<td>Proportion of patients with T1a RCC undergoing partial nephrectomy who achieve trifecta (warm ischaemia time less than 25 minutes, negative surgical margins and no complications).</td>
</tr>
</tbody>
</table>
| **Numerator:** | Number of patients with T1a RCC undergoing partial nephrectomy under warm ischaemic conditions who have warm ischaemia time less than 25 minutes, negative surgical margins and no complications (length of stay ≤ 7 days).  
Warm Ischaemia Time coded as less than 25 minutes; AND ‘Margin Status’ coded as ‘negative’; AND ‘Date of Discharge (Cancer Surgery)’ minus ‘Date of Definitive Surgery’ is greater than or equal to zero days and less than or equal to seven days  

$$[\text{ISCTIME} < 25] \text{ AND } [\text{MARGIN} = 2] \text{ AND } [0 \leq \text{DISCDATE} – \text{SURGDATE} \leq 7]$$ |
| **Denominator:** | All patients with T1a RCC undergoing partial nephrectomy under warm ischaemic conditions (No exclusions).  
Date of Diagnosis [DIAGDATE] in range specified for comparative analysis; AND ‘Morphology of Tumour’ coded as RCC; AND ‘TNM Tumour Classification (Clinical) (Kidney) (Pre-treatment)’ coded as T1a; AND ‘Definitive Operative Procedure’ coded as ‘partial nephrectomy’; AND Warm Ischaemia Time not coded as ‘not applicable’.  

$$[\text{MORPHOL} = 8260/3 \text{ OR } 8310/3 \text{ OR } 8312/3 \text{ OR } 8316/3 \text{ OR } 8317/3 \text{ OR } 8318/3 \text{ OR } 8319/3 \text{ OR } 6666/6] \text{ AND } [\text{cT} = \text{T1a}] \text{ AND } [\text{OPCODE1} = \text{M03.9}] \text{ AND } [\text{ISCTIME} \neq 1010]$$ |
| **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  

$$[\text{MARGIN} = 99] \text{ OR } [\text{DISCDATE} = '09/09/0909'] \text{ OR } [\text{SURGDATE} = '09/09/0909'] \text{ OR } [\text{ISCTIME} = 9999]$$ |
| **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.  
NA |
| **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  

$$[\text{MORPHOL} = 99] \text{ OR } [\text{cT} = 99] \text{ OR } [\text{OPCODE1} = 99]$$ |

*Length of stay is being used as a surrogate measure for the quality of surgery and post operative care including post operative complications.*