

**West of Scotland Cancer Network**

**Urological Cancer  
Managed Clinical Network**



# **Audit Report**

## **Renal Cancer Quality Performance Indicators**

**Clinical Audit Data: 1st January - 31st December 2023**

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# Renal Quality Performance Indicators Overview

Patients diagnosed: Jan -Dec 2023

Number of WoS cases: **534**

Gender of patients: Male 63% Female 37%

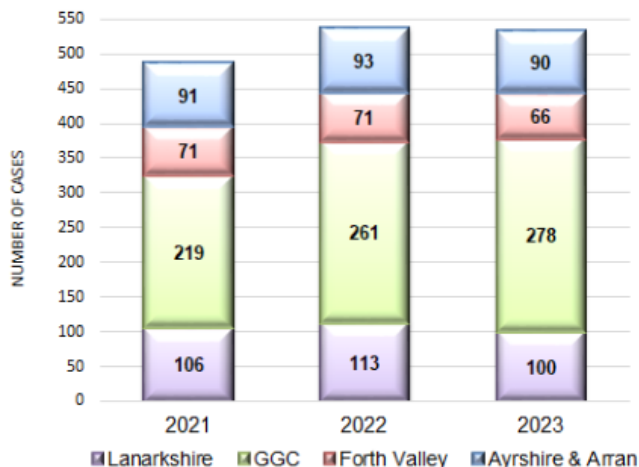
Number of new diagnoses in Scotland, 2021\*: Male 755 Female 407

\*Source: PHS

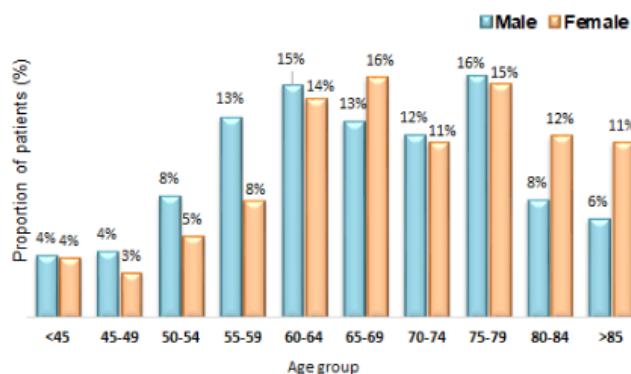
1 year Net survival\* 80.1% 77.8%  
5 year Net survival\* 63.1% 59.6%

\* Net non-age standardised survival for patients diagnosed 2015-19 in Scotland

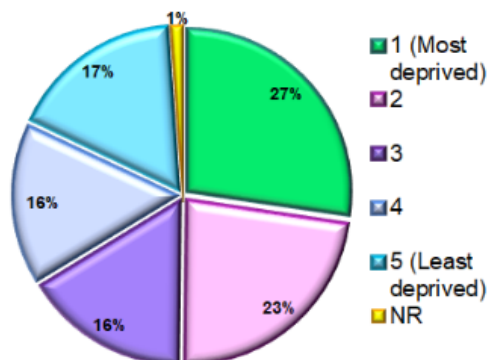
Number of cases by Board



5 Year Age Distribution



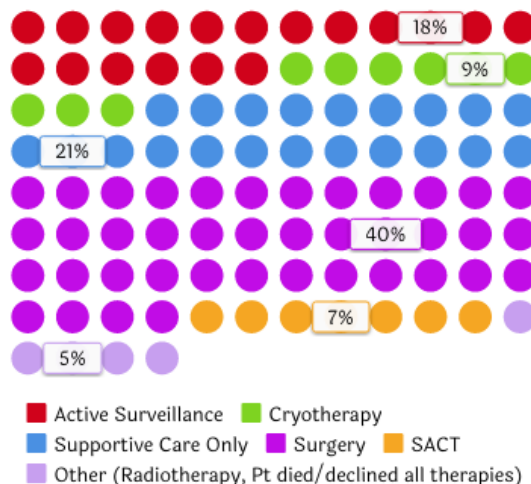
SIMD



Stage



First Treatment Type



## Executive Summary

This report contains an assessment of the performance of West of Scotland (WoS) urological cancer services using clinical audit data relating to patients diagnosed with renal cancer in the twelve months between 01 January and 31 December 2023.

Cancer audit has underpinned much of the regional development and service improvement work of the MCN and the regular reporting of activity and performance have been fundamental in assuring the quality of care delivered across the region. With the development of QPIs, this has now become a national programme to drive continuous improvement and ensure equity of care for patients across Scotland.

The majority of QPI targets were successfully achieved by the boards, reflecting excellent performance across the region, with all targets met by every board except NHS Lanarkshire. Notable areas of achievement include QPI 2(ii): Histological Diagnosis before SACT and QPI 3: Clinical Staging-TNM, both meeting regional targets at 100%. Reassuringly, surgeons routinely performing renal cancer operations successfully met the minimum target of 15 procedures for QPI 12. There were no reported cases of mortality within 30 or 90 days following Surgery or Cryotherapy procedures (QPI 8) signifying an improvement in patient outcomes.

NHS Lanarkshire reviewed cases and provided clinical comments where QPI targets were not achieved. In the main these indicate valid clinical reasons or that, in some cases, patient choice or co-morbidities have influenced patient management. With the implementation of a new regional MDT system, data recording is expected to improve, which should positively impact future reporting periods.

QPI 1: Radiological Diagnosis, QPI 2(ii): Histological Diagnosis, QPI 3: Clinical Staging -TNM, QPI 4: MDT Meeting, QPI 7: Nephron Sparing Surgery, QPI 8: 30/90-Day Mortality - Cryotherapy, RFA, Surgery, QPI 9: Systemic Therapy, and QPI 13: Trifecta Rate were met by all Boards, and therefore detailed graphs have not been included for these QPIs in the main report.

NHS Lanarkshire has been assigned the following action.

### Action:

QPI 11: Leibovich Score

- NHS Lanarkshire to remind the MDTs to document the numerical Leibovich score, and the pathology team to include it in future reports.

An Action Plan has been included with this report, and a template has been provided to the Board. **The completed Action Plan should be returned to WoSCAN promptly for review at the Regional Cancer Oversight Group.**

## Summary of Renal QPI Results

Colour Key	
	Above QPI target
	Below QPI target
	Indicates no comparable measure for previous years

Summary of the QPI results for clinical audit data. A dash (-) denotes restricted data where the denominator is less than 5. An asterisk (\*) denotes data where the denominator is zero.

Renal MCN					
	A&A	FV	GGC	LAN	WoSCAN
2023	90	66	278	100	534
2022	93	71	261	113	538
2021	91	71	219	106	487

Quality Performance Indicator (QPI)	Performance by NHS Board of diagnosis						
	QPI target	Year	A&A	FV	GGC	LAN	WoSCAN
<b>QPI 1-Radiological Diagnosis:</b> Proportion of patients with RCC receiving active treatments who undergo pre-treatments cross-sectional imaging of the chest, abdomen +/- pelvis.	95%	2023	96% (47/49)	100% (38/38)	100% (149/149)	97% (66/68)	99% (300/304)
		2022	100%	97.6%	100%	97.1%	99.1%
		2021	100%	98%	99%	97%	99%
<b>QPI 2(i)-Histological Diagnosis:</b> Proportion of patients with RCC where surgery is not the primary treatment who have a histological diagnosis before treatments, via biopsy. <b>Cryotherapy / Radiofrequency ablation/ Stereotactic ablative radiotherapy (SABR)</b>	90%	2023	-	-	100% (24/24)	87% (13/15)	96% (45/47)
		2022	92.9%	100%	85.7%	80.0%	89.6%
		2021	88%	-	93%	78%	89%
<b>QPI 2(ii)-Histological Diagnosis:</b> Proportion of patients with RCC where surgery is not the primary treatments who have a histological diagnosis before treatments, via biopsy. <b>Systemic Anti-Cancer Therapy (SACT)</b>	90%	2023	-	100% (7/7)	100% (16/16)	100% (13/13)	100% (38/38)
		2022	-	-	100%	100%	100%
		2021	100%	-	100%	89%	97%

Quality Performance Indicator (QPI)	Performance by NHS Board of diagnosis						
	QPI target	Year	A&A	FV	GGC	LAN	WoSCAN
<b>QPI 3-Clinical Staging–TNM:</b> Proportion of patients whose RCC is staged pre-treatments using the TNM staging system	<b>98%</b>	2023	100% (90/90)	100% (66/66)	100% (278/278)	100% (101/101)	100% (535/535)
		2022	100%	100%	98.5%	100%	99.3%
		2021	100%	100%	99%	100%	99%
<b>QPI 4-Multi-Disciplinary Team (MDT) Meeting:</b> Proportion of patients with RCC who are discussed at the MDT before definitive treatments.	<b>95%</b>	2023	99% (89/90)	98% (63/64)	95% (263/277)	98% (96/98)	97% (511/529)
		2022	98.9%	100%	96.9%	100%	98.3%
		2021	100%	100%	98%	98%	99%
<b>QPI 7-Nephron Sparing Treatment:</b> Proportion of patients with T1aN0M0 RCC who undergo nephron sparing treatment (cryotherapy, RFA, SABR or robotic / laparoscopic / open partial nephrectomy).	<b>50%</b>	2023	88% (14/16)	88% (7/8)	90% (45/50)	100% (24/24)	92% (90/98)
		2022	95.5%	100%	87.0%	81.3%	90.0%
		2021	76%	100%	89%	100%	89%
<b>QPI 8(i)-30 Day Mortality Following Treatment for RCC:</b> Proportion of patients who die within 30 days of treatments for RCC. <b>(a) Cryotherapy</b>	<b>&lt;2%</b>	2023	-	-	0% (0/25)	0% (0/11)	0% (0/44)
		2022	0%	0%	0%	0%	0%
		2021	0%	-	0%	0%	0%
<b>QPI 8(i)-30 Day Mortality Following Treatment for RCC:</b> Proportion of patients who die within 30 days of treatments for RCC. <b>(b) RFA</b>	<b>&lt;2%</b>	2023	*	*	*	*	*
		2022	*	*	*	*	*
		2021	*	*	*	*	*
<b>* QPI 8(i)-30 Day Mortality Following Treatment for RCC:</b> Proportion of patients who die within 30 days of treatments for RCC. <b>(c) Surgery</b>	<b>&lt;2%</b>	2023	0% (0/24)	0% (0/19)	0% (0/160)	0% (0/25)	0% (0/228)
		2022	0%	0%	0%	0%	0%
		2021	0%	10%	0%	0%	1%

Quality Performance Indicator (QPI)	Performance by NHS Board of diagnosis						
	QPI target	Year	A&A	FV	GGC	LAN	WoSCAN
<b>QPI 8(ii)-90 Day Mortality Following Treatment for RCC:</b> Proportion of patients who die within 90 days of treatments for RCC. <b>(a) Cryotherapy</b>	<2%	2023	-	-	0% (0/23)	0% (0/11)	0% (0/41)
		2022	0%	0%	0%	-	0%
		2021	0%	-	0%	0%	0%
<b>QPI 8(ii)-90 Day Mortality Following Treatment for RCC:</b> Proportion of patients who die within 90 days of treatments for RCC. <b>b) RFA</b>	<2%	2023	*	*	*	*	*
		2022	*	*	*	*	*
		2021	*	*	*	*	*
<b>* QPI 8(ii)-90 Day Mortality Following Treatment for RCC:</b> Proportion of patients who die within 90 days of treatments for RCC. <b>(c) Surgery</b>	<2%	2023	0% (0/24)	0% (0/17)	0% (0/159)	0% (0/25)	0% (0/225)
		2022	0%	0%	0.5%	0%	0.4%
		2021	0%	10%	1%	0%	1%
<b>QPI 9-Systemic Therapy:</b> Proportion of patients presenting with advanced and/or metastatic RCC who receive initial SACT within 12 months of diagnosis.  <i>Patients diagnosed 1st January 2022 - 31st December 2022</i>	40%	2023	-	63% (5/8)	57% (12/21)	60% (9/15)	60% (27/45)
		2022	100%	42.9%	53.1%	85.7%	60.8%
		2021	85%	40%	62%	63%	65%
<b>QPI 10-Prognostic Scoring in Metastatic Disease:</b> Patients with metastatic Renal Cell Carcinoma (RCC) should be assigned a valid prognostic score following diagnosis.	90%	2023	100% (9/9)	92% (11/12)	93% (40/43)	72% (13/18)	89% (73/82)
		2022	100%	100%	94.4%	91.7%	95.2%
		2021	100%	93%	87%	96%	92%
<b>*QPI 11-Leibovich Score:</b> Proportion of patients with clear cell RCC who are assigned a Leibovich score following radical nephrectomy.	100%	2023	100% (17/17)	100% (14/14)	100% (72/72)	83% (19/23)	97% (122/126)
		2022	100%	100%	100%	100%	100%
		2021					

Quality Performance Indicator (QPI)	Performance by NHS Board of diagnosis						
	QPI target	Year	A&A	FV	GGC	LAN	WoSCAN
<b>QPI 12: Volume of Cases per Surgeon</b> - Number of renal surgical resections performed by each surgeon in a given year (SMR01 data).	<b>Min-imum of 15</b>	2023	2 Met	1 Met	5 Met**	2 Met**	10 Met
		2022**	2 Met	1 Met	5 Met	2 Met	10 Met
		2021**	2 Met	1 Met	4 Met 1 Not Met	2 Met	9 Met 1 Not Met
<b>*QPI 13-Trifecta Rate:</b> Proportion of patients with T1a RCC undergoing partial nephrectomy who achieve trifecta (ischaemia time conditions met, negative surgical margins and no complications).	<b>50%</b>	2023	*	*	82% (40/49)	*	82% (40/49)
		2022	*	*	84.6%	*	84.6%
		2021					

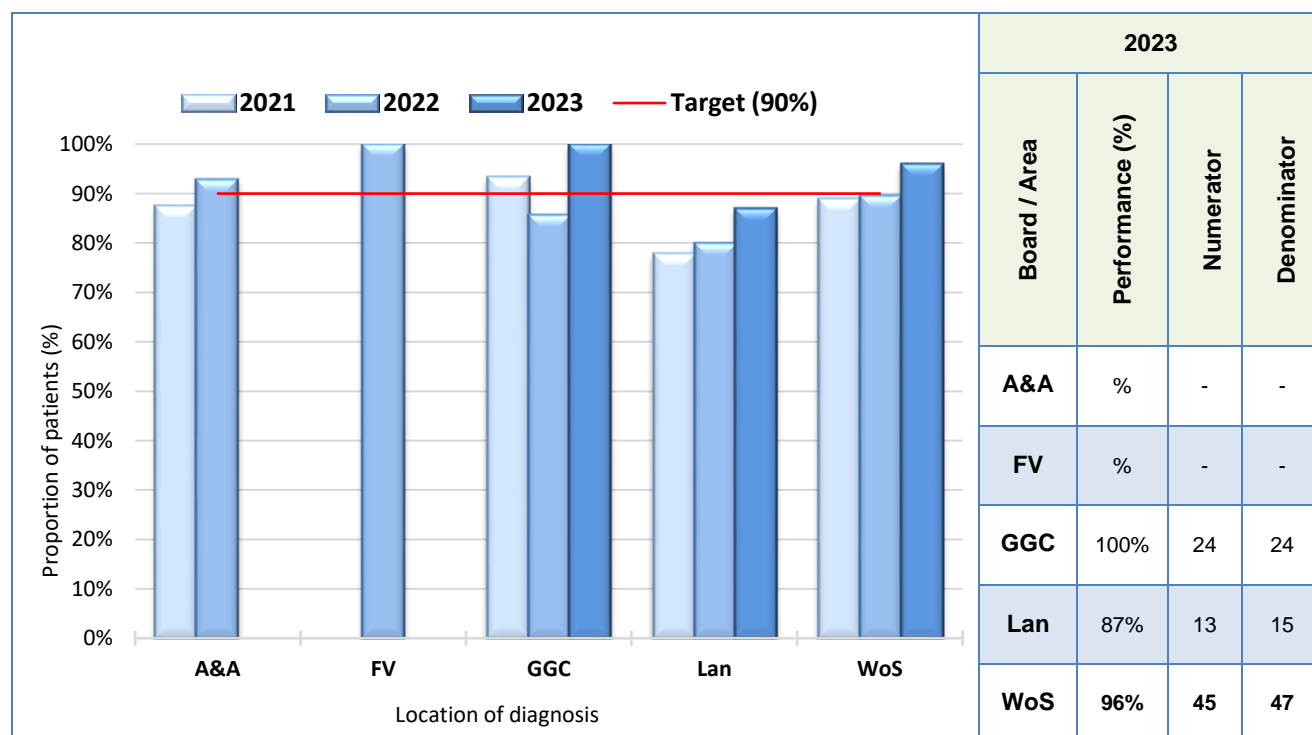
\*QPI analysed by Location of Surgery

\*\* Board adjusted figure



## QPI 2: Histological diagnosis prior to treatment

<b>QPI 2 Title:</b>	Patients with renal cancer not undergoing surgery should have a histological diagnosis prior to commencing treatment.
<b>Specification (i):</b>	Cryotherapy / radiofrequency ablation (RFA) / stereotactic ablative radiotherapy (SABR)
<b>Numerator (i):</b>	Number of patients with RCC undergoing cryotherapy, radiofrequency ablation or SABR as their first treatment who have a histological diagnosis (confirmed by biopsy) before commencing treatment.
<b>Denominator (i):</b>	All patients with RCC undergoing cryotherapy, radiofrequency ablation or SABR as their first treatment.
<b>Exclusions:</b>	<ul style="list-style-type: none"> <li>• Patients with inherited genetic renal cancer.</li> </ul>
<b>Target:</b>	<b>90%</b>



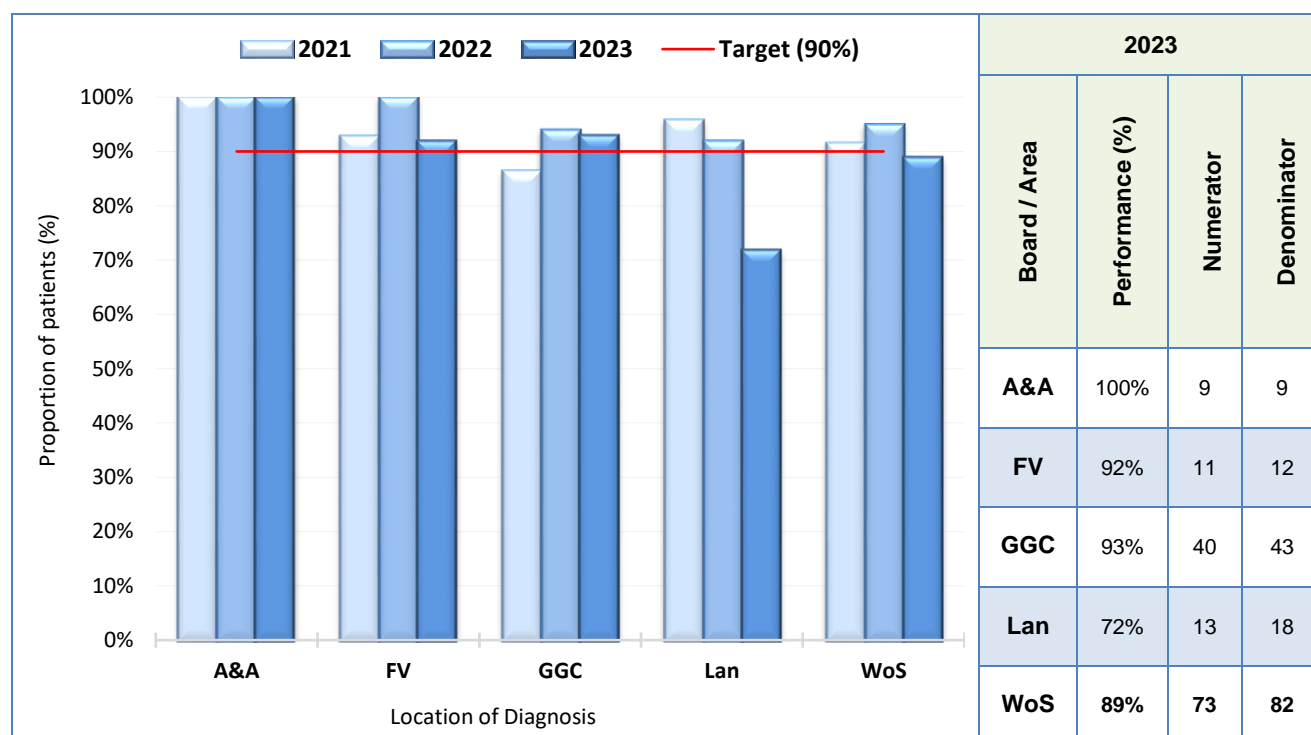
(-) Data is not shown; Denominator less than 5.

The overall performance in the WoS was 96%, with 45 out of 47 patients receiving a histological diagnosis prior to starting treatment with cryotherapy, RFA, or SABR. It should be noted that the number of patients included within the denominator is low and can have a considerable effect on overall proportions; therefore comparisons between NHS Boards should be viewed with caution. All boards, except NHS Lanarkshire, achieved the target with 100%.

NHS Lanarkshire reported two patients without histological confirmation prior to treatment: one due to an incomplete renal biopsy, and the other due to a pathology report indicating suspicion of RCC, with the patient declining a repeat biopsy.

## QPI 10: Prognostic Scoring in Metastatic Disease

<b>QPI 10 Title:</b>	Patients with metastatic Renal Cell Carcinoma (RCC) should be assigned a valid prognostic score following diagnosis.
<b>Numerator:</b>	Number of patients with metastatic RCC who are assigned a valid prognostic score following diagnosis.
<b>Denominator:</b>	All patients diagnosed with metastatic RCC.
<b>Exclusions:</b>	<ul style="list-style-type: none"> <li>• No exclusions</li> </ul>
<b>Target:</b>	90%

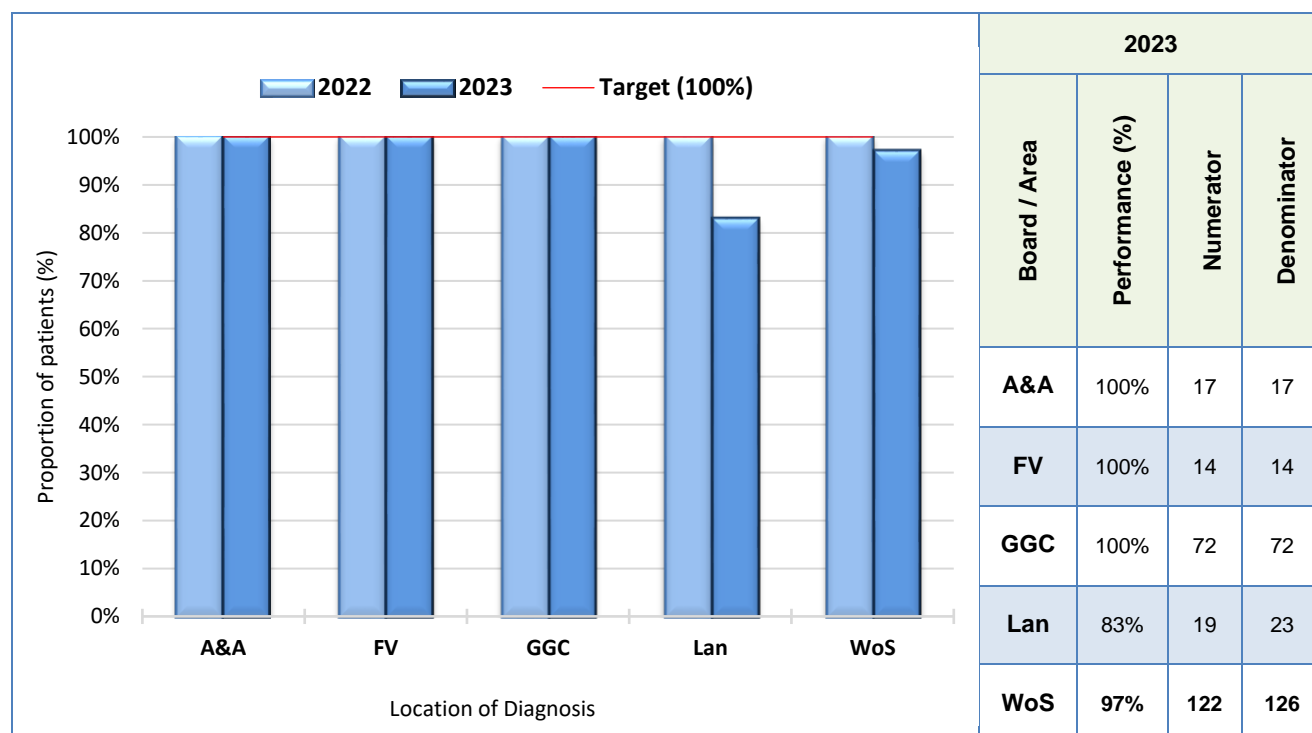


The overall performance for the WoS was 89%, narrowly missing the 90% target, with all boards meeting the target except NHS Lanarkshire.

NHS Lanarkshire reviewed five non-compliant cases, all involving advanced RCC (T3/T4) and poor prognoses. A small number passed away soon after diagnosis and the remaining patients were for best supportive care only. Surgeons have emphasised to the local team the importance of documenting a prognostic score at local and regional MDT.

## QPI 11: Leibovich Score

<b>QPI 11 Title:</b>	Patients with clear cell Renal Cell Carcinoma (RCC) should be assigned a Leibovich score following radical nephrectomy.
<b>Numerator:</b>	Number of patients with clear cell RCC who undergo radical nephrectomy and are assigned a Leibovich score following surgery.
<b>Denominator:</b>	All patients with clear cell RCC who undergo radical nephrectomy.
<b>Exclusions:</b>	<ul style="list-style-type: none"> <li>• Patients with metastatic disease (TanyNanyM1).</li> <li>• Patients undergoing neoadjuvant systemic anti-cancer therapy (SACT).</li> </ul>
<b>Target:</b>	<b>100%</b>



The overall performance in the WoS was 97%, with patients diagnosed with clear cell RCC who underwent radical nephrectomy being assigned a Leibovich score following surgery. All boards, except NHS Lanarkshire, achieved the target.

NHS Lanarkshire reviewed the cases where the Leibovich score was not documented. In some cases, risk levels were noted but no numerical scores recorded. As an improvement, local and regional MDTs will be reminded to document the numerical score, and the pathology team will include the score in future reports.

### Action:

- NHS Lanarkshire to remind MDTs to document the numerical Leibovich score, and ensure the pathology team include this in future reports.

## QPI 12: Volume of cases per surgeon

<b>QPI 12 Title:</b>	Renal surgical resection* should be performed by surgeons who perform the procedures routinely.
<b>Description:</b>	Number of renal surgical resections performed by each surgeon in a given year.
<b>Exclusions:</b>	<ul style="list-style-type: none"> <li>• No exclusions.</li> </ul>
<b>Target:</b>	Minimum 15 procedures per surgeon in a 1 year period.

\* Renal surgical resection includes nephrectomy, partial nephrectomy and nephroureterectomy

	No. of Operating Surgeons	No. of Procedures	No. of Surgeons Meeting Target
<b>^A&amp;A</b>	2	44	2
<b>^FV</b>	1	28	1
<b>*GGC</b>	5	246	5
<b>*Lan</b>	2	48	2
<b>WoS</b>	<b>10</b>	<b>366</b>	<b>10</b>

\*Board adjusted figures as per comments

^SMR01 figures

SMR01 data is used to measure performance for this QPI (rather than QPI audit data) and although the source data indicates that a small number of surgeons did not meet the minimum target of 15 procedures, further local scrutiny of the data has identified some SMR01 data recording issues or that in some cases surgeons from other specialties were assisting with renal procedures (e.g. vascular surgeon). This data also includes renal surgical resections for non-cancer diagnoses, as defined within the QPI specification.

The data shown represents the Board adjusted figures based on detailed information provided by each Board. In light of Board review findings and the adjusted figures, all Boards concluded that surgeons routinely operating on renal cancer achieved the QPI target.

## Appendix 1: Meta Data

Report Title	Cancer Audit Report: Renal Cancer Quality Performance Indicators					
Time Period	Patients diagnosed between 1st January - 31st December 2023					
QPI Version	Renal Cancer Clinical QPIs V5.0 (June 22) ( <a href="#">Renal cancer clinical quality performance indicators: June 2022 – Healthcare Improvement Scotland</a> )					
Data extraction date	2200 hrs on 28 October 2024.					
Data Quality		Ayrshire & Arran	Forth Valley	GGC	Lanarkshire	WoS
	Cases from audit	90	66	278	100	534
	Cases from ISD (2018-22)	77	67	262	107	514
	Case ascertainment	117%	99%	106%	94%	104%

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