

National Bowel Cancer Audit: Findings of the 2024 State of the Nation Report Part 2

21st January 2025



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National Bowel
Cancer Audit

@NBOCA_NATCAN



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Welcome



Chair: Mr Dale Vimalachandran, APCGBI
Research and Audit Committee



Miss Nicola Fearnhead, NBOCA
Clinical Co-Lead: Surgery



Dr Mike Braun, NBOCA
Clinical Co-Lead: Oncology



Prof Kate Walker, NBOCA
Senior Methodologist



Prof Chris Cunningham,
Consultant Colorectal Surgeon



Prof Deena Harji, Consultant
Colorectal Surgeon



Dr Clare Taylor, Chief Nursing Officer
Macmillan



Ms Sam Alexandra Rose, Patient and Public
Involvement Manager at Bowel Research UK

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[@NBOCA_NATCAN](https://twitter.com/NBOCA_NATCAN)

Summary from Webinar 1

www.nboca.org.uk/news

Changes to NATCAN

QI plan and KPIs

State of the Nation Report 2024
key recommendations



National Bowel Cancer Audit State of the Nation Report

An audit of care received by people with bowel cancer in England and Wales focusing on people diagnosed between 1 April 2022 and 31 March 2023.

Published January 2025



Summary of 2024 Key Recommendations



Improve

Improve data completeness (TNM, PS)



Increase

Increase testing of Lynch Syndrome via MMR assessment



Increase

Increase ileostomy closure (within 18 months)



Reduce

Reduce variation of chemotherapy use between trusts/MDTs for Stage 3 colorectal cancer



Understand

Understand delivery of neoadjuvant rectal cancer therapy regionally

Data Analysis and Identification of Outliers

Process requires sufficient data completeness

Exclusions:

- Overall <20% completeness
- PS or TNM missing in >80%

Outlier Definition:

- > 3 SDs from national average (mean) in 1 year
- > 2 SDs from national average (mean) twice in a 3-year period (only applies to outcomes with a one-year reporting period*)

Outlier Assessment Performance Indicators

- 90-day mortality after major resection*
- 30-day unplanned return to theatre after bowel cancer resection*
- 30-day unplanned readmission after bowel cancer resection*
- Severe acute toxicity during/after adjuvant chemotherapy for stage 3 colon cancer
- 18-month diverting unclosed ileostomy after anterior resection
- Two-year survival rate after bowel cancer resection*

Risk Adjustment

Risk adjustment with 7 factors:

Age

Sex

Performance Status

TNM stage

Cancer site

Mode of admission

Number of co-morbidities (Charlson)

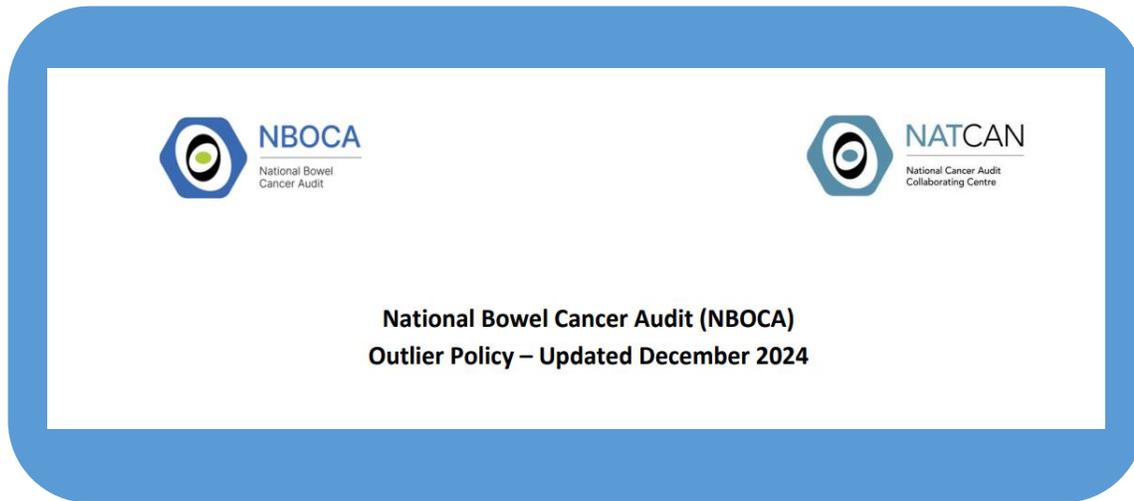
Major resections include:

Emergency AND elective

Curative AND palliative

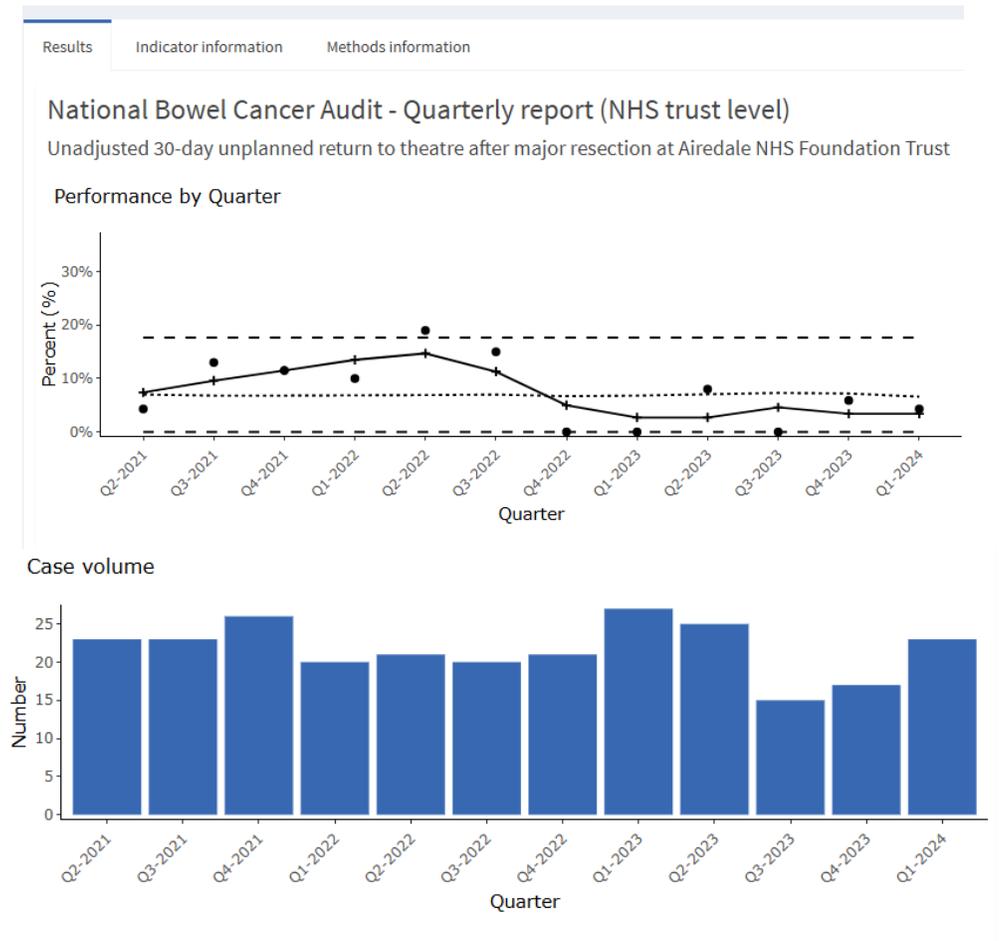
Walker *et al* 2015 Model for risk adjustment of postoperative mortality in patients with colorectal cancer. BJS 102(3):269-80

Outlier Responses



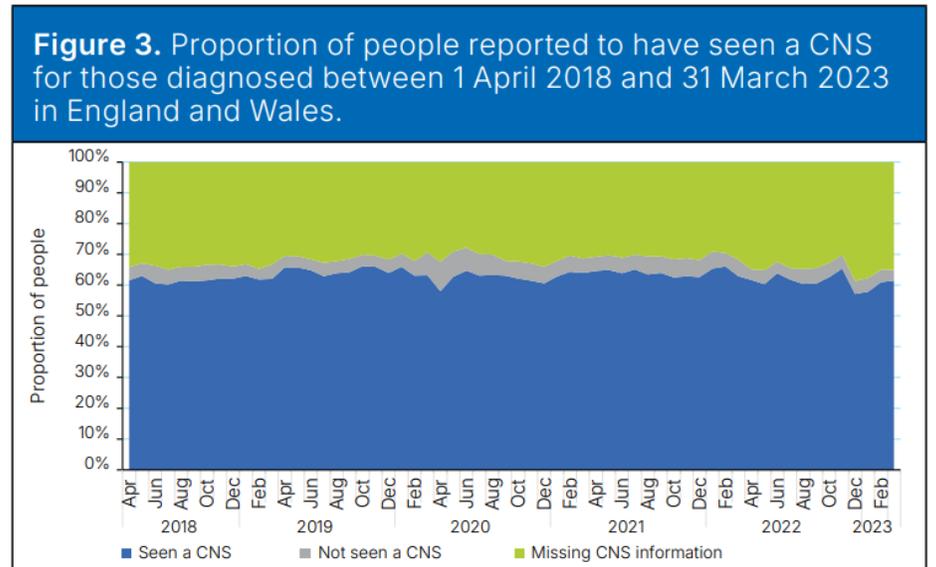
<https://www.nboca.org.uk/resources/nboca-outlier-policy/>

Quarterly Data Dashboard



Outlier Process

- Trust/MDT is identified as a potential outlier **and response requested**
- NBOCA review Trust/MDT response and data and comment whether confirmed or agree that outlier status is likely to be due to a coding error
- Impact of routinely collected data
- Emphasis on improving completeness +/-coding accuracy
 - Clinical Nurse Specialist
 - 90-day mortality following major resection
 - Return to theatre 30 days (operation codes)
 - Re-admission within 30 days
- Positive outliers



Performance Indicators

National and Local Results 2024



Table 1. NBOCA performance indicators with national and local results, England and Wales

Performance indicator	National results	Local Target	Percentage of trusts/ MDTs meeting local target
1. Seen by Clinical Nurse Specialist	94%*	>95%	61%*
2. Trust/MDT volume for rectal cancer surgery	N/A**	≥20 per year	81%
3. Adjusted 90-day mortality after major resection	2.7%	<6%	96%
4. Adjusted 30-day unplanned return to theatre after major resection	6.4%	<10%	92%
5. Adjusted 30-day unplanned readmission after major resection ¹	11%	<15%	81%
6. Adjusted 18-month unclosed ileostomy after anterior resection	38%	<35%	41%
7. Stage 3 colon cancer receiving adjuvant chemotherapy	66%	>50%	93%
8. Adjusted severe acute toxicity after adjuvant chemotherapy for colon cancer	21%	<33%	95%
9. People with rectal cancer receiving neo-adjuvant treatment***	34%	10%-60%	89%
10. Adjusted 2-year survival rate after major resection	82%	>70%	97%

Quality Improvement

Core Values

- Focus on patient outcome
- Engage stakeholders
- Data-driven decision making
- Sustainable improvement

Identify area for improvement

Review data

Approach to QI



Quality Improvement

Framework

- Analyse current processes
- Identify and implement intervention
- Measure and evaluate outcomes
- Engage, empower and communicate

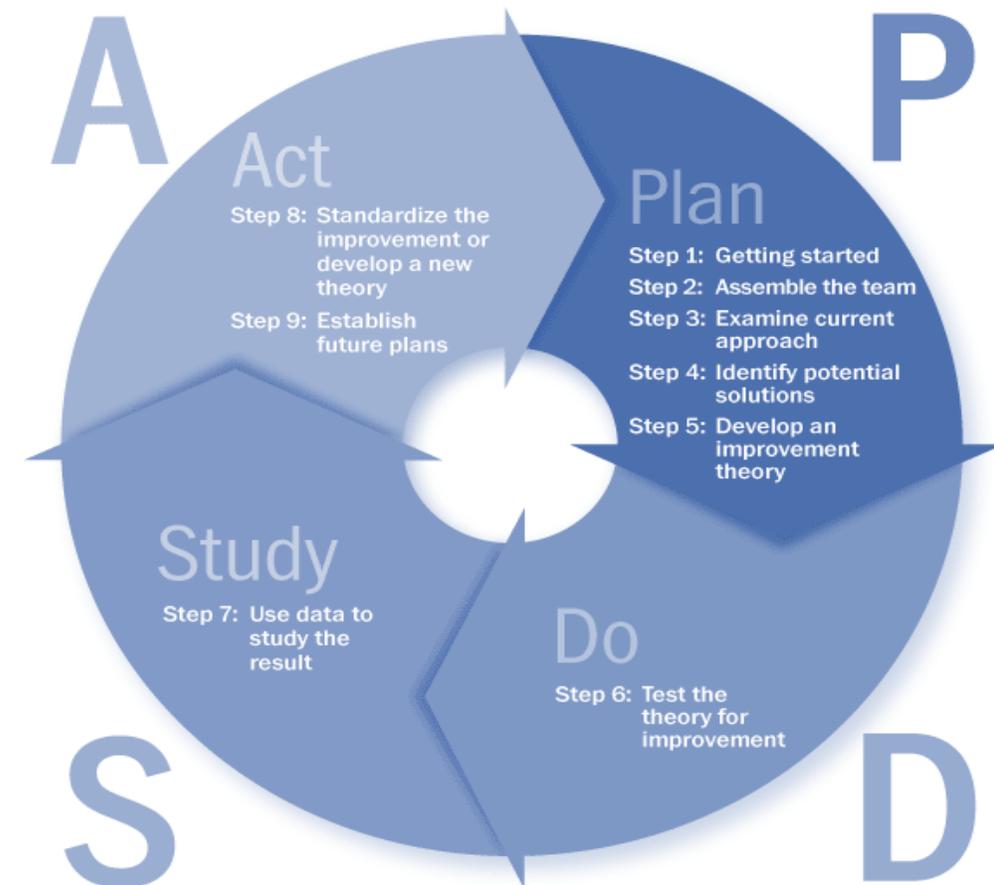
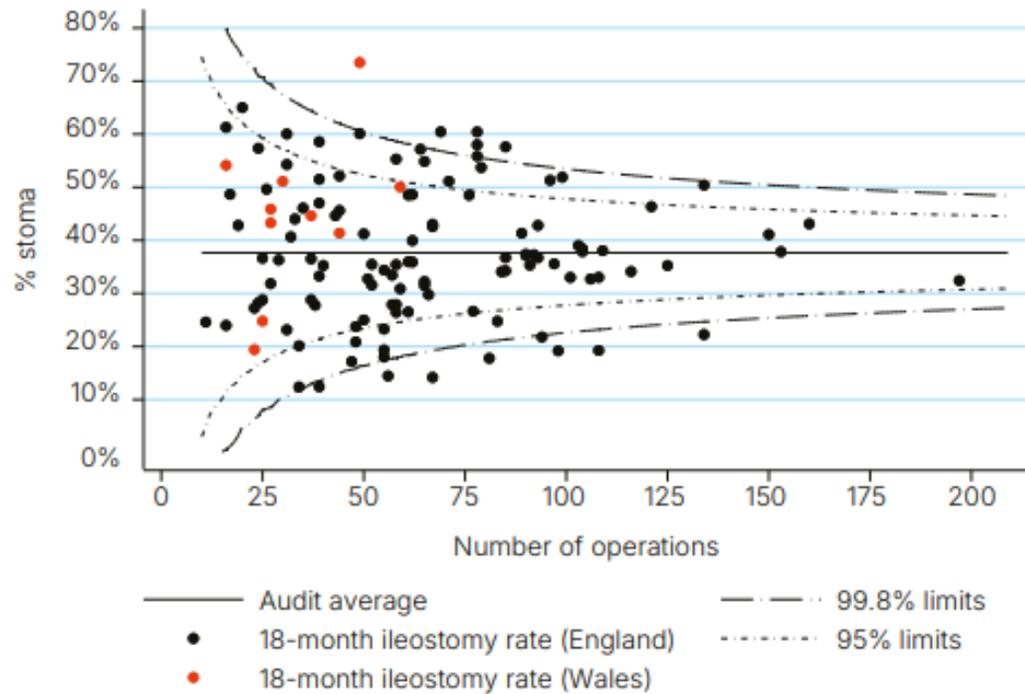


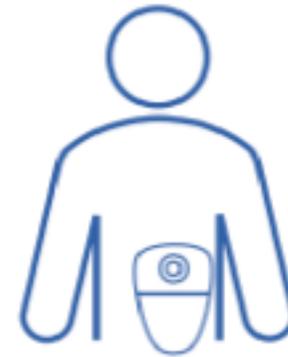


Figure 12. Adjusted 18-month unclosed ileostomy after anterior resection performed between 1 April 2017 and 31 March 2022 at English trust/Welsh MDT level.



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

Variation in Ileostomy Closure



% of people with an unclosed diverting ileostomy 18-months after anterior resection (major rectal cancer operation, year of surgery)

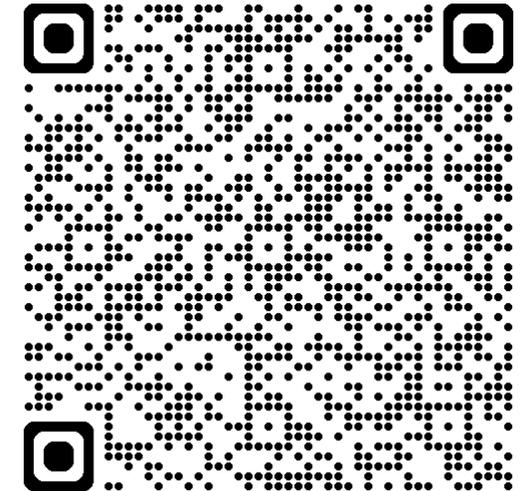
Close It Quick

- Royal College of Surgeons multicentre quality improvement programme
- Timely closure of defunctioning loop ileostomy
- What is offered to Trust/MDT
- Expression of interest
closeitquick@rcseng.ac.uk



Royal College
of Surgeons
of England

Launch date -
Thursday 27th
November



<https://www.rcseng.ac.uk/standards-and-research/support-for-surgeons-and-services/quality-improvement-in-surgery/qi-collaboratives/>

Stepwise Improvements in Ileostomy Closure

- Shared Decision-Making in Preoperative Stoma Counselling
- Discharge Diary
- Checklist Prior to Ileostomy Closure
- Optimisation of Ileostomy Closure
- Follow-up (functional outcomes, colonoscopy surveillance)

NBOCA Workshop – ACPGBI Annual Conference – Manchester 2023
Monday 3 July 9am – 11am

NBOCA's Unique Selling Points

0900	Welcome	Nicola Fearnhead
0905	Breaking News on NATCAN and ICORC	Kate Walker
0915	NBOCA Patient and Carer Panel	Robert Arnott
0925	NBOCA QI Programme Review	Nicola Fearnhead
0935	Focus on Acute Toxicity in CRC Chemotherapy	Jemma Boyle
0945	Discussion	

Proposal for National QI Programme in Ileostomy Closure

0955	RCSE & NBOCA Ileostomy Closure QI Plan	Nicola Fearnhead
1015	Evidence-Based Practice in Ileostomy Closure	Neil Smart
1025	Discussion and Feedback	

Showcase on Moondance Cancer Initiative in Wales

1035	Towards Zero Deaths	Jared Torkington
1055	Discussion	

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Stepwise Interventions in Patient Pathway

1. Shared Decision-Making

- Discuss benefits and risks of restoration of bowel continuity
- Explain rationale for diverting ileostomy
- Discuss potential complications of having an ileostomy
- Explore potential risks for poor bowel function after closure
- Assess risk factors for non-closure
- Explain risks of subsequent ileostomy closure
- Preoperative stoma counselling

2. Discharge Diary after Ileostomy Creation

- Book contrast enema
- Schedule outpatient appointment
- Schedule date for closure
- Administrative support
- Strategy for closure if adjuvant chemotherapy

3. Checklist Prior to Ileostomy Closure

- Negative contrast study excluding anastomotic leak
- Date for surgery
- Preoperative consent and information
- Consider preoperative measures to reduce risk of LARS (physiotherapy, biofeedback, distal instillation)

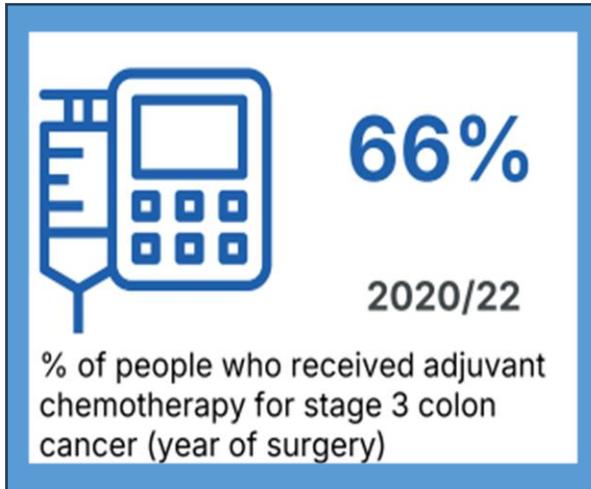
4. Optimisation of Ileostomy Closure

- Timely access to operating lists (ring-fenced slots?)
- Administrative support / tracking
- EUA at time of closure
- Enhanced recovery after surgery (ERAS)
- Probiotics
- Reducing length of stay (23 hour pathway/virtual ward)
- Evidence-based practice (purse-string wound closure, probiotics)

5. Follow-up after Closure

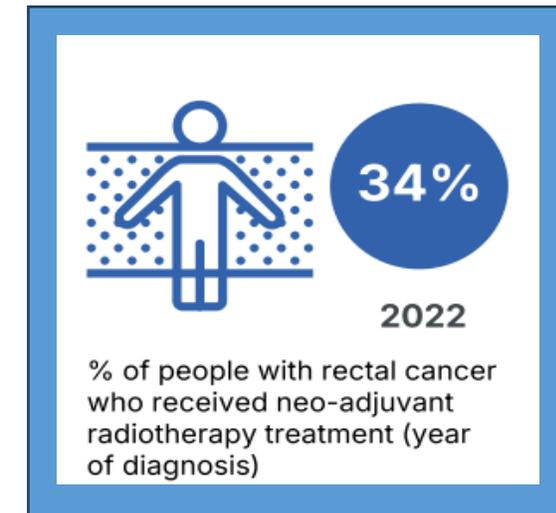
- Functional assessment (nurse-led)
- Access to treatment for LARS
- Colonoscopic surveillance (scheduling)

Oncological Management



Adjuvant chemotherapy has returned to pre-pandemic level

Local target 10-60% met by 89%
Considerable variation (0-82%)



Toxicity from Chemotherapy

Defining severe acute toxicity



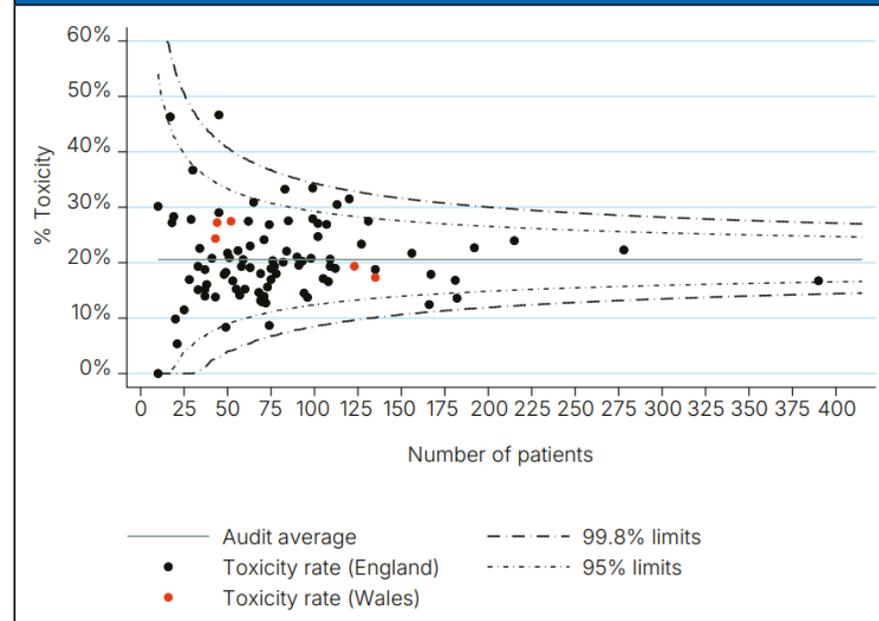
Cancer Epidemiology
Volume 77, April 2022, 102096



Development and validation of a coding framework to identify severe acute toxicity from systemic anti-cancer therapy using hospital administrative data

Jemma M. Boyle ^{a b}, Thomas E. Cowling ^{a b}, Angela Kuryba ^b, Nicola S. Fearnhead ^c, Jan van der Meulen ^{a b}, Michael S. Braun ^d, Kate Walker ^{a b 1}, Ajay Aggarwal ^{e 1}

Figure 15. Adjusted severe acute toxicity for people receiving adjuvant chemotherapy for pathological Stage 3 bowel cancer, by English NHS trusts/Welsh MDTs treating more than ten people after major resection between 1 April 2020 and 30 November 2022.



- Overall 21% of people receiving adjuvant chemotherapy for **pathological stage 3 colorectal cancer** experience severe acute toxicity
- Variation between Trusts/MDTs 0-47%

Rectal Cancer Management Trends Over Time



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Figure 16. Changes in rectal cancer management over calendar year of diagnosis by cancer stage for people in England.



Stage 1

↑ local excision

Stage 2/3

↑ oncological management without resection

Stage 4

↓ major resections

Survival

- After major resection only
- April 2020 to March 21
- Overall 82.3% adjusted all-cause survival (compared to 84.4%)
- Likely capturing more patients through routinely collected data
- Covid effect?



2020/21

Performance Indicator and Local Target 10
>70% adjusted 2-year overall survival rate after bowel cancer resection: 97% of trusts/MDTs



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Patient Perspective

The image shows the cover of a report titled "National Bowel Cancer Audit State of the Nation Report". At the top left is the NBOCA logo (National Bowel Cancer Audit) and at the top right is the NATCAN logo (National Cancer Audit Collaborating Centre). The title is in blue text, followed by the subtitle "Summary of findings for the public and patients" and the publication date "Published January 2025". Below the text is a photograph of a female healthcare professional in a white coat and stethoscope, sitting at the bedside of a male patient in a hospital bed. The patient is wearing a blue and white striped hospital gown and is smiling at the healthcare professional. The healthcare professional is holding a clipboard and a pen, looking at the patient.



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Panellist Discussion

- Please submit your questions via Q&A function
- Chair will put your questions to the panellists
- NBOCA team on hand to answer queries in Q&A
- No patient identifiable data please

NBOCA QI Workshop



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- Monday 30th June 2025
- Discussion on data driven approaches to improve the quality of care for people with bowel cancer

CLOSE IT QUICK
Launch -
Thursday 27th
November



The Association of
Coloproctology of
Great Britain & Ireland





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Webinar Recordings

- Recording of Webinars 1 & 2 available on our website
- www.nboaca.org.uk/news

The screenshot shows the NBOCA website's news page. At the top left is the NBOCA logo and name. To the right is a search bar. Below the logo is a navigation menu with links for 'For Professionals', 'For Public', 'News', 'About us', 'Contact us', 'FAQs', and 'Quality Improvement'. Underneath these are links for 'Resources', 'Reports', 'Publications', and 'Trust Results'. The main content area has a blue-to-green gradient header with 'Home > News' and 'News' in large white text. Below this is a news item card with the text 'Posted 15 January 2025' and a link to 'NBOCA State of the Nation Report 2024 Webinar Series'. To the right of the card is a 'Categories' sidebar with links for 'Announcements' and 'Newsletters'.