
National Kidney Cancer Audit State of the Nation Report

An audit of care received by people diagnosed with kidney cancer between 1 January 2019 and 31 December 2023 in England and 1 January 2022 and 31 December 2024 in Wales. National time trends in kidney cancer diagnoses and treatments between 1 January 2019 and 30 September 2025 in England.

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The National Cancer Audit Collaborating Centre (NATCAN) is commissioned by the [Healthcare Quality Improvement Partnership \(HQIP\)](#) and funded by NHS England and the Welsh Government as part of the [National Clinical Audit and Patient Outcomes Programme \(NCAPOP\)](#). NATCAN delivers national audits in bowel, breast (primary and metastatic), kidney, lung, non-Hodgkin lymphoma, oesophago-gastric, ovarian, pancreatic and prostate cancers.



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The British Uro-oncology Group (BUG) was formed in 2004 to meet the needs of clinical and medical oncologists specialising in the field of urology. As the only dedicated professional association for uro-oncologists, its overriding aim is to provide a networking and support forum for discussion and exchange of research and policy ideas. Registered Charity no: 1116828.



This work uses data that have been provided by patients and collected by the NHS as part of their care and support. For patients diagnosed in England, the data are collated, maintained and quality assured by the National Disease Registration Service (NDRS), which is part of NHS England. Access to the data was facilitated by the NHS England Data Access Request Service.



NHS Wales recently implemented Cancer Dataset Forms with the latest implementation date being January 2025. These have been designed to improve the data capture and reporting capabilities of NHS Wales. This implementation has impacted the data quality within NHS Wales. NHS Wales has committed to continue to submit audit data annually until data submissions are sourced exclusively from the new cancer informatics solution. This will be from 2027 onwards that NHS Wales will be able to supply quarterly data using this new integrated, and more accessible digital platform.

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Contents

1. Introduction	1
2. Infographic	4
3. Recommendations	5
4. Results for England	8
4.1 Data completeness and patient characteristics	8
4.2 Performance indicators	8
4.3 National picture of treatment in 2019-2025	10
5. Results for Wales	12
5.1 Data completeness and patient characteristics	12
5.2 Performance indicators	12
6. Commentary	14

1. Introduction

The National Kidney Cancer Audit (NKCA) evaluates patterns of care and outcomes for people diagnosed with kidney cancer in England and Wales. It aims to help NHS organisations benchmark their kidney cancer care against measurable standards, to identify unwarranted variation in measures of processes and outcomes, and to describe national levels and patterns of these measures in England and Wales.

This is the audit's third annual State of the Nation report. It presents performance indicator results for people diagnosed with kidney cancer between January 2019 and December 2023 in England, and between January 2022 and December 2024 in Wales. The report describes the national picture and variation between NHS trusts in England from January 2019 to September 2025. Data were impacted by the COVID-19 pandemic and so will be atypical to some degree during 2020-2021.

This year's report introduces several new elements:

- **Alignment with the National Institute for Health and Care Excellence (NICE) guidance for kidney cancer.** On 19 March 2026, NICE published its first dedicated clinical guideline on kidney cancer ([NG256](#)), alongside a new Quality Standard ([QS215](#)). Four of the six quality standard statements map directly onto existing NKCA performance indicators. The quality standard names the [NKCA State of the Nation Report Data Dashboard](#) as a data source for assessing performance against these quality standards.
- **Launch of the NKCA Quality Improvement Intervention.** The [quality improvement intervention](#) launched on 19 March 2026, alongside the new NICE guideline and quality standard, focuses on access to a clinical nurse specialist (CNS) for people with kidney cancer ([QS215 Statement 3](#); [NG256 recommendations 1.1.3 and 1.1.4](#)).
- **Expanded reporting for Wales.** This report includes 'percentage of people with a small kidney cancer who have a biopsy' (PI 3) for Wales for the first time. In addition, 'percentage of people with T1b-3NXM0 renal cell carcinoma (RCC) who have surgery one month prior and 12 months following diagnosis' (PI 5) has been redefined to match the England cohort (previously T2-T3NXM0).
- **Expansion of PI 8 definition.** PI 8 (the percentage of people with kidney cancer who die within 30 days of starting SACT treatment) now includes all people with kidney cancer who received SACT, including those receiving adjuvant treatment following [NICE approval of adjuvant pembrolizumab in October 2022](#). Previous reports

described this group as people assumed to have metastatic disease.

- **Improvements to case-mix adjustment.** Four methodological changes strengthen the comparability of trust-level results this year: age is modelled using restricted cubic splines to better capture its non-linear relationship with treatment receipt; missing data are handled by multiple imputation; approach to assessing comorbidities is improved; year of diagnosis is included as a covariate.
- **Ongoing methodological developments.** In the [appendix](#), we present progress towards more timely reporting using the Rapid Cancer Registration Dataset (RCRD) and we introduce the use of mixed-effects models, estimating the distribution of national performance.

The management of people with kidney cancer is informed by national guidelines, against which the NKCA evaluates current patterns of care. The principal standards used in this report are the NICE clinical guideline on kidney cancer ([NG256: Kidney cancer: diagnosis and management](#)) and the accompanying Quality Standard ([QS215: Kidney cancer](#)), both published on 19 March 2026, and the [Getting It Right First Time \(GIRFT\)](#) national specialty report for kidney cancer published in June 2023. The NKCA has developed quality improvement goals and indicators using these standards after consultations with its Clinical Reference Group (CRG) and Patient and Public Involvement (PPI) forum. The goals and indicators are described in the NKCA [Quality Improvement Plan](#).

We use [data routinely collected](#) by the NHS, using the nationally mandated flow of data from hospitals to the National Disease Registration Service (NDRS) in NHS England and the National Cancer Team, NHS Wales Performance and Improvement.

The results for individual NHS organisations will be available on [NKCA Data Dashboards](#). We encourage NHS kidney cancer service providers to review the findings of this report and their results on the dashboard to explore reasons for unwarranted differences in practice. The data dashboards are updated quarterly (January, April, July and October) using the RCRD. Data quality reports provide a local perspective on the completeness of data available on people with kidney cancer at individual NHS organisations and shine a spotlight on areas where improvements to data collection are needed, such as tumour, node, metastasis (TNM) staging. Good quality data are essential for the audit to produce reliable and robust results.

Additional materials that accompany this report include:

- A [methodology supplement](#) with details about the NKCA's data sources and methods
- An [appendix](#) containing supporting documents
- An online [glossary](#) that explains the technical terms used in this report
- [Action plan template](#) to support local quality improvement projects
- Information about the [outlier policy](#)
- Resources to support local monitoring of practice and quality improvement, such as provider-level results on the [NKCA Data Dashboard and downloadable reports](#)
- A [summary of this report](#) for people living with kidney cancer and for the public is available on the NKCA's web pages

Table 1. Performance indicators included*.

Description	England [^]	Wales [#]
PI 1: Percentage of people with kidney cancer with a recorded multidisciplinary team (MDT) meeting date	Yes (01/21 – 12/23)	Yes (01/22 – 12/24)
PI 2: Percentage of people with kidney cancer who are consented for a clinical trial	Yes (01/21 – 12/23)	No (data unavailable)
PI 3: Percentage of people with a small kidney cancer (≤4cm) who have a biopsy**	Yes (01/21 – 12/23)	Yes (01/24 – 12/24)
PI 4: Percentage of people with a T3+ and/or 10cm+ and/or N1 and M0 RCC *** whose radical nephrectomy is within 31 days of decision to treat	Yes (01/21 – 12/23)	No (data unavailable)
PI 5: Percentage of people with T1b-3NXM0^^ RCC *** who have surgery 1 month prior and 12 months following diagnosis	Yes (01/21 – 12/23)	Yes (01/22 – 12/24)
PI 6: Percentage of people with T1aN0M0 RCC*** who undergo nephron sparing treatment 1 month prior and 12 months following diagnosis	Yes (01/21 – 12/23)	No (data unavailable)
PI 7: Percentage of people with M1 RCC receiving initial SACT within 12 months of diagnosis	Yes (01/19 – 12/23)	Yes (01/22 – 12/24)
PI 8: Percentage of people with kidney cancer who die within 30 days of starting SACT treatment	Yes (01/19 – 12/23)	Yes (01/22 – 12/24)
PI 9: Percentage of people with kidney cancer who are treated within 31 days of decision to treat	No (on quarterly data dashboard)	No (data unavailable)
PI 10: Percentage of people with kidney cancer who are treated within 62 days of an urgent referral	No (on quarterly data dashboard)	No (data unavailable)
MDT: Multidisciplinary team; SACT: systemic anti-cancer therapy. * See methodology supplement/data dashboard for the exact definitions of each performance indicator, ^ English data: National Cancer Registration Dataset (NCRD), # Welsh data: Cancer Network Information System Cymru (CaNISC) and Cancer Dataset Form (CDF), ** The audit does not include individuals with benign pathology. Therefore, it only encompasses people for whom the biopsy detects kidney cancer, ^^ People who would have been coded as MX in the old Welsh database (CaNISC) are now coded as M0 in the new system (CDF). The transition to the new system began in 2023, and as of mid-2026 NHS Wales are encouraging people with unknown metastatic status (previously coded as MX or missing) to be coded as missing instead of M0, *** Union for International Cancer Control (UICC) TNM8 Kidney Cancer		

T3+ and/or 10cm+ and/or N1 and M0 RCC	Tumour extends into major veins or perinephric tissues or invades beyond Gerota fascia and/or tumour more than 10cm in size and/or metastases in regional lymph node(s) with no distant metastasis
T1b-3NXM0 RCC	Tumour is more than 4cm in size or tumour extends into major veins or perinephric tissues with no distant metastases
T1aN0M0 RCC	Tumour is less than or equal to 4cm in size with no regional lymph node metastases and no distant metastases
For more details, see Table A1 in the appendix.	

For six performance indicators, we report results of people diagnosed in a three-year period (2021-2023) for England to ensure sufficient numbers to be able to reliably estimate each provider's performance. Two indicators, relating to systemic anti-cancer therapy (SACT), are reported for a five-year period (2019-2023) for England due to the

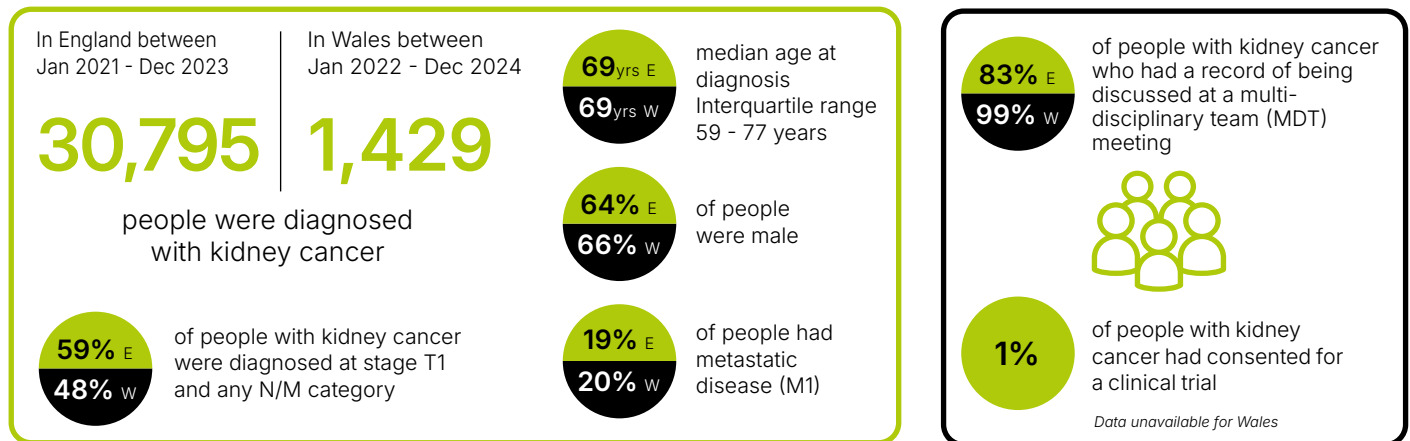
relatively small number of people diagnosed with metastatic disease by each provider. For Wales, data for three years were available (2022-2024) for most indicators. Due to the different periods covered and differences in the construction of some indicators, results for England and Wales are presented separately but combined in the infographic.

2. Infographic

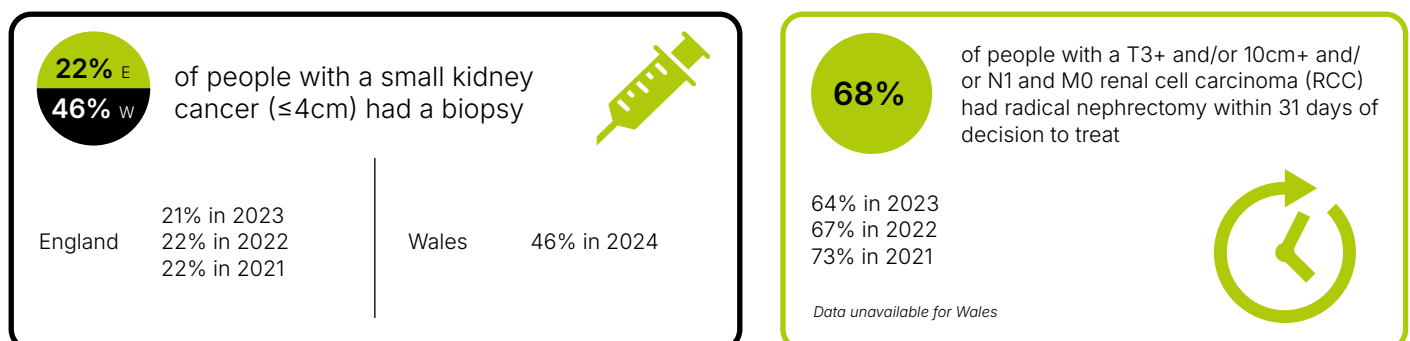
Summary of results for people diagnosed with kidney cancer between 1 January 2019 and 31 December 2023 in England and 1 January 2022 and 31 December 2024 in Wales.

%E The number within the circle represents the national percentage (England top | Wales bottom) for the time period indicated
%W

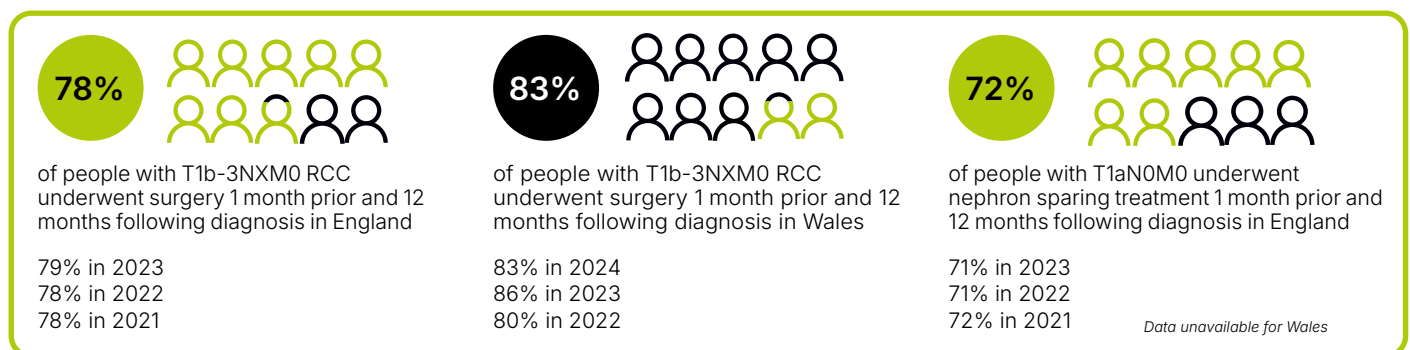
Diagnosis & staging (England Jan 2021 - Dec 2023 and Wales Jan 2022 - Dec 2024)



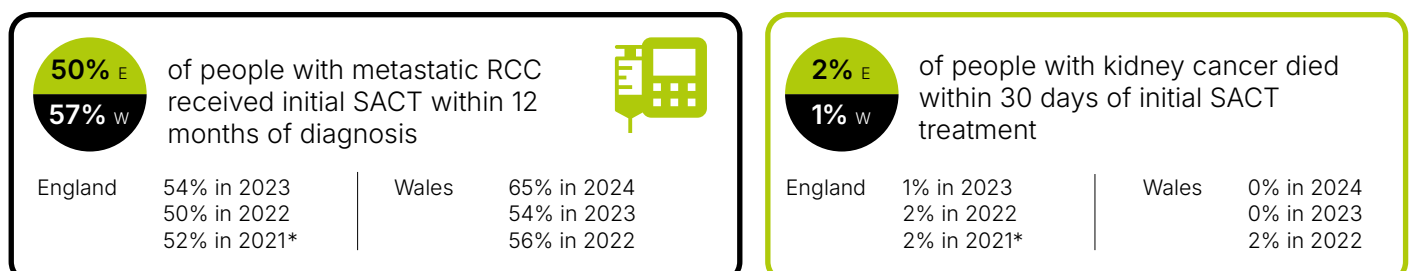
Treatment allocation (England Jan 2021 - Dec 2023 and Wales Jan 2024 - Dec 2024)



Surgery (England Jan 2021 - Dec 2023 and Wales Jan 2022 - Dec 2024)



Systemic Anti-Cancer Therapy (SACT, England Jan 2019 - Dec 2023 and Wales Jan 2022 - Dec 2024)



T3+ and/or 10cm+ and/or N1 and M0 RCC - Tumour extends into major veins or perinephric tissues or invades beyond Gerota fascia and/or tumour more than 10cm in size and/or metastasis in regional lymph node(s)

T1b-3NXM0 RCC - Tumour is more than 4cm in size or tumour extends into major veins or perinephric tissues with no distant metastasis

T1aN0M0 RCC - Tumour is less than or equal to 4cm in size with no regional lymph node metastasis and no distant metastasis

* 2020 and 2019 English national averages available in the [appendix](#)

3. Recommendations

The following recommendations are developed in collaboration with the [NKCA Clinical Reference Group](#) and based on key findings in this report. The recommendations are intended for healthcare providers and commissioners in England and Wales, including trusts, Cancer Alliances, and health boards. The [NKCA local quality improvement action plan](#) contains suggested actions to address the recommendations described below.

Recommendation****	Audience	Audit Findings	Quality Improvement Goal	National Guidance/Standards/Resources
1. Conduct a local review of people with a small kidney cancer who were not recorded as undergoing a renal biopsy to identify potential barriers to timely diagnostics and data recording. Ensure that all eligible people have the option of a renal biopsy to confirm the histological diagnosis and to support shared decision making.	England: Cancer Alliances working with NHS trusts Wales: health boards	England: The percentage of people with a small kidney cancer who have a renal biopsy recorded was 22%, with an NHS trust-level IQR of 10-35%**, PI 3. Wales: The percentage of people with a small kidney cancer who have a renal biopsy was 46%, with a health board-level IQR of 11-59%**, PI 3. English national average consistent from 2019 to 2023. Welsh data only available for 2024. 25% of providers perform better than 35% (England) and 59% (Wales).*****	Goal #2: To increase the use of renal tumour biopsy	NG256 recommendation 1.3.1 offer renal biopsy to confirm diagnosis and inform management for people with suspected localised or locally advanced RCC with a solid renal lesion ≤4 cm where a tissue sample can be obtained. QS215 Statement 2: Adults with a suitable renal lesion 4 cm in diameter or smaller have a renal biopsy to help confirm the diagnosis.
2. Review pathways for higher risk RCC to understand system-level delays and ensure providers prioritise these people over lower-risk cases, treating them within 31 days from decision to treat*** in England and 21 days in Wales*.	England: Cancer Alliances working with NHS trusts Wales: health boards	England: The percentage of people with a T3+ and/or 10cm+ and/or N1 and M0 RCC whose radical nephrectomy is within 31 days of decision to treat (England only) was 68% with an NHS trust-level IQR of 57-81%**, PI 4. Wales: Unable to report this performance indicator due to incomplete recording of the decision-to-treat date. Significant decreasing trend in English national average: 81% (2019), 78% (2020), 73% (2021), 67% (2022), 64% (2023). 25% of providers perform better than 81% (England).*****	Goal #3: To expedite treatment of people with potentially high risk for recurrence localised and locally advanced RCCs (i.e. cT3+, 10cm+, cN1 tumours)	QS215 Statement 4: Adults with high-risk localised or locally advanced RCC, for whom surgery is suitable, have surgery with curative intent within 31 days of the decision to treat.

Recommendation****	Audience	Audit Findings	Quality Improvement Goal	National Guidance/Standards/Resources
3. Identify and address reasons why people diagnosed with kidney cancer, stage T1b-3NXM0 RCC are not considered for surgical treatment and increase the percentage of eligible people assessed and treated.	England: Cancer Alliances working with NHS trusts Wales: health boards	England: The percentage of people with T1b-3NXM0 RCC who have surgery was 78%. This is with an NHS trust-level IQR of 72-83%**; PI 5. Wales: The percentage of people with T1b-3NXM0 RCC who have surgery was 82% with a health board-level IQR of 71-82%**; PI 5. English national average consistent from 2019 to 2023. Welsh national average consistent from 2022 to 2024. 25% of providers perform better than 83% (England) and 82% (Wales).*****	Goal #4: To increase use of surgery, if medically appropriate, for initially localised RCC at risk of progression	NG256 recommendation 1.5.3 offers surgery for localised solid renal masses or Bosniak 4 cysts ≥2 cm after imaging and uro-oncology MDT discussion.
4. Ensure that people with kidney cancer, stage T1aN0M0 RCC are discussed in specialist multidisciplinary team meetings to support consistent and appropriate consideration for nephron sparing treatment*.	England: Cancer Alliances working with NHS trusts Wales: health boards	England: The percentage of people with T1aN0M0 RCC who undergo nephron sparing treatment was 72% with an NHS trust-level IQR of 59-81%**; PI 6. Wales: Unable to report this performance indicator due to poor differentiation between T1a and T1b stage categories in 2022-2023 data and insufficient follow-up in 2024 data. English national average consistent from 2019 to 2023. 25% of providers perform better than 81% (England).*****	Goal #4: To reduce the use of unnecessary extensive surgery for low-risk RCC	NG256 Table 1 sets out that total nephrectomy should be preferred over partial nephrectomy for localised RCC when either (i) the renal lesion cannot be entirely removed with partial nephrectomy based on lesion location, size and complexity, and the person's clinical characteristics, or (ii) reducing the risk of complications is more important than preserving kidney function.

Recommendation****	Audience	Audit Findings	Quality Improvement Goal	National Guidance/Standards/Resources
5. Ensure people diagnosed with metastatic RCC are evaluated by a medical/clinical oncologist with expertise in renal cancer management to increase the percentage of people considered for receipt of systemic anti-cancer therapy (SACT), if appropriate.	England: Cancer Alliances working with NHS trusts Wales: health boards	England: The percentage of people with metastatic RCC receiving initial SACT within 12 months of diagnosis was 50%. This is with an NHS trust-level IQR of 43-58%**, PI 7. Wales: The percentage of people with metastatic RCC receiving initial SACT within 12 months of diagnosis was 59%. This is with a health board-level IQR of 56-68%**, PI 7. Significant increasing trend in English national average: 48% (2019), 48% (2020), 52% (2021), 50% (2022), 54% (2023). Welsh national average consistent from 2022 to 2024. 25% of providers perform better than 58% (England) and 68% (Wales).*****	Goal #5: To increase use of evidence based SACT treatment in eligible people with kidney cancer without severe toxicity	NG256 recommendation 1.12.1 requires referral of people with advanced RCC to a uro-oncology MDT with relevant expertise (radiologist, pathologist, oncologist, and urologist with specialty in kidney cancer surgery). QS215 Statement 6: Adults with advanced RCC have their treatment options discussed by a uro-oncology multidisciplinary team.
* Measured in England only due to the availability of relevant data for Wales. ** Interquartile range, representing the range between the 25th and 75th percentiles. *** The audit's measure of treatment within 31 days of decision to treat is specific to kidney cancer and risk stratified. **** All recommendations reinforce priorities identified in previous NKCA State of the Nation reports reflecting their importance. The clinical recommendations are consistent with previous year's recommendations as not enough time has passed to be able to assess whether improvement has taken place following publication of previous NKCA State of the Nation reports. ***** Providers with a low percentage should review their data and investigate the reasons as part of their quality improvement activity.				

4. Results for England

4.1 Data completeness and patient characteristics

We analysed the National Cancer Registration Dataset (NCRD) for 30,795 people diagnosed with kidney cancer in England from 1 January 2021 to 31 December 2023 ([Table A2](#)) with 26,871 (91%) people being from the white ethnic group (4% unknown). A further 1,925 people had ethnicity recorded as "Asian or Asian British" or "Black, Black British, Caribbean or African".

The levels of completeness for the 30,795 people analysed were: 78% for T, 72% for N and 76% for M category of stage ([Table A2](#)). [Performance status](#)

(47%) and tumour size (62%) data items could also be improved and are included in [NKCA Data Dashboard](#), updated quarterly (using RCRD for a more recent cohort of people with kidney cancer).

The median age at diagnosis was 69 years (interquartile range (IQR): 59-77). There were more men (64%) than women (36%) diagnosed with kidney cancer. In people with a T, N, or M category of stage recorded, the percentage of people with a T1, T2, T3 and T4 stage category was 59%, 10%, 28% and 3% respectively, 9% of people had nodal disease (N1) and 19% had metastatic disease (M1).

4.2 Performance indicators

Table 2. Performance indicators for people with kidney cancer diagnosed and treated in England. Yearly breakdowns available in [Table A3](#).

	National average %	Trust-level median % (IQR %) [Trust n]	No. of people with kidney cancer included in analysis (total)	No. of people with the outcome	Time period
PI 1: Percentage of people with kidney cancer with a recorded MDT meeting date (data completeness measure)	83%	85% (74-91%) [n=123]	30,781	25,670	2021-2023
PI 2: Percentage of people with kidney cancer consented for a clinical trial	1%	1% (0-2%) [n=121]	24,569	345	
PI 3: Percentage of people with a small kidney cancer who have a biopsy*	22%	17% (10-35%) [n=113]	9,143	1,976	
PI 4: Percentage of people with a T3+ and/or 10cm+ and/or N1 and M0 RCC** whose radical nephrectomy is within 31 days of decision to treat	68%	69% (57-81%) [n=102]	4,275	2,913	
PI 5: Percentage of people with T1b-3NXM0 RCC** who have surgery 1 month prior and 12 months following diagnosis***	78%	79% (72-83%) [n=115]	9,477	7,426	
PI 6: Percentage of people with T1aN0M0 RCC** who undergo nephron sparing treatment 1 month prior and 12 months following diagnosis***	72%	71% (59-81%) [n=102]	5,095	3,654	2019-2023
PI 7: Percentage of people with metastatic RCC receiving initial SACT within 12 months of diagnosis***	50%	50% (43-58%) [n=119]	7,550	3,800	
PI 8: Percentage of people with kidney cancer who die within 30 days of starting SACT treatment****	2%	1% (0-3%) [n=90]	10,459	208	

IQR: interquartile range; MDT: multidisciplinary team; RCC: renal cell carcinoma; SACT: systemic anti-cancer therapy. All performance indicators in this table (except PI 1 & PI 2) are case-mix adjusted for age, person stated gender, ethnicity, comorbidity, deprivation and year of diagnosis. We have used median and IQR to reflect the skewed, non-normal distributions. Trusts with fewer than 10 people in their denominator were excluded. Data were impacted by the COVID-19 pandemic and so will be atypical to some degree during 2020-2021. *The audit does not include individuals with benign pathology. Therefore, it only encompasses people where the biopsy detects kidney cancer, **[Union for International Cancer Control \(UICC\) TNM8 Kidney Cancer](#), ***12 months following diagnosis was measured to capture all people with kidney cancer who underwent treatment. Timeframe to treatment was not assessed in these performance indicators, ****Indicator subject to the [outlier policy](#) this year.

Treatment planning

Key message

83% (25,670) of people diagnosed with kidney cancer in 2021–2023 in England were recorded to have an MDT meeting date, with an NHS trust IQR of 74–91% (Table 2). During this period, only 1% (345) were recorded to have consented to a clinical trial with an NHS trust IQR of 0–2% (Table 2).

NHS trusts should ensure that all people with RCC are discussed at a uro-oncology MDT in line with [NICE NG256](#) and [QS215](#), with full and accurate recording of MDT discussion and staging information. In line with [NG256 recommendation 1.1.8](#), trusts should also ensure that research and clinical trial opportunities are systematically discussed with people with RCC, and that consent and participation are reliably captured in routine data. NICE identifies research involvement as important for giving people with RCC access to new treatments before they are widely available, strengthening the evidence base for future care, and enabling people to share their views and experiences of treatments.

Use of renal biopsy

Key message

22% (1,976) of people with a small kidney cancer (4 cm in diameter or smaller) in 2021–2023 in England had a biopsy recorded to help confirm the diagnosis and guide management decisions, with an NHS trust IQR of 10–35% (Table 2).

People with a suitable renal lesion ≤ 4 cm should be offered a renal biopsy, in line with [NG256 recommendation 1.3.1](#) and [QS215 Statement 2](#). NICE identifies wider use of renal biopsy as an important change to practice introduced by NG256, intended to avoid overtreatment of benign and low-risk malignant lesions and reduce exposure to the morbidity of radical surgery.

Curative treatment for renal cell carcinoma

Key messages

68% (2,913) of people with high-risk localised or locally advanced RCC (T3+ and/or 10cm+ and/or N1, M0) in 2021–2023 in England had a radical nephrectomy within 31 days of the decision to treat, with an NHS trust IQR of 57–81% (Table 2). The benchmark defined for cancer waiting times from decision to treat to treatment is 31 days, with NHS England's standard set at 96%.

For those with T1b–3NXM0 RCC, 78% (7,426) in 2021–2023 had surgery within one month prior and 12 months following diagnosis, with an NHS trust IQR of 72–83% (Table 2). These two indicators provide information on ensuring timely management for people with RCC amenable to surgical treatment.

The percentage of people diagnosed with kidney cancer with high-risk, localised and locally advanced RCC treated within 31 days has sharply declined from 81% in 2019 to 64% in 2023 ([Table A3](#)). This sustained reduction is a significant concern to prevent progression to metastatic disease through timely management of high-risk disease. [QS215 Statement 4](#) requires adults with high-risk localised or locally advanced RCC, for whom surgery is suitable, to have surgery with curative intent within 31 days of the decision to treat. Together, PI 4 and PI 5 describe whether people with surgically treatable RCC are being offered surgery (PI 5), and whether those who do receive surgery are treated promptly (PI 4).

[Cancer waiting time reporting](#) does not separate kidney cancer from the wider non-prostate urological group and is not risk-stratified. Doctoral work from the audit team is examining the audit's dataset to investigate the timeliness of surgery for people with high-risk RCC in England, and to determine the patient and healthcare-related factors associated with delay.

Nephron sparing treatment for T1a renal cell carcinoma

Key messages

72% (3,654) of people with T1aN0M0 RCC who underwent active treatment within one month prior and 12 months following diagnosis in 2021–2023 in England had nephron sparing treatment (partial nephrectomy and thermal ablation). The IQR across NHS trusts was 59–81% (Table 2).

28% of people with T1aN0M0 underwent radical nephrectomy. Both the numerator and denominator exclude people with kidney cancer who are managed with active surveillance.

Nephron-sparing treatment should be considered for people with T1aN0M0 RCC in line with [NG256 \(recommendation 1.5.4 and Table 1\)](#). NICE identifies partial nephrectomy as a nephron-sparing procedure that better preserves renal function than total nephrectomy, with total nephrectomy preferred only when the lesion cannot be entirely removed by partial nephrectomy or when reducing surgical complications outweighs the benefit of preserving kidney function.

Systemic anti-cancer therapy for metastatic renal cell carcinoma

Key messages

50% (3,800) of people with metastatic RCC in 2019–2023 in England received initial SACT within 12 months of diagnosis. The IQR across NHS trusts was 43–58% (Table 2).

2% (208) of people died within 30 days of SACT, with an NHS trust IQR of 0–3% (Table 2).

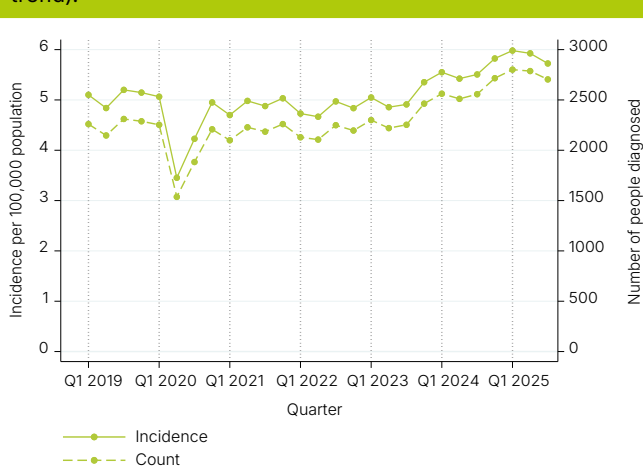
There has been an improvement in the percentage of people with metastatic RCC in England receiving initial SACT within 12 months of diagnosis, rising from 48% in 2019 to 54% in 2023 ([Table A3](#)). All people diagnosed with metastatic RCC should be referred to a uro-oncology multidisciplinary team with relevant expertise, in line with [QS215 Statement 6](#) and [NG256 recommendation 1.12.1](#), so that all eligible people are considered for SACT. NICE identifies specialist MDT review as central to ensuring people with advanced RCC have access to the full range of available systemic therapies, including those delivered through clinical trials.

In addition, in England, 2% of people died within 30 days of receiving SACT, when measured from the start date of the first cycle, with a decreasing trend over the audit period. There were no NHS trusts/health boards above three SDs from the national average ([alarm outliers](#)).

4.3 National picture of treatment in 2019–2025

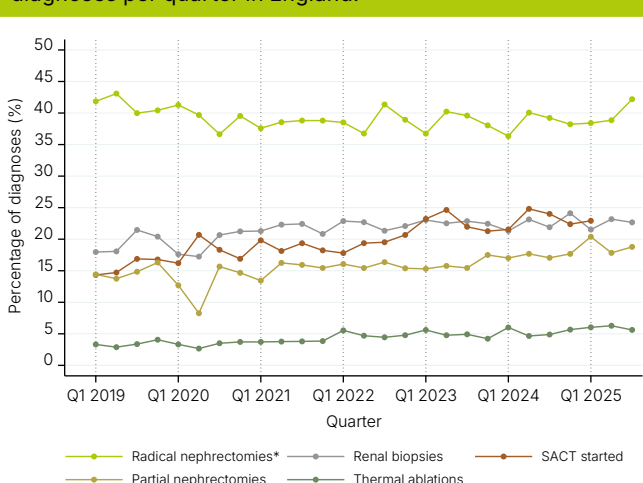
Using the RCRD, we present the national trends in the diagnosis and treatment of kidney cancer from 1 January 2019 to 30 September 2025 ([Figure A1](#)). After Q4 2023, we observe increased numbers of diagnoses (Figure 1), renal biopsies, partial nephrectomies and thermal ablations, along with a significant increase in SACT utilisation in the first quarter of 2023, following the approval by NICE of adjuvant pembrolizumab therapy (Figure 2). Kidney cancer diagnosis and treatment were affected by the COVID-19 pandemic, with a noticeable decline in the number of diagnoses and treatments, with recovery to pre-pandemic levels being achieved in 2021. For all graphs throughout this report, Q1 is Jan-Mar, Q2 is Apr-Jun, Q3 is Jul-Sept and Q4 is Oct-Dec.

Figure 1. Diagnoses per quarter in England (increasing trend).



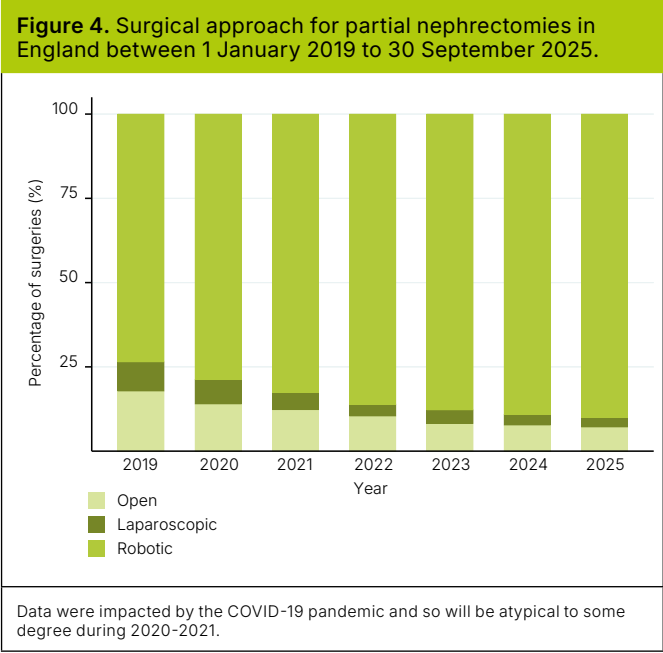
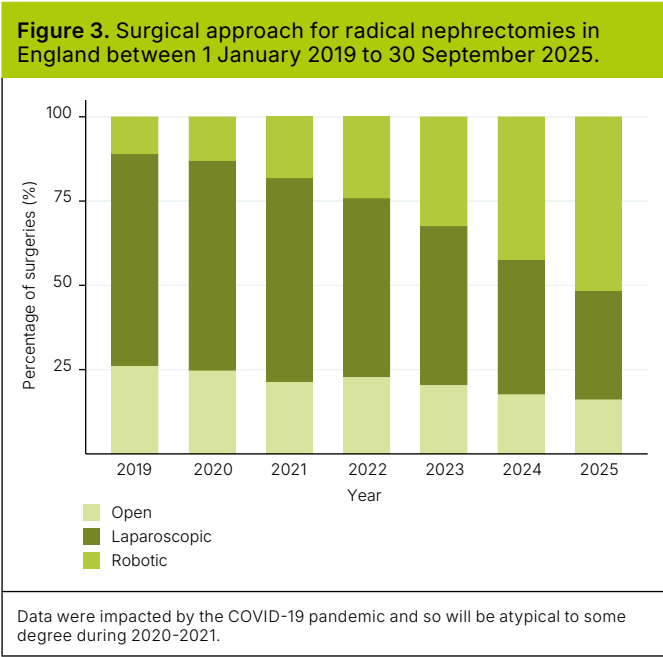
Data were impacted by the COVID-19 pandemic and so will be atypical to some degree during 2020–2021.

Figure 2. Therapies and surgeries as a percentage of diagnoses per quarter in England.



Data were impacted by the COVID-19 pandemic and so will be atypical to some degree during 2020–2021. * Radical nephrectomies have a decreasing trend, while all others have an increasing trend.

From 1 January 2019 to 30 September 2025, the share of robot-assisted radical nephrectomy rose from 11% (406/3,701) in 2019 to 51% (1,834/3,563) in 2025, consistent with [NG256 recommendation 1.7.2](#), which lists laparoscopic and robot-assisted approaches as minimally invasive options for total nephrectomy (Figure 3, Figure A2). The share of partial nephrectomies performed robotically rose from 74% (953/1,296) in 2019 to 90% (1,534/1,706) in 2025, consistent with [NG256 recommendation 1.5.4](#) favouring robot-assisted partial nephrectomy (Figure 4, Figure A2).



5. Results for Wales*

5.1 Data completeness and patient characteristics

Results for Wales were derived using Cancer Network Information System Cymru (CaNISC) and Cancer Dataset Form (CDF) datasets. The analysis included 1,429 people diagnosed with kidney cancer in 2022–2024 ([Table A4](#), [Figure A3](#)), 761 (97%) of which were from the white ethnic group. NHS Wales is undergoing implementation of a new cancer informatics system. This implementation has affected the data quality and completeness for Wales in this audit. Data have not been clinically validated before submission to the audit.

The levels of completeness for the 1,429 people analysed were: 84% for T, 77% for N and 76% for M category of stage ([Table A4](#)).

In addition, completeness of performance status (84% complete) and ethnicity (55% complete) data items could also be improved.

The median age at diagnosis was 69 years (IQR 59–77). There were more men than women diagnosed with kidney cancer, with 66% being male and 34% female. In people with a T, N, or M category of stage recorded, the percentage of people with a T1, T2, T3 and T4 stage category was 48%, 13%, 32% and 6% respectively. 15% of people had nodal disease (N1), and 20% had metastatic disease (M1).

5.2 Performance indicators

Table 3. Performance indicators for people with kidney cancer diagnosed and treated in Wales in 01/2022–12/2024. Yearly breakdowns available in [Table A5](#).

	National average %	Health Board-level median % (IQR %) [health board n]	No. of people with kidney cancer included in analysis (total)	No. of people with the outcome
PI 1: Percentage of people with kidney cancer with a recorded MDT meeting date (data completeness measure)	99%	99% (99–99%) [n=6]	1,427	1,409
PI 3: Percentage of people with a small kidney cancer who have a biopsy**	46%	24% (11–59%) [n=5]	99	46
PI 5: Percentage of people with T1b–3NXM0^^ RCC** who have surgery 1 month prior and 12 months following diagnosis***	83%	82% (71–82%) [n=6]	415	345
PI 7: Percentage of people with metastatic RCC receiving initial SACT within 12 months of diagnosis***	57%	59% (56–68%) [n=6]	207	119
PI 8: Percentage of people with kidney cancer who die within 30 days of starting SACT treatment****	1%	0% (0–2%) [n=6]	307	2

IQR: interquartile range; MDT: multidisciplinary team; RCC: renal cell carcinoma; SACT: systemic anti-cancer therapy. All performance indicators in this table (except PI 1) are case-mix adjusted for age, person stated gender, ethnicity, comorbidity, deprivation and year of diagnosis. We have used median and IQR to reflect the skewed, non-normal distributions. Health boards with fewer than 10 people in their denominator were excluded. *The audit does not include individuals with benign pathology. Therefore, it only encompasses people where the biopsy detects kidney cancer. ^Due to poor T1a and T1b differentiation for people diagnosed in 2022 and 2023, we only included people diagnosed in 2024 for this performance indicator, ^^ People who would have been coded as MX in the old Welsh database (CaNISC) are now coded as M0 in the new system (CDF). The transition to the new system began in 2023, and as of mid-2026 NHS Wales are encouraging people with unknown metastatic status (previously coded as MX or missing) to be coded as missing instead of M0, **[Union for International Cancer Control \(UICC\) TNM8 Kidney Cancer](#), ***12 months following diagnosis was measured to capture all people with kidney cancer who underwent treatment. Timeframe to treatment was not assessed in these performance indicators, ****Indicator subject to the [outlier policy](#) this year.

* We have not been able to include a national picture section for Wales due to a discrepancy in the recorded operative approach data. The number and proportion of procedures recorded as laparoscopic or robotic appear lower than expected.

Treatment planning

Key message

99% of people diagnosed with kidney cancer in 2022–2024 in Wales were recorded to have been discussed at an MDT meeting, with a health board IQR of 99–99% (Table 3).

Use of renal biopsy

Key message

46% (46) of people with small kidney cancer (4 cm in diameter or smaller) in 2024 in Wales had a biopsy to help confirm the diagnosis and guide management decisions. The median was 24% and the IQR was 11–59% (Table 3).

Curative treatment for renal cell carcinoma

Key message

83% (345) of people with T1b–3NXM0 RCC in 2022–2024 in Wales had surgery within one month prior and 12 months following diagnosis. The median was 82% and the IQR was 71–82% (Table 3).

Systemic anti-cancer therapy for metastatic renal cell carcinoma

Key messages

57% (119) of people with metastatic RCC in 2022–2024 in Wales received initial SACT, with a median of 59% and an IQR of 56–68% (Table 3).

1% of people with kidney cancer died within 30 days of SACT treatment. The median being 0% with an IQR of 0–2% (Table 3).

6. Commentary

This third State of the Nation report from the NKCA covers care delivered in NHS hospitals across England and Wales to people diagnosed with kidney cancer between 2019 and 2025. The report's findings are intended to guide improvements in service delivery and patient outcomes and can serve as a resource for patient charities, support groups, and the wider kidney cancer community. For the first time since the audit's establishment, the recommendations in this report are anchored to [NICE clinical guideline NG256](#) and [quality standard QS215](#).

The report has focused on the overall national figures. The indicator values for the NHS organisations, both quarterly and State of the Nation results, can be found on the [NKCA Data Dashboard](#). It is essential that clinicians, NHS trusts and Cancer Alliances in England and NHS hospitals and health boards in Wales use the dashboard and additional online materials to review their performance and, where necessary, initiate local quality improvement activities. The [NKCA Data Dashboard](#) also provides quarterly results to support ongoing monitoring and local quality improvement. These resources support delivery of the NKCA [Quality Improvement Plan](#), which provides a framework for coordinated local and national action to address variation and improve outcomes across kidney cancer care.

The data dashboards should also be used to monitor data quality. Particular attention should be given to the completeness of TNM staging and to CNS recording in the RCRD. The latter is a key focus of the NKCA's [quality improvement intervention](#), Improving Access to Clinical Nurse Specialist Care, which launched on 19 March 2026 alongside the publication of [NG256](#) and [QS215](#), and aims to ensure that all people diagnosed with kidney cancer are offered access to specialist nursing support.

Overall, there has been limited change in the headline State of the Nation results, which reflects the nature of the findings, which include data for one, three or five years, with only one year of new data being added on an annual basis. To enhance clarity and context, we have included year-on-year results to illustrate trends and provide a deeper understanding of performance.

The key findings include a sustained decline in the percentage of people with high-risk RCC receiving treatment within 31 days of a decision to treat, with no NHS trust reaching the NHS England operational standard of 96% and substantial variation between NHS trusts. Additional resources are urgently required for trusts to identify people with high-risk RCC and ensure they receive treatment without delay through risk-stratified prioritisation frameworks, increasing ring-fenced surgical and critical care capacity, and distribution-based reporting of waiting times.

Furthermore, audit data show wide variation in the percentage of people with metastatic RCC receiving initial SACT within 12 months of diagnosis, with an interquartile range of 43–58% across 119 NHS trusts in England and 56–68% across the six Welsh health boards. Targeted interventions are needed to address this unwarranted variation and reduce inequalities in access, including review by a medical or clinical oncologist with expertise in renal cancer care, specialist oncogeriatric assessment and equitable referral pathways across providers.

Looking ahead, the NKCA aims to continue enhancing kidney cancer care in England and Wales (supporting the aims of the [National Cancer Plan for England](#)) with a focus on quarterly reporting through our data dashboard, and by working closely with professional bodies to drive the [quality improvement intervention](#).