NBOCA | National Bowel Cancer Audit

NBOCA Annual Report 2020 – Provider results

North Bristol NHS Trust

Somerset, Wiltshire, Avon & Gloucestershire A11

The North Bristol NHS Trust incorporates Southmead Hospital and Frenchay Hospital in Bristol https://www.nbt.nhs.uk/ <https://www.nbt.nhs.uk/>

Patient inclusion and data sources

The majority of these results are for patients in England and Wales diagnosed with bowel cancer 1 Apr 2018 – 31 Mar 2019. The exceptions are for adjuvant chemotherapy and the four trust outcomes: 30-day unplanned readmission, 90-day mortality and 2-year mortality. 30-day unplanned readmission and 90-day mortality are further restricted to patients undergoing surgery up to 31 October 2019. Two-year mortality estimates include patients undergoing a major resection between 1 April 2016 and 31 March 2017. Adjuvant chemotherapy estimates include patients undergoing major resection for pathological stage III colon cancer between 01 December 2015 and 31 August 2018.

The Audit dataset is linked to Hospital Episode Statistics (HES) and Patient Episode Database for Wales (PEDW) at the patient level to obtain further information on patient care and follow-up such as stoma reversal and emergency readmissions in England/Wales. The dataset also links to Office of National Statistics records. These provide information about date, place 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 NCRAS in England and PEDW in Wales. This can be larger than 100 if more patients are reported to the Audit than identified in NCRAS/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

Potentially curative patients

Patients electively diagnosed with colon cancer with pre-treatment staging of T2-T4 and no evidence of metastatic disease.

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.

Adjuvant chemotherapy

% of adjuvant chemotherapy in patients undergoing major resection for pathological stage III colon cancer between 01 December 2015 and 31 August 2018 in England only. These are unadjusted chemotherapy rates.

Rectal cancer patients

Neo-adjuvant therapy (%)

% of rectal cancer patients having short- or long-course radiotherapy prior to major resection.

Circumferential resection margin: Negative (%)

% of rectal cancer patients undergoing major resection whose CRM is reported to be negative.

Circumferential resection margin: Recorded (%)

% of rectal cancer patients undergoing a major resection who have a recorded CRM.

APER rate (%)

% of patients with rectal cancer undergoing abdominoperineal excision of the rectum and therefore having a permanent stoma.

Compare trust outcomes

Funnel plots display trust risk-adjusted outcomes for 90-day mortality, 30-day unplanned readmission and 2-year mortality. This year we are not reporting 18-month stoma rates in readiness for two new stoma indicators in 2021. 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.

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	160	1094	29766
Case ascertainment (%)	55	63	90
Data completeness of:			
– Pre-treatment TNM (%)	98	92	83
– Performance status (%)	34	85	85

Patients having major resection:	**Trust**	**Network**	**National**

Number of patients in Audit	73	613	16499
ASA grade 1 (%)	4	5	10
ASA grade 2 (%)	52	59	53
ASA grade 3 (%)	32	30	30
ASA grade 4+ (%)	3	3	3
ASA grade not recorded (%)	10	3	4
Data completeness of:			
7 Audit items for risk-adjustment (%)	22	82	86

Key:

> 80%
50 - 80%
< 50%

Management of all patients

All Patients:	**Trust**	**Network**	**National**
Number of patients in Audit	160	1094	29766

All Patients:	Trust	Network	National
Seen by Clinical Nurse Specialist (%)	59	87	86

All patients deemed potentially curative	Trust	Network	National
Number of potentially curative patients	49	292	7226
Undergoing major resection (%)	90	87	86

Management of patients having major resection

Patients having major resection:	Trust	Network	National
Number of patients in Audit	73	613	16474
Distant metastases (%)	6	6	6
Urgent or emergency surgery (%)	5	13	15
At least 12 lymph nodes excised (%)	26	77	84
Laparoscopic surgery attempted (%)	96	78	72
Risk-adjusted length of stay > 5 days (%)	43	53	62

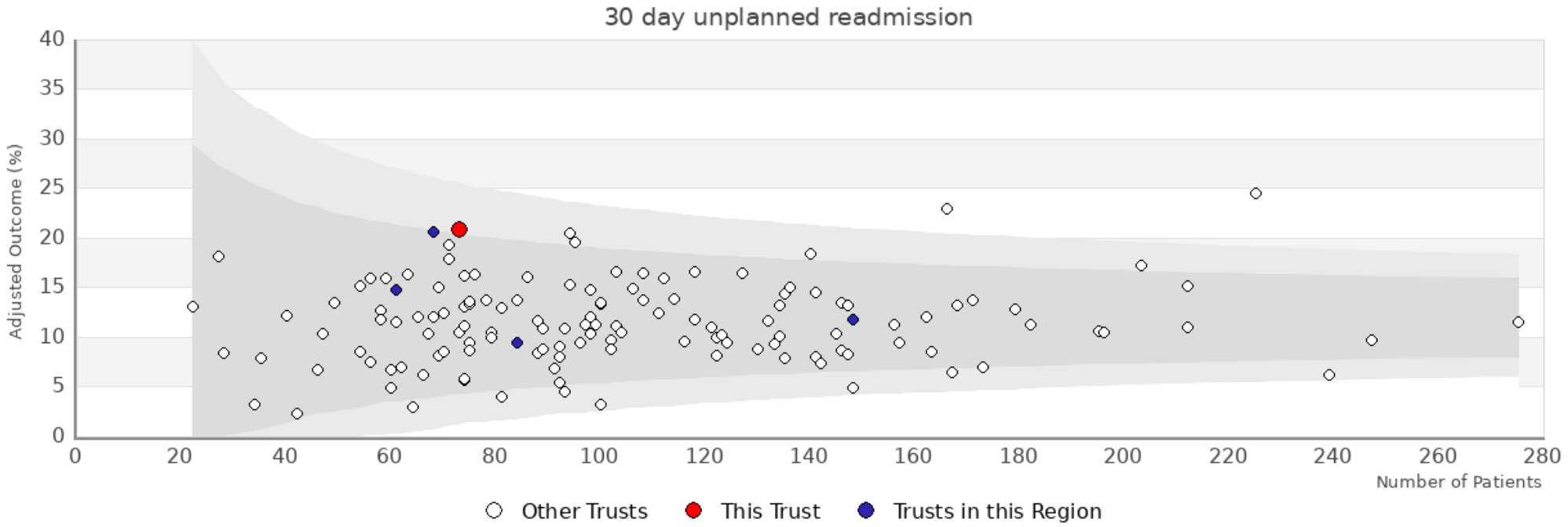
Patients having major resection for stage III colon cancer:	Trust	Network	National

Number of patients in audit	67	561	10641
Adjuvant chemotherapy (%)	66	65	61

Rectal cancer patients

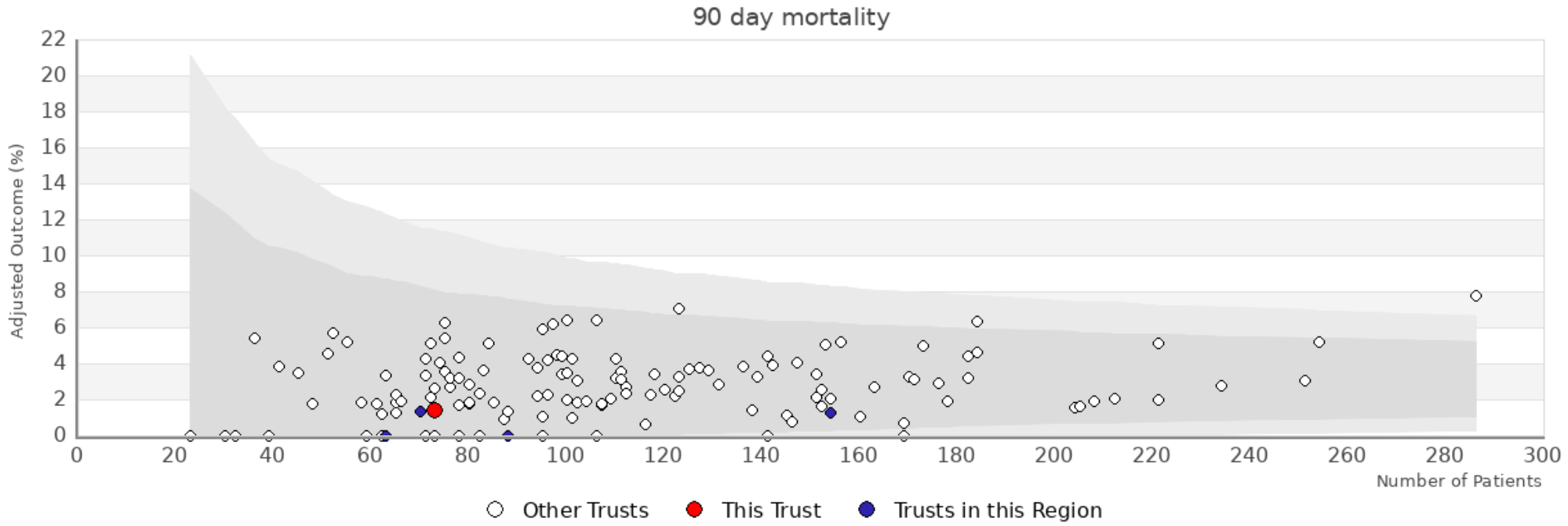
Patients having major resection:	**Trust**	**Network**	**National**
Number of patients in Audit	16	142	3899
Neoadjuvant therapy (%)	17	22	32
Circumferential resection margin: Recorded (%)	6	76	86
Circumferential resection margin: Negative (%)	6	72	79
Rectal volume	N/A	N/A	N/A

Patients in APER/Hartmanns estimate:	**Trust**	**Network**	**National**
Number of patients in APER/Hartmanns estimate	N/A	N/A	N/A
APER/Hartmanns (%)	N/A	N/A	N/A



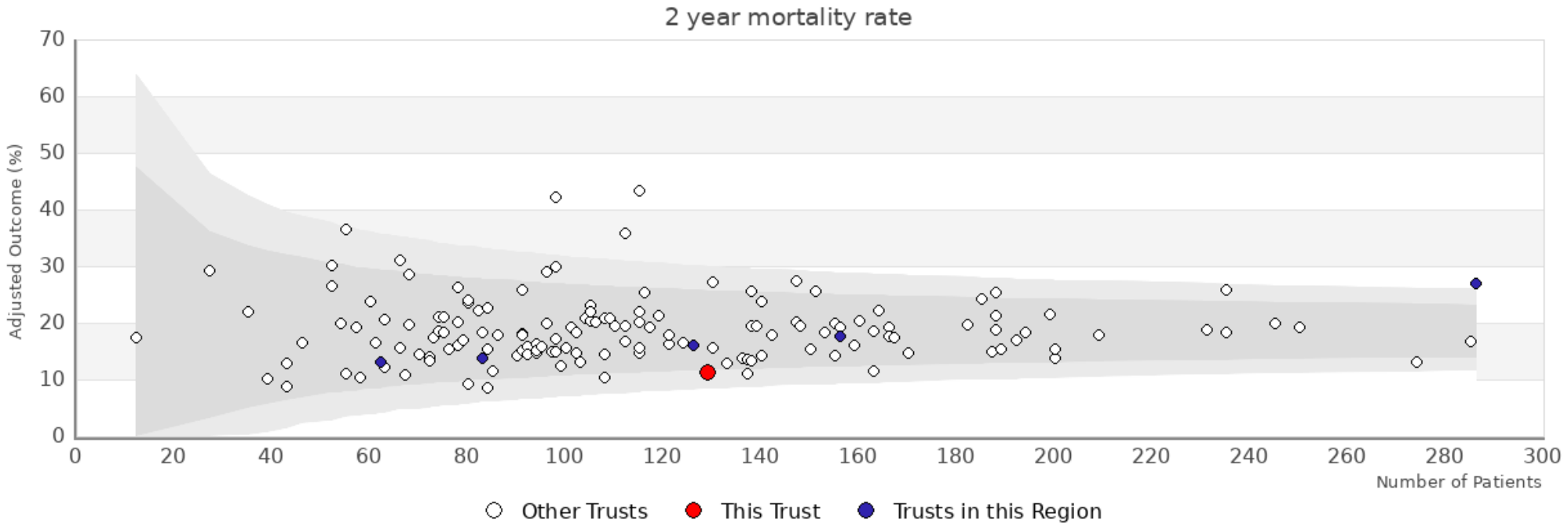
Trust	Number	Adjusted	Observed
North Bristol NHS Trust	73	20.9%	20.6%
Other trusts within the region: Somerset, Wiltshire, Avon & Gloucestershire			
Royal United Hospitals Bath NHS Foundation Trust	148	11.8%	11.5%
Salisbury NHS Foundation Trust	68	20.6%	19.1%

Trust	Number	Adjusted	Observed
University Hospitals Bristol and Weston NHS Foundation Trust	84	9.4%	9.5%
Yeovil District Hospital NHS Foundation Trust	61	14.8%	14.8%



Trust	Number	Adjusted	Observed
North Bristol NHS Trust	73	1.4%	1.4%
Other trusts within the region: Somerset, Wiltshire, Avon & Gloucestershire			
Royal United Hospitals Bath NHS Foundation Trust	154	1.3%	1.3%

Trust	Number	Adjusted	Observed
Salisbury NHS Foundation Trust	70	1.3%	1.4%



Trust	Number	Adjusted	Observed
North Bristol NHS Trust	129	11.3%	11.5%
Other trusts within the region: Somerset, Wiltshire, Avon & Gloucestershire			
Gloucestershire Hospitals NHS Foundation Trust	286	26.9%	22.6%
Royal United Hospitals Bath NHS Foundation Trust	156	17.6%	14.4%

Trust	Number	Adjusted	Observed
Salisbury NHS Foundation Trust	83	13.7%	10.1%
University Hospitals Bristol and Weston NHS Foundation Trust	126	16.1%	15.5%
Yeovil District Hospital NHS Foundation Trust	62	13.1%	12.1%