NBOCA | National Bowel Cancer Audit

NBOCA Annual Report 2023 – Provider results

East and North Hertfordshire NHS Trust

East of England - South A03b

The East and North Hertfordshire NHS Trust incorporates Lister Hospital in Stevenage, Hertford County Hospital in Hertford, and Queen Elizabeth II Hospital in Welwyn Garden City http://www.enherts-tr.nhs.uk/ <http://www.enherts-tr.nhs.uk/>

Patient inclusion and data sources

The 2023 State of the Nation Report includes results for patients in England and Wales diagnosed with bowel cancer 1 April 2021 – 31 March 2022.

Adjuvant chemotherapy estimates include patients undergoing major resection for pathological stage III colon cancer between 01 December 2018 and 31 August 2021. Severe acute toxicity estimates include patients receiving adjuvant chemotherapy after major resection for pathological stage III colon cancer between 01 December 2018 and 31 August 2021.

APER/Hartmann's and unclosed ileostomy estimates include patients undergoing rectal cancer surgery between 01 April 2016 and 31 March 2021. Annual rectal cancer resection volume includes major resections for rectal cancer performed between 01 April 2021 and 31 March 2022.

30-day unplanned readmission, 30-day unplanned return to theatre and 90-day mortality are further restricted to patients undergoing surgery up to 31 October 2022. Two-year mortality estimates include patients undergoing a major resection between 1 April 2019 and 31 March 2020.

The Audit dataset is linked to Hospital Episode Statistics (HES) and Patient Episode Database for Wales (PEDW) at patient level to obtain further information on patient care and follow-up such as stoma reversal and emergency readmissions in England/Wales. Linkage to Office for National Statistics records provides information about date and cause of death.

NBOCA also links to the National Radiotherapy Dataset (RTDS) for information on radiotherapy treatment in England, and the Systemic Anti-Cancer Therapy database (SACT) for information on chemotherapy treatment in England.

Data Quality

Case ascertainment

Number of patients reported to the Audit as a percentage of the number of patients admitted for the first time to the trust/network with a diagnosis of bowel cancer within the audit period according to HES in England and PEDW in Wales. This can be larger than 100 if more patients are reported to the Audit than identified in HES/PEDW.

Data completeness

% of relevant patient group with useable value of data item.

ASA grade

% of patients recorded as having a major resection who have a particular ASA grade recorded, or no ASA recorded.

Management of all patients

Clinical Nurse Specialist

% of patients recorded as having been seen by a clinical nurse specialist or a member of their team.

Management of patients having major resection

At least 12 lymph nodes excised (%)

% of colon cancer patients undergoing major resection with a recorded number of lymph nodes, who had at least 12 lymph nodes examined, reported by the trust/hospital/MDT providing major resection.

Adjuvant chemotherapy (%)

% of adjuvant chemotherapy in patients undergoing major resection for pathological stage III colon cancer between 01 June 2017 and 31 August 2020. These are unadjusted chemotherapy rates reported by the trust/hospital/MDT providing major resection. SACT and HES data are used for patients treated in England and PEDW data are used for patients treated in Wales.

Severe acute toxicity after adjuvant chemotherapy (%)

% risk-adjusted overnight admission for severe acute toxicity in patients receiving adjuvant chemotherapy for stage III colon cancer, reported by the trust/hospital/MDT providing chemotherapy. ICD-10 diagnosis codes in overnight admissions in HES/ PEDW from the first cycle of chemotherapy to 8 weeks after the last cycle of chemotherapy are used to identify severe acute toxicity. Estimates are risk-adjusted for age, sex, number of comorbidities, performance status and staging.

Rectal cancer patients

Neo-adjuvant therapy (%)

% of rectal cancer patients having short- or long-course radiotherapy prior to major resection, reported by the trust/hospital/MDT providing major resection.

Circumferential resection margin: Negative (%)

% of rectal cancer patients undergoing major resection whose CRM is reported to be negative, reported by the trust/hospital/MDT providing major resection.

Circumferential resection margin: Recorded (%)

% of rectal cancer patients undergoing a major resection who have a recorded CRM, reported by the trust/hospital/MDT providing major resection.

Rectal volume

Reported number of rectal major resections between 1 April 2021 and 31 March 2022, reported by the trust/hospital/MDT providing major resection.

APER/Hartmann’s (%)

% of patients whose rectal cancer resection is an abdomino-perineal excision of rectum (APER)/pelvic exenteration/Hartmann’s 1 April 2016 to 30 September 2021, reported by the trust/hospital/MDT providing major resection.

Compare trust outcomes

Trust outcomes are reported reported by the trust/hospital/MDT providing major resection. Funnel plots display trust risk-adjusted outcomes only for 2-year mortality this year. Other outcomes are not outlier-reported this year because they are measured on patients diagnosed and/or treated during the COVID-19 pandemic. The funnel regions represent the 95 per cent limit and the 99.8 per cent limit for trusts compared to the national average. Those trusts with results outside the outer (99.8 per cent) limit are considered potential outliers. Previous years of results show funnel plots for all five trust outcomes.

Risk adjustment is performed using the seven items listed under Data Quality as well as mode of admission

(elective/emergency) and number of co-morbidities according to HES/PEDW, and an interaction between age and distant metastases. Missing values are imputed using Multiple Imputation. The model for two-year mortality additionally includes interactions between follow-up time (0-3 months after surgery vs. 3-24 months after surgery) and all of the risk factors.

See FAQs <https://www.nboca.org.uk/about/faq/> for more details.

Data Quality

All Patients:	Trust	Network	National
Number of patients in Audit	220	1867	35779
Case ascertainment (%)	Good	Good	Good
Data completeness of:			
– Pre-treatment TNM (%)	100	85	86
– Performance status (%)	100	96	89

Patients having major resection:	Trust	Network	National
Number of patients in Audit	79	1016	19631
ASA grade 1 (%)	23	11	9
ASA grade 2 (%)	46	50	53
ASA grade 3 (%)	28	36	31
ASA grade 4+ (%)	4	3	2
ASA grade not recorded (%)	N/A	1	4
Data completeness of:			
7 Audit items for risk-adjustment (%)	85	93	87

Key:

> 80%
50 - 80%
< 50%

Management of all patients

All Patients:	Trust	Network	National
Number of patients in Audit	220	1867	35779

All Patients:	Trust	Network	National
Seen by Clinical Nurse Specialist (%)	98	94	88

Management of patients having major resection

Patients having major resection:	Trust	Network	National
Number of patients in Audit	79	1016	19614
Distant metastases (%)	6	5	5
Urgent or emergency surgery (%)	13	11	15
At least 12 lymph nodes excised (%)	84	89	84
Laparoscopic surgery attempted (%)	61	80	72
Risk-adjusted length of stay > 5 days (%)	60	46	55

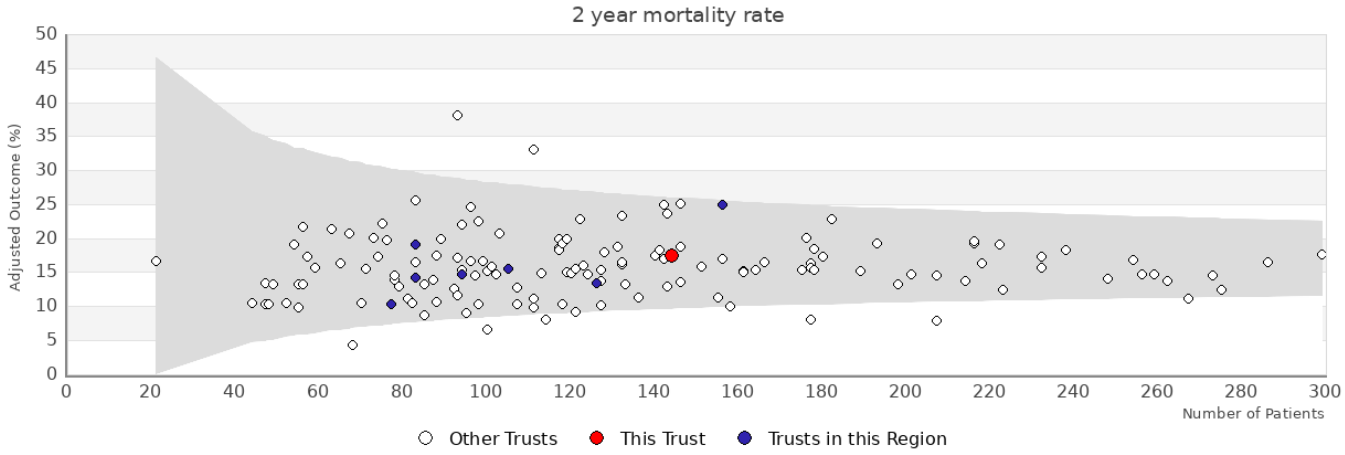
Patients having major resection for stage III colon cancer:	Trust	Network	National
Number of patients in audit	80	N/A	10747
Adjuvant chemotherapy (%)	66	N/A	62

Patients receiving chemotherapy after major resection for stage III colon cancer:	Trust	Network	National
Number of patients in audit	119	N/A	6608
Severe acute toxicity after adjuvant chemotherapy (%)	22	N/A	22

Rectal cancer patients

Patients having major resection:	Trust	Network	National
Number of patients in Audit	15	N/A	4251
Neoadjuvant therapy (%)	21	N/A	33
Circumferential resection margin: Recorded (%)	80	94	89
Circumferential resection margin: Negative (%)	73	90	83
Rectal volume	12	N/A	4377

Patients in APER/Hartmanns estimate:	Trust	Network	National
Number of patients in APER/Hartmanns estimate	136	936	19644
APER/Hartmanns (%)	37	34	37



Trust	Number	Adjusted	Observed
East and North Hertfordshire NHS Trust	144	17.5%	14.3%
Other trusts within the region: East of England - South			
Bedfordshire Hospitals NHS Foundation Trust - Bedford Hospital	83	19.1%	17%
Bedfordshire Hospitals NHS Foundation Trust - Luton & Dunstable Hospital	94	14.8%	17.4%
Milton Keynes Hospital NHS Foundation Trust	83	14.2%	11.5%
Mid and South Essex NHS Foundation Trust - Basildon University Hospital	126	13.5%	14.3%
Mid and South Essex NHS Foundation Trust - Southend University Hospital	105	15.5%	15.4%
The Princess Alexandra Hospital NHS Trust	77	10.3%	11.1%
West Hertfordshire Hospitals NHS Trust	156	25%	20.7%