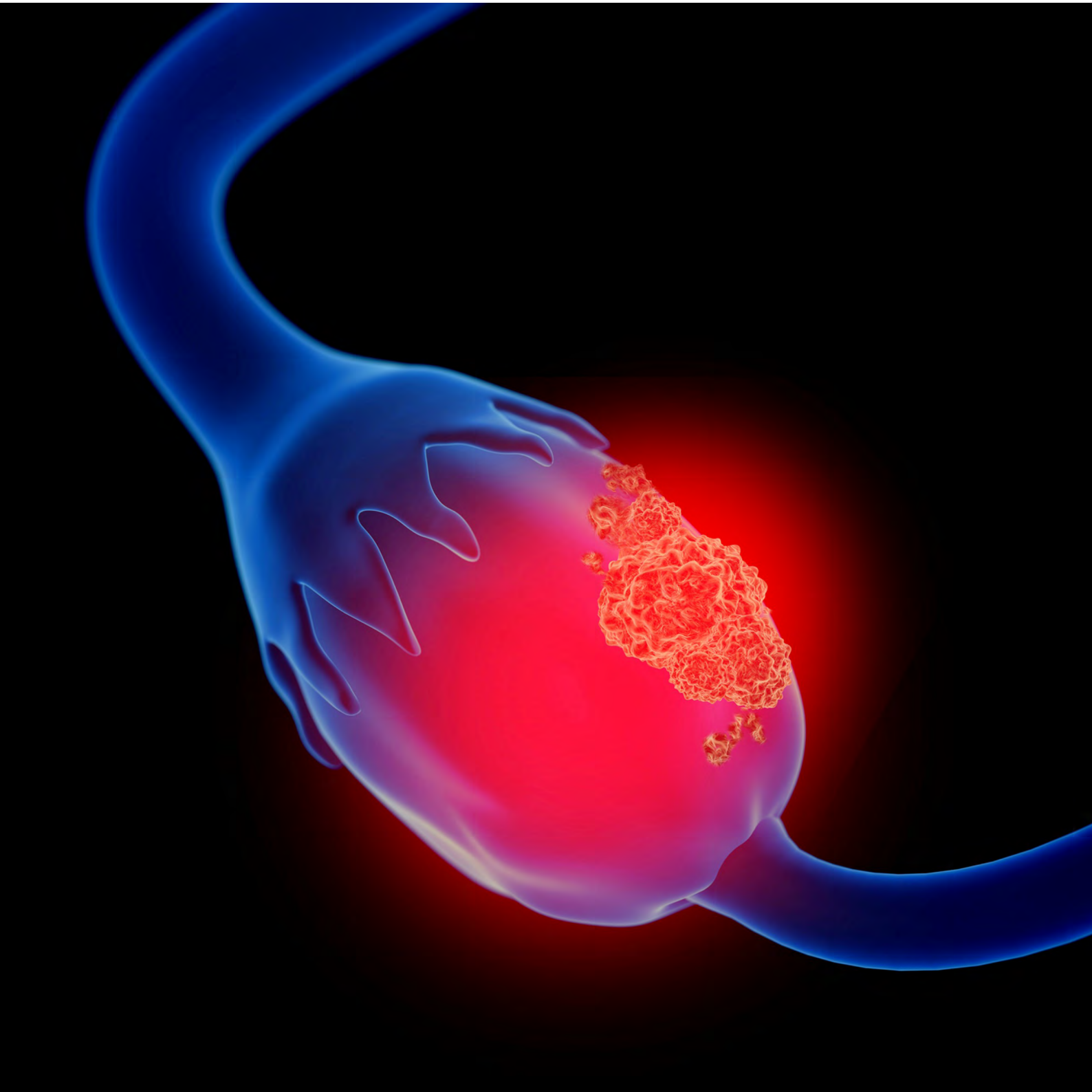
NOCA
National Ovarian Cancer Audit

NATCAN
National Cancer Audit Collaborating Centre

National Ovarian Cancer Audit
State of the Nation Report 2025

An audit of care received by women diagnosed with ovarian cancer between 1 January 2022 and 31 December 2022 in England and 1 January 2022 and 31 December 2023 in Wales.

Published September 2025



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Royal College of Surgeons of England
ADVANCING SURGICAL CARE

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HQIP
Healthcare Quality Improvement Partnership

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.

BRITISH GYNAECOLOGICAL CANCER SOCIETY

The British Gynaecological Cancer Society (BGCS) is the professional home of health providers working and researching the area of gynaecological cancers. The BGCS members consist of medical practitioners, clinical nurse specialists and other allied professionals, including scientists who have an interest in gynaecological cancers. Registered Charity no: 290959.

NDRS
NATIONAL DISEASE REGISTRATION SERVICE

This work uses data that has been provided by patients and collected by the NHS as part of their care and support. For patients diagnosed in England, the data is 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.

GIG CYMRU NHS WALES
Rhwydwaith Canser Cymru
Wales Cancer Network

NHS Wales is implementing a new cancer informatics system. As a result, the quality and completeness of data from Wales is likely to have been impacted due to implementation of this new system across multiple NHS organisations (Health Boards), which has resulted in data being supplied by both old and new systems. Additionally, and reflecting the uncertainty of data quality, the data submitted to the audit may not have undergone routine clinical validation prior to submission to the Wales Cancer Network (WCN), Public Health Wales.

Contents

1. Introduction

The National Ovarian Cancer Audit (NOCA) aims to evaluate the patterns of care and outcomes for women with ovarian cancer in England and Wales, and to support services to improve the quality of care for these women[1]. This State of the Nation (SotN) report publishes information on the care received by women diagnosed with ovarian cancer in England in 2022 and in Wales in 2022-2023.

In this report, we present a national picture in England and Wales. Please go to NOCA's Data Dashboard for results of each of the 40 gynaecological cancer systems in England and the three systems in Wales. There are also results for cancer alliances, individual NHS trusts and health boards available on the dashboard.

New developments

This is the audit's second annual assessment of ovarian cancer services provided by the NHS. The new elements in this report include:

- Two new indicators in this year's SotN report:
    - Receipt of any treatment (surgery and/or chemotherapy) for women with emergency admission prior to diagnosis
    - Two-year survival
- Implementation of a formal outlier process, linked to the one-year survival performance indicator, requesting hospitals with a performance indicator outside the expected range to review the relevant data on practice outcomes and to feedback to NOCA the findings of this review.
- Introduction of NOCA's Quality Improvement Intervention/Initiative, which will be launched in October 2025.

NOCA has also worked with England's National Disease Registration Service (NDRS) and the Wales Cancer Network (WCN), updating the cohort of patients and aiming to use as recent data as possible depending on the requirement of each performance indicator (see Table 1). Although this report is being published in September 2025, it includes data on women diagnosed with ovarian cancer in England in 2022, the latest year of available NCRD registration data, and in Wales in 2023, the latest year for which data is available. More details regarding the timeliness of the data can be found here.

Relevant clinical guidance

As explained in last year's SotN report, NOCA aims to evaluate the care for women with ovarian cancer informed by various national guidelines. NOCA evaluates ovarian cancer care against standards derived from national guidelines for ovarian cancer (NG12 & CG122) that were published by the National Institute for Health and Clinical Excellence (NICE). These guidelines include recommendations for the early recognition of symptoms of ovarian cancer, the referral pathway, and the treatment of early (stage 1) and advanced (stage 2 to 4) cancer. International[2] and national[3] professional societies have also published recommendations on the management of ovarian cancer.

More recently, NICE published interventional procedures guidance (IPG757) on maximal cytoreductive surgery, which supports the use of this surgery in accredited specialised centres for women with advanced ovarian cancer. Guidelines on managing familial and genetic risk were published in 2024 by NICE and the British Gynaecological Cancer Society (BGCS). Finally, NICE has published several technology appraisals on chemotherapy treatment of early and relapsed ovarian cancer. Also a number of appraisals are still in progress.

Quality improvement goals

In consultation with key stakeholders, including women with lived experience of ovarian cancer and NOCA's Clinical Reference Group, we recognise five quality improvement goals. Further information regarding these quality improvement goals can be found in NOCA's Quality Improvement Plan. The six performance indicators reported in this year's SotN report align as much as possible with these quality improvement goals.

1 Ovarian cancer can affect all people with ovaries, including those who have had their ovaries removed, as it can also affect the fallopian tubes or the peritoneum. In this report, all the patients are referred to as 'women', but we acknowledge that some patients with ovarian cancer may not identify as women. The data we receive from NDRS include all patients with ovarian cancer who, according to the data, self-identify as female, but we do not receive the data for patients with ovarian cancer who identify as male.

2 Ledermann J A, Matias-Guiu X, Amant F, Concin N, Davidson B, Fotopoulou C, et al. ESGO–ESMO–ESP consensus conference recommendations on ovarian cancer: pathology and molecular biology and early, advanced and recurrent disease. Ann Oncol. 2024 Mar;35(3):248-266..

3 Moss E, Taylor A, Andreou A, Ang C, Arora R, Attygalle A, et al. British Gynaecological Cancer Society (BGCS) ovarian, tubal and primary peritoneal cancer guidelines: Recommendations for practice update 2024. European Journal of Obstetrics & Gynecology and Reproductive Biology. 10.1016/j.ejogrb.2024.06.025.

Accompanying materials available on NOCA's website:

Additional materials that accompany this report include:

A methodology supplement with details about the Audit's data sources and methods

- An online glossary that explains technical terms used in this report
- Information about the outlier process
- Resources to support local monitoring of practice and quality improvement, such as provider-level results on the Data Dashboard and downloadable reports and a local action plan template.
- A summary of this report for women with ovarian cancer and for the public is available on the Audit's website.

Data sources

The Audit derives its indicators using information that is routinely collected by the NHS as part of the care and support given to women diagnosed with ovarian cancer, rather than data collected specifically for the Audit[4]. For people diagnosed or treated in England, the data are collated, maintained and quality assured by NHS England's National Disease Registration Service (NDRS). For people diagnosed or treated in Wales, data are provided by Wales Cancer Network (WCN)[5], using the Cancer Network Information System Cymru (CaNISC) or Cancer Dataset Form (CDF). For full details of the data and methods used within this report, please see the NOCA Methodology Supplement.

Interpretation of the audit results

When interpreting differences between England and Wales and between gynaecological cancer hub and spoke systems, it is important to note that only the one- and two-year survival indicators are adjusted for potential differences in case-mix (e.g. age, stage, grade, morphology, ethnicity, socioeconomic deprivation status, comorbidity, and frailty). We are not yet able to adjust for important cancer characteristics, such as BRCA[6] or homologous recombination deficiency (HRD) status.

One limitation in developing case-mix adjustment is the completeness of key patient and tumour characteristics recorded in national cancer registration systems. These characteristics include cancer stage and grade, morphology based on histology or cytology as well as the patient's performance status.

National Cancer Audit Collaborating Centre (NATCAN)

NOCA is part of NATCAN, the national centre that aims to strengthen NHS cancer services by looking at treatments provided for cancer patients and their outcomes across England and Wales. The centre is commissioned by the Healthcare Quality Improvement Partnership (HQIP) on behalf of NHS England and the Welsh Government. More information about the ten national cancer audits for England and Wales delivered by NATCAN can be found at NATCAN's website.

4 The audits in NATCAN do not 'collect' clinical data. The cancer audits utilise the nationally mandated flows of data from hospitals to the National Disease Registration Service (NDRS) in NHSE and the Wales Cancer Network in Public Health Wales, thereby minimising the burden of data collection on provider teams.

5 NHS Wales is part way through a cancer informatics implementation programme which is designed to improve the data capture and reporting capabilities of NHS Wales. This ongoing implementation is impacting the data quality within NHS Wales in the short term with multiple systems being used and different implementation dates across cancer sites and organisations resulting in a complex data landscape. 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.

6 The presence of specific variants in BRCA genes increases a woman's chance of developing ovarian cancer.

Table 1. *Performance Indicators Included		
	England^	**Wales#**
PI1: Emergency admission prior to diagnosis	Yes (01/22 – 12/22)	Yes (01/23 – 12/23)
PI2: Receipt of any treatment (surgery and/or chemotherapy) for women with emergency admission prior to diagnosis	Yes (01/22 – 12/22)	Yes (01/23 – 12/23)
PI3: Receipt of any treatment (surgery and/or chemotherapy)	Yes (01/22 – 12/22)	Yes (01/23 – 12/23)
PI4: Receipt of platinum-based chemotherapy	Yes (01/22 – 12/22)	No (data not available)
PI5: One-year survival from the date of diagnosis	Yes (01/22 – 12/22)	Yes (01/23 – 12/23)
PI6: Two-year survival from the date of diagnosis	Yes (01/22 – 09/22)	Yes (01/22 – 12/22)
Performance indicators not currently reported		
PI7: Germline panel testing	No (data not available)	No (data not available)
PI8: HRD testing	No (data not available)	No (data not available)
PI9: Receipt of cytoreductive surgery	No (in development)	No (data not available)

*See methodology supplement for the exact definitions of each performance indicator
^England data: National Cancer Registration Dataset (NCRD)
#Welsh data: Cancer Network Information System Cymru (CaNISC)

2. Infographic

Summary of results for women diagnosed with ovarian cancer in England (2022) and Wales (2022-2023)

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Diagnosis

5,713
diagnoses of ovarian cancer in England in 2022

317
diagnoses of ovarian cancer in Wales in 2023

(excluding borderline ovarian tumours)

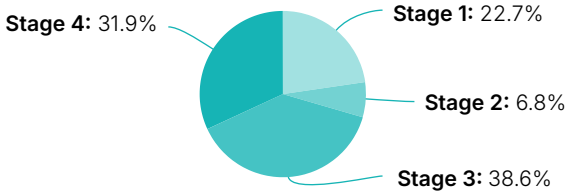
Mean age at diagnosis

England in 2022: **66.3** years

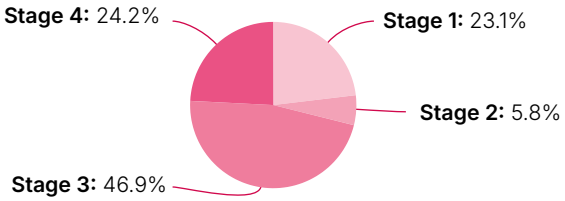
Wales in 2023: **66.3** years

Stage at diagnosis

Stage in England in 2022



Stage in Wales in 2023



(based on those with complete staging information - 77.0% in England and 92.7% in Wales)

Emergency admissions

Approximately four out of ten women diagnosed in England 2022 and in Wales in 2023 had an emergency admission within 28 days prior to diagnosis.

Receipt of any treatment (surgery and/or chemotherapy) for women with emergency admission prior to diagnosis

61.3% (E)
71.0% (W)

of women who had an emergency admission 28 days prior to ovarian cancer diagnosis in England (E) in 2022 and in Wales (W) in 2023 had any treatment recorded.

Receipt of any treatment (surgery and/or chemotherapy)

74.2% (E)
80.3% (W)

of women diagnosed with stage 2 to 4 or unstaged ovarian cancer in England (E) in 2022 and in Wales (W) in 2023 had any treatment recorded (surgery and/or chemotherapy).

Platinum-based chemotherapy

Approximately one out of three women diagnosed in England in 2022 with stage 2 to 4 or unstaged epithelial ovarian cancer did not have any platinum-based chemotherapy recorded.

Survival

One-year survival

of women diagnosed with ovarian cancer in England in 2022 and in Wales in 2023 survived at least one year after the diagnosis.

Two-year survival

of women diagnosed with ovarian cancer in England between 1st January and 30th September 2022 and in Wales between 1st January and 31st December 2022 survived at least two years after the diagnosis.

(based on crude estimates and it does not account for differences in case-mix)

3. Recommendations

Recommendations developed in collaboration with NOCA Clinical Reference Group and based on key findings in this report.

Recommendation	Audience	Audit findings	Quality Improvement Goal	National guidance/standards/resources
Clinical Recommendations				
1. Reduce the current rate of emergency admissions: • NHS England and the Wales Cancer Network to continue working with gynaecological cancer systems, Cancer Alliances, health boards, and primary care organisations to explore the use of innovative approaches to early diagnosis in community settings, and including: ◦ Gynaecological cancer systems, Cancer Alliances, health boards to continue engaging with their local populations alongside ovarian cancer charities to improve recognition of ovarian cancer symptoms, particularly among older adults and those living in more deprived areas. ◦ Referring hospitals to review cases of emergency admissions to identify potential missed opportunities and share learning with primary care partners to support earlier diagnosis in the future.	England: NHS England, Cancer Alliances working with gynaecological cancer systems[7] and NHS trusts. Wales: health boards working with gynaecological cancer systems.	Performance indicator 1: 40.1% of women diagnosed in England in 2022 and 41.3% diagnosed in Wales in 2023 had an emergency admission within 28 days prior to diagnosis (lowest percentage 29.9% and highest 52.0% across the 40 gynaecological cancer systems in England; lowest percentage 33.3% and highest 47.4% across three gynaecological cancer systems in Wales).	Goal #1: Increase the proportion of patients receiving timely diagnosis and treatment decisions.	Women can be diagnosed late with advanced disease due to delays in presenting for medical care, difficulties in access to care, delays in primary care, or delays in secondary care[8]. The short-term mortality report from the Ovarian Cancer Audit Feasibility Pilot (OCAFP) showed that women diagnosed via an emergency presentation were four times more likely to die within two months of diagnosis than those diagnosed via the urgent suspected cancer referral system. Our data show that approximately 40% of women with ovarian cancer have an emergency admission 28 days prior to diagnosis which implies that there is considerable scope to improve outcomes by enhancing symptom awareness, increasing access to primary care and increasing the number of women diagnosed through rapid access pathways. Symptom triggered testing and fast track pathways are associated with low volume disease and early-stage diagnosis[9]. Promoting awareness amongst women and health care professionals in primary care through collaboration with cancer alliances and cancer charities will facilitate this.

7 The main organisational unit for audit reporting is the gynaecological cancer system. This was recommended as a level for reporting performance indicators in the British Gynaecological Cancer Society's recommendations for evidence-based, population data derived quality performance indicators for ovarian cancer. This choice of unit acknowledges that decisions about ovarian cancer care are not always attributable to an individual NHS Trust such as the trust or hospital where a woman is diagnosed. It also avoids the problem of reporting indicators for individual trusts or hospitals that may diagnose a small number of patients each year.

8 Abel GA, Mendonca SC, McPhail S, Zhou Y, Elliss-Brookes L, Lyratzopoulos G. Emergency diagnosis of cancer and previous general practice consultations: insights from linked patient survey data. Br J Gen Pract. 2017 Jun;67(659):e377-e387.

9 Kwong FLA, Kristunas C, Davenport C, Deeks J, Mallett S, Agarwal R, et al. Symptom-triggered testing detects early stage and low volume resectable advanced stage ovarian cancer. International Journal of Gynecological Cancer Published Online First: 13 August 2024. doi: 10.1136/ijgc-2024-005371.

Recommendation	Audience	Audit findings	Quality Improvement Goal	National guidance/standards/resources
2. Investigate why women diagnosed with ovarian cancer within 28 days following an emergency admission did not receive any treatment (surgery and/or chemotherapy) and aim to reduce that proportion by: • engaging with NOCA's Quality Improvement Intervention/Initiative. • performing a detailed case-note review to identify the reasons why women did not receive treatment. • assessing eligibility for treatment based on the women's pre-admission fitness and consider timely involvement of prehabilitation service. • ensuring close collaboration between the centre and the units within a gynaecological cancer system.	England: Cancer Alliances working with gynaecological cancer systems and NHS trusts. Wales: health boards working with gynaecological cancer systems.	Performance indicator 2: 61.3% of women in England in 2022 and 71.0% of women in Wales in 2023 who had an emergency admission 28 days prior to ovarian cancer diagnosis had any treatment (surgery and/or chemotherapy) recorded between one month prior and three months following diagnosis (lowest percentage 46.2% and highest 81.8% across the 40 gynaecological cancer systems in England; lowest percentage 62.2% and highest 75.8% across three gynaecological cancer systems in Wales).	Goal #1: Increase the proportion of patients receiving timely diagnosis and treatment decisions Goal #3: Increase the proportion of patients receiving surgery. Goal #4: Increase the proportion of patients receiving chemotherapy.	Surgery and platinum-based chemotherapy is the standard of care for women with ovarian cancer. Our data show that approximately 40% of women who have an emergency admission prior to their diagnosis do not have any treatment recorded within 3 months of diagnosis.
3. Review the percentage of women with stage 2 to 4, or unstaged ovarian cancer who receive treatment (any type), explore and address some of the reasons behind the variation across gynaecological cancer systems by: • performing a detailed case-note review to identify why women did not receive any treatment. • documenting whether women eligible for treatment were offered it and the reasons for not treating, if appropriate.	England: Cancer Alliances working with gynaecological cancer systems. Wales: health boards working with gynaecological cancer systems.	Performance indicator 3: 74.2% of women in England in 2022 and 80.3% in Wales in 2023 who were diagnosed with stage 2 to 4, or unstaged ovarian cancer had any treatment (i.e., surgery and/or chemotherapy) recorded between one month prior and nine months following diagnosis (lowest percentage 62.0% and highest 87.8% across the 40 gynaecological cancer systems in England; lowest percentage 75.0% and highest 82.1% across three gynaecological cancer systems in Wales).	Goal #3: Increase the proportion of patients receiving surgery. Goal #4: Increase the proportion of patients receiving chemotherapy.	Surgery and platinum-based chemotherapy is the standard of care for these women. The short-term mortality report from the OCAFP showed that 22.2% of all women with ovarian cancer, regardless of stage, did not have any treatment recorded between one month prior and nine months following diagnosis. Those women were also more likely to die within 2 months following diagnosis (56.9%) than women who received treatment. The NHS Cancer Programme and the Cancer Alliance Treatment Variation Working Group have set the recommended treatment rate for these women at 80%.

Recommendation	Audience	Audit findings	Quality Improvement Goal	National guidance/standards/resources
4. Identify opportunities to increase the utilisation of platinum-based chemotherapy in women with epithelial ovarian cancer (stage 2 to 4, or unstaged), explore and address some of the reasons behind the variation across gynaecological cancer systems by: • performing a detailed case-note review to identify why women did not receive any chemotherapy. • documenting whether women eligible for treatment were offered it and the reasons for not treating, if appropriate. • assessing eligibility for treatment based on the women's pre-admission fitness and consider timely involvement of prehabilitation service.	England: Cancer Alliances working with gynaecological cancer systems.	Performance indicator 4: 66.0% of women diagnosed in England in 2022 with stage 2 to 4, or unstaged epithelial ovarian cancer were recorded as receiving platinum-based chemotherapy one month prior to three months following diagnosis (lowest percentage 44.7% and highest 83.8% across the 40 gynaecological cancer systems in England)[10].	Goal #4: Increase the proportion of patients receiving chemotherapy.	First-line chemotherapy treatment in ovarian cancer should include a platinum-based compound either in combination or as a single agent.
5. Review one-year survival in women diagnosed with ovarian cancer, explore and address some of the reasons behind the variation across gynaecological cancer systems by: • taking into account the performance of gynaecological cancer systems across the previous indicators. • identifying key pressure points in the ovarian cancer care pathway.	England: Cancer Alliances working with gynaecological cancer systems. Wales: health boards working with gynaecological cancer systems.	Performance indicator 5: 70.2% of women diagnosed in England in 2022 and 73.8% in Wales in 2023 were alive at least one year after diagnosis (lowest percentage 58.4% and highest 86.9% across the gynaecological cancer systems in England; lowest percentage 67.9% and highest 76.0% across three gynaecological cancer systems in Wales).	Goal #5: Improve rates of survival and reduce variation in survival.	One-year net survival according to the profile and treatment report from the OCAFP in women diagnosed between 2015 and 2019 in England was 68.4%. An international study has demonstrated similar results and has reported that one-year net survival in women diagnosed between 2010 and 2014 in the UK was 70.3% which lags behind countries with similar health systems[11], i.e., Australia 78.5%, Canada 72.6%, Denmark 77.4%, New Zealand 71.5%, and Norway 77.5%.

10 This performance indicator was not available for Wales due to absence of data for chemotherapy regimens..

11 Arnold M, Rutherford MJ, Bardot A, Ferlay J, Andersson TM, Myklebust TÅ, et al. Progress in cancer survival, mortality, and incidence in seven high-income countries 1995-2014 (ICBP SURVMARK-2): a population-based study. Lancet Oncol. 2019 Nov;20(11):1493-1505.

4. Result for England and Wales

4.1 Data

Patient cohort

7,391 women aged 18 years and older with newly diagnosed ovarian cancer in the NHS (7,000 in England in 2022 and 391 diagnosed in Wales in 2023) were eligible to be included. Of these women, 850 (12.1%) in England and 41 (10.5%) in Wales had a diagnosis not based on histology or cytology. In England, 1,997 (28.5%) women did not have their cancer stage at diagnosis recorded and this was the case for 33 (8.4%) in Wales.

We report on the care provided to 6,043 women with ovarian cancer (n=5,713 in England, n= 317 in Wales) after excluding women with borderline tumours or whose ovarian cancer diagnosis was based on death certificate only (n=1,287 in England, n=74 in Wales).

Data completeness

Key messages: For women with ovarian cancer, information recorded in national datasets regarding stage (England), grade and performance status was below the target of 90% completeness.

Treatment options for women with ovarian cancer are influenced by the characteristics of their cancer (stage and grade at diagnosis) and their general health and fitness. The recording of this information in national cancer datasets is vital to understand patterns of care. Levels of completeness were good for ethnicity in England and stage in Wales but fell below the 90% target for other data items (see Table 2), particularly stage in England, grade, performance status, and ethnicity in Wales.

Table 2. Data completeness for women with newly diagnosed ovarian cancer in England in 2022 and Wales in 2023.

	Completeness	
Item	**England 2022 (n=5,713)**	**Wales 2023 (n=317)**
Ethnicity	90.4%	51.7%
Stage	77.0%	92.7%
Grade*	78.1%	n/a
Performance status	63.8%	87.4%

*237 morphologies were excluded from the denominator as grading does not apply to them

Patient characteristics

Key messages: Approximately three out of four women with ovarian cancer were diagnosed with stage 2 to 4 disease in England and in Wales.

NOCA included 6,030 women diagnosed with ovarian cancer in England in 2022 (n=5,713) and Wales in 2023 (n=317) and a summary of their characteristics is given in Table 3. Please note that women with borderline tumours were not included. Mean age at diagnosis was 66.3 years (IQR: 57-77) in England and 66.3 years (IQR: 57-76) in Wales. Of the women who had their performance status recorded, 1,968 out of 3,646 in England (54.0%) and 94 out of 277 in Wales (33.9%) were reported as "fully active".

In England, 77.3% of women with a recorded stage had stage 2 to 4 ovarian cancer and the corresponding percentage was 76.9% of women in Wales. In England, 78.2% of women with a recorded grade had a high-grade ovarian cancer. The majority of women had epithelial ovarian cancer (82.6% in England and 81.4% in Wales).

Table 3. Characteristics of women diagnosed with ovarian cancer in England in 2022 and Wales in 2023.		
	England 2022	**Wales 2023**
Number of women		
	5,713	317
Age at diagnosis (years)		
18-29	2.0%	1.3%
30-39	3.2%	2.8%
40-49	7.3%	5.7%
50-59	17.4%	20.5%
60-69	23.5%	26.2%
70-79	28.1%	29.0%
>79	18.6%	14.5%
Index of multiple deprivation quintile		
1 - most deprived	16.1%	15.1%
2	18.9%	16.7%
3	20.9%	22.1%
4	21.7%	23.1%
5 - least deprived	22.4%	23.1%
Not recorded (E=0, W=18)		
Performance status (reported E=3,646, W=277)		
0 - fully active	54.0%	33.9%
1	29.1%	44.0%
2	9.3%	11.6%
3	6.0%	7.6%
4 - bedbound	1.7%	2.9%
Not recorded (E=2,067, W=40)		
Stage at diagnosis (reported E=4,408, W=294)		
Stage 1	22.7%	23.1%
Stage 2	6.8%	5.8%
Stage 3	38.6%	46.9%
Stage 4	31.9%	24.2%
Not recorded (E= 1,315, W= 23)		
Grade (reported E=4,511, W=n/a)		
Low	11.2%	n/a
Moderate	5.4%	n/a
High	78.2%	n/a
Not graded	5.3%	n/a
Not recorded (E=1,202, W=n/a)		
Morphology		
Malignant epithelial	82.6%	81.4%
Clear cell carcinoma	4.0%	4.4%
Endometrioid carcinoma	5.6%	7.3%
Mucinous carcinoma	5.5%	6.0%
Other malignant epithelial	12.2%	9.8%
Serous carcinoma	55.3%	53.9%
Miscellaneous & unspecified	9.5%	12.6%
Non-specific site	2.5%	3.5%
Sex cord-stromal & germ cell	5.4%	2.5%
E = England, W = Wales, n/a = not available, percentages are rounded to the first decimal.		

4.2 Performance indicators

Performance indicator 1: Emergency admission prior to diagnosis

Key messages: Approximately four out of ten women in England and in Wales had an emergency admission 28 days prior to diagnosis.

Of the 5,713 women with ovarian cancer diagnosed in England in 2022, 2,288 (40.1%) had an emergency admission within 28 days prior to diagnosis. Of 317 women diagnosed in Wales in 2023, 131 (41.3%) had an emergency admission. These data indicate that their symptoms immediately before diagnosis were so severe or that there were difficulties in access to care, delays in primary care, or delays in secondary care[12] which made access to acute care necessary. This percentage varied across the 40 gynaecological cancer systems in England from 29.9% to 52.0% and across the three gynaecological cancer systems in Wales from 33.0% to 47.4%.

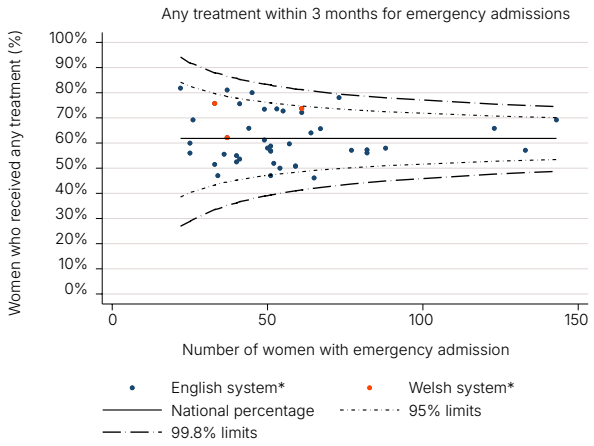
Performance indicator 2: Receipt of any treatment (surgery and/or chemotherapy) for women with emergency admission prior to diagnosis

Key messages: Approximately four out of ten women in England and three out of ten women in Wales who had an emergency admission 28 days prior to ovarian cancer diagnosis did not have any treatment recorded within three months of diagnosis.

Of the 2,288 women who had an emergency admission 28 days prior to ovarian cancer diagnosis in England in 2022, 1,403 (61.3%) received any type of treatment (surgery and/or chemotherapy) between one month before and three months after the recorded date of diagnosis. Of the 131 women who had an emergency admission 28 days prior to diagnosis in Wales in 2023, 93 (71.0%) received any type of treatment. This percentage varied across the 40 gynaecological cancer systems in England from 46.1% to 81.8% and across the three gynaecological cancer systems in Wales from 62.2% to 75.8%.

Considerable variation exists in the utilisation of any treatment (surgery and/or chemotherapy) recorded for women who had an emergency admission 28 days prior to ovarian cancer diagnosis across the gynaecological cancer systems in England and Wales (Figure 1).

Figure 1. Unadjusted funnel plot for the proportion of women diagnosed with ovarian cancer within 28 days of an emergency admission receiving any treatment (surgery and/or chemotherapy).



There are three cancer systems above the upper 95% control limit, but none is above the upper 99.8% limit and two systems below the lower 95% limit, with none falling below the lower 99.8% limit.

* system refers to the gynaecological cancer system.

Performance indicator 3: Receipt of any treatment (surgery and/or chemotherapy)

Key messages: Approximately one out of four women newly diagnosed with stage 2 to 4 or unstaged ovarian cancer in England, and one in five in Wales, did not have any treatment recorded within nine months of diagnosis.

For women with stage 2 to 4 or unstaged ovarian cancer, 3,496 of 4,714 (74.2%) diagnosed in England in 2022, and 200 of 249 (80.3%) diagnosed in Wales in 2023 received any type of treatment (surgery and/or chemotherapy) between one month before and nine months after the recorded date of diagnosis. This percentage varied across the 40 gynaecological cancer systems in England from 62.0% to 87.8% and across the three gynaecological cancer systems in Wales from 75.0% to 82.1%.

12 Abel GA, Mendonca SC, McPhail S, Zhou Y, Elliss-Brookes L, Lyratzopoulos G. Emergency diagnosis of cancer and previous general practice consultations: insights from linked patient survey data. Br J Gen Pract. 2017 Jun;67(659):e377-e387.

Performance indicator 4: Receipt of platinum-based chemotherapy

Key messages: Approximately one out of three women newly diagnosed in England with stage 2 to 4 or unstaged epithelial ovarian cancer were not recorded as receiving platinum-based chemotherapy within three months of diagnosis.

With respect to women with stage 2 to 4 or unstaged epithelial ovarian cancer, 2,594 of 3,931 (66.0%) received platinum-based chemotherapy in England in 2022 between one month before and three months after the recorded date of diagnosis. Information about type of chemotherapy was not available for Wales. This percentage varied across the 40 gynaecological cancer systems from 44.7% to 83.8%.

Performance indicator 5: One-year survival

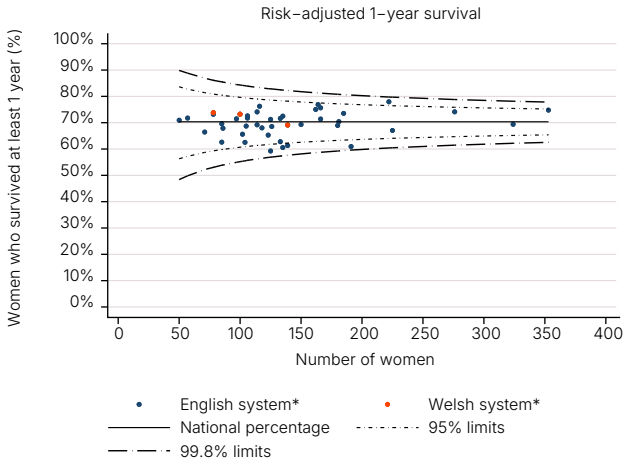
Key messages: Approximately seven out of ten women diagnosed with ovarian cancer survived at least one year after diagnosis in England and three out of four in Wales.

Of the 5,713 women diagnosed with ovarian cancer in England in 2022, 4,009 (70.2%) survived at least one year after diagnosis, and this was the case for 234 of the 317 women (73.8%) diagnosed in Wales in 2023.

Overall, one-year survival varied across the 40 gynaecological cancer systems in England from 58.4% to 86.9% and across the three gynaecological cancer systems in Wales from 67.9% to 76.0%. It is important to note that these system-specific results are not adjusted for differences in case-mix (e.g. age, stage, grade, morphology, deprivation status, performance status, and comorbidity), which may account for some of the differences in survival between England and Wales and between the gynaecological cancer systems.

We then adjusted the results to account for differences in case-mix. The adjusted one-year survival estimates account for differences in age, stage, grade, morphology, socio-economic deprivation, ethnicity, comorbidities, and frailty. Even after adjustment, considerable variation in one-year survival remains across the gynaecological cancer systems in England and Wales (Figure 2.).

Figure 2. Risk-adjusted funnel plot showing the proportion of women with ovarian cancer who are alive at least one year following their diagnosis across the gynaecological cancer systems.



One gynaecological cancer system is above the upper 95% control limit, but none is above the upper 99.8% limit. Four systems are below the lower 95% limit, with none falling below the lower 99.8% limit. This performance indicator is subject to our outlier process.

* system refers to the gynaecological cancer system.

Risk-adjusted results account for differences in the case-mix.

Performance indicator 6: Two-year survival

Key messages: Approximately four out of seven women diagnosed with ovarian cancer survived at least two years after diagnosis in England and two out of three in Wales.

Of the 4,328 women diagnosed with ovarian cancer in England between 1st January 2022 and 30th September 2022, 2,502 (57.8%) survived at least two years after diagnosis. Of the 293 women diagnosed with ovarian cancer in Wales between 1st January 2022 and 31st December 2022, 198 (67.6%) survived at least two years after diagnosis. Overall two-year survival varied across the 40 gynaecological cancer systems in England from 44.7% to 80.1% and across the three gynaecological cancer systems in Wales from 64.9% to 69.4%.

We then adjusted the results to account for differences in case-mix. The adjusted two-year survival estimates account for differences in age, stage, grade, morphology, socio-economic deprivation, ethnicity, comorbidities, and frailty. Adjusted two-year survival was 57.9% for women diagnosed with ovarian cancer in England and 62.8% for women diagnosed with ovarian cancer in Wales. Overall two-year adjusted survival varied across the 40 gynaecological cancer systems in England from 44.9% to 68.7% and across the three gynaecological cancer systems in Wales from 62.0% to 65.1%. Even after adjustment, considerable variation in two-year survival remains across the gynaecological cancer systems in England and Wales.

Table 4. Performance indicators of women diagnosed with ovarian cancer in England in 2022 and Wales in 2023					
		England 2022		**Wales 2023**	
		Number	**Percentage**	**Number**	**Percentage**
Performance indicator 1*: Women diagnosed with ovarian cancer who had an emergency admission within 28 days prior to diagnosis.	**Denominator:** Women diagnosed with ovarian cancer (excluding borderline tumours).	2,288/5,713	40.1%	131/317	41.3%
			Lowest: 29.9% Highest: 52.0%		Lowest: 33.3% Highest: 47.4%
Performance indicator 2: Women diagnosed with ovarian cancer within 28 days of an emergency admission who receive any type of treatment (surgery and/or chemotherapy) one month prior to three months following diagnosis.	**Denominator:** Women diagnosed with ovarian cancer who had an emergency admission within 28 days prior to diagnosis cancer (excluding borderline tumours).	1,403/2,288		93/131	71.0%
			Lowest: 46.1% Highest:81.8%		Lowest: 62.2% Highest: 75.8%
Performance indicator 3: Women diagnosed with stage 2 to 4 or unstaged ovarian cancer who receive any type of treatment (surgery and/ or chemotherapy) one month prior to nine months following diagnosis.	**Denominator:** Women diagnosed with stage 2 to 4 or unstaged ovarian cancer (excluding borderline tumours).	3,496/4,714	74.2%	200/249	80.3%
			Lowest: 62.0% Highest: 87.8%		Lowest: 75.0% Highest: 82.1%
Performance indicator 4: Women diagnosed with stage 2 to 4 or unstaged epithelial ovarian cancer who receive platinum-based chemotherapy one month prior to three months following diagnosis.	**Denominator:** Women diagnosed with stage 2 to 4 or unstaged epithelial ovarian cancer (excluding borderline tumours).	2,594/3,931	66.0%	n/a	n/a
			Lowest: 44.7% Highest: 83.8%		n/a
Performance indicator 5: Women diagnosed with ovarian cancer who are alive one year following the diagnosis.	**Denominator:** Women diagnosed with ovarian cancer (excluding borderline tumours).	4,009/5,713	70.2%	234/317	73.8%
			Lowest: 58.4% Highest: 86.9%		Lowest: 67.9% Highest: 76.0%
		England 2022**		**Wales 2022**	
Performance indicator 6: Women diagnosed with ovarian cancer who are alive two years following the diagnosis.	**Denominator:** Women diagnosed with ovarian cancer (excluding borderline tumours).	2,502/4,328	57.8%	198/293	67.6%
			Lowest: 44.7% Highest: 80.1%		Lowest: 64.9% Highest: 69.4%

* For performance indicator 1, a lower value indicates better performance.

** For performance indicator 6, the cohort included women diagnosed with ovarian cancer in England between 1st January 2022 and 30th September 2022 as data required to estimate survival outside this period were unavailable.

Borderline: Borderline malignant ("borderline") ovarian tumours have historically been recorded as ovarian cancers, though their malignant potential is now understood to be lower than the rest of the group.

Difference between England and Wales should be interpreted with caution as these results are not adjusted for differences in case-mix and confidence intervals are expected to be wide due to the smaller number of patients in Wales.

5. Commentary

This is the second NOCA SotN report, where we provide a summary of our analysis of six performance indicators covering four quality improvement goals (Table 4). As indicated above, results for each gynaecological cancer system in England and in Wales are available on NOCA's Dashboard. Most indicators include women newly diagnosed with ovarian cancer in England in 2022 and in Wales in 2023.

Provider level results for certain indicators are currently available on a quarterly basis (curated using 'Rapid Cancer Registry' data) through an interactive online dashboard, enabling providers to reflect on more timely data. In addition to these, results from this annual report (curated using 'Gold standard' data) have been added to this dashboard.

The results reflect NOCA's ambition captured in the Quality Improvement Plan, also taking into account the limitations of the availability and completeness of relevant national data. We expect that the Quality Improvement Plan will gradually develop over time in response to improvements in data availability.

We found that the recording of stage, grade and performance status was missing for a considerable number of women. We will continue working with NDRS in England and WCN in Wales in order to improve the completeness of these data items, which are essential for the evaluation of ovarian cancer care. We also encourage the ovarian cancer care providers to identify areas for improvement in data completeness and accuracy. For example, it would be helpful if clinicians ensure on a regular basis in their own hospital that the data reported on their behalf are both complete and accurate.

Our SotN report demonstrates that:

- Four out of ten women in England and in Wales had an emergency admission in the 28 days prior to their ovarian cancer diagnosis. Women admitted as an emergency have worse cancer outcomes than women diagnosed via non-emergency routes. This highlights the urgency to review and where possible improve the timeliness of the diagnostic and referral pathways of ovarian cancer within the Cancer Alliances and Welsh Health Boards and increase symptom awareness amongst patients and primary care professionals.

- Four out of ten women in England and in Wales who had an emergency admission 28 days prior to their ovarian cancer diagnosis did not have any treatment recorded within three months of diagnosis. This category of women tends to have worse survival outcomes compared to women who receive treatment. NOCA considers this indicator of great clinical importance and will launch a nationwide Quality Improvement Intervention/Initiative in October 2025 aiming to improve the rates of treatment for these women. This initiative will have to take into account that some of these women might not receive treatment because of their poor clinical condition resulting from advanced malignancy or because of personal choice.

- One out of four women newly diagnosed in England or in Wales with stage 2 to 4 or with unstaged ovarian cancer did not have any treatment recorded within nine months of diagnosis. Although some women might not receive treatment because of their poor clinical condition resulting from advanced malignancy or because of personal choice, this audit finding suggests that there are women whose cancer is potentially undertreated. This seems to be an ongoing issue, first highlighted in the geographic variation report by OCAFP, which included women diagnosed with stage 2 to 4 or with unstaged ovarian cancer in England between 2016 and 2018, of whom 73.8% had any treatment recorded. Therefore, further investigations are required to understand better how and to what extent the number of women not receiving treatment can be increased.

- One out of three women newly diagnosed in England with stage 2 to 4 or unstaged epithelial ovarian cancer did not receive platinum-based chemotherapy within three months of diagnosis. These data were not available for Wales. This highlights that the NICE guidance for chemotherapy in ovarian cancer, recommending platinum-based chemotherapy for all these women, is not always being followed. Again, possible explanations could be that some women are in a very poor clinical condition or that some women are potentially undertreated.

- Seven out of ten women diagnosed with ovarian cancer survived at least one year after diagnosis in England and three out of four in Wales. The difference between England and Wales and between the gynaecological cancer systems should be interpreted with caution as these results are not adjusted for differences in case-mix (especially stage, grade, performance status, comorbidity, socio-economic deprivation). Adjusted one-year survival results are presented in the funnel plot (Figure 2.) and can also be found on NOCA's Dashboard and Data tables. These results have been adjusted for differences in age, stage, grade, morphology, socio-economic deprivation, ethnicity, comorbidities, and frailty. However, adjustment for BRCA or HRD status was not possible due to lack of available data. This is a considerable limitation as the use of poly-ADP

ribose polymerase inhibitors, known as PARP inhibitors, in women with BRCA mutations or HRD positive cancers appears to provide long-term enduring responses. This performance indicator is subject to our outlier process. In this year's SotN report, there were no outliers.

- Four out of seven women diagnosed with ovarian cancer survived at least two years after diagnosis in England and two out of three in Wales. Again, differences between England and Wales and between the gynaecological cancer systems should be interpreted with caution as these results are not adjusted for differences in case-mix.
  Following adjustment, considerable variation across the gynaecological cancer systems remain. The case-mix adjustment approach was similar to the one used for one-year survival and is subject to the same limitations.

Despite issues with data completeness, we are confident that the six clinical indicators published in this SotN report are clinically relevant and methodologically robust. Therefore, we encourage ovarian cancer care providers in England and Wales to respond to our five clinical recommendations. NOCA's Data Dashboard and data tables provide the results for each gynaecological cancer system. We envisage that the national and local results based on the six indicators can also be used by patient charities and support groups when they have conversations with cancer care providers about how ovarian cancer care can be further improved. In addition, women, their families and wider support systems may want to consider our findings when they discuss their treatment options with their clinicians.

As in last year's SotN report, we did not report on three performance indicators that are mentioned in NOCA's Quality Improvement Plan. These indicators relate to germline panel and homologous recombination deficiency testing (BRCA 1/2 and/or genomic instability) as well as cytoreductive surgery. NOCA expects to be able to report on these three indicators in forthcoming reports when data necessary to derive these indicators will become available for analysis. In this year's SotN report, two new indicators, performance indicators 2 and 6, have been introduced. Although they are not part of NOCA's Quality Improvement Plan, they reflect NOCA's commitment to evolve and adjust to clinical priorities after consulting with key stakeholders. In addition, for performance indicators 3 and 4, we have introduced time limits to the numerator.

Going forward, NOCA will continue to develop its SotN report alongside the quarterly reports. NOCA is developing its case-mix adjustment methodology for the other five performance indicators, and case-mix adjusted results for these will be included in future reports. A key developmental priority for the forthcoming years is to develop clinical, statistical and data science approaches to address missing data on patient and tumour characteristics. NOCA is also committed to producing research outputs that align closely with its aims and ambitions. These research activities will help inform and shape future reports, and support and guide Quality Improvement Interventions/Initiatives for ovarian cancer care in England and Wales.

NOCA Quality Improvement Intervention/Initiative

In October 2025, NOCA will launch a Quality Improvement Intervention/Initiative aimed at increasing the percentage of women with an emergency admission prior to their ovarian cancer diagnosis who receive any type of treatment (surgery and/or chemotherapy). This initiative has been developed in consultation with key stakeholders, including women with lived experience of ovarian cancer who are members of NOCA's Patient and Public Involvement Forum and a wider range of stakeholders represented in NOCA's Clinical Reference Group.

NOCA has presented the Quality Improvement Intervention/Initiative in webinars and conferences[13]. In this way, NOCA aims to engage with the clinical community and stimulate sharing best practice.

We aim to evaluate the impact of the Quality Improvement Intervention/Initiative using rapid registration data published in the quarterly reports. These data will enable evaluation of the intervention's effectiveness.

13 British Gynaecological Cancer Society, Annual Scientific Meeting – London, July 2025