#### **NBOCA** National Bowel Cancer Audit NBOCA Annual Report 2020 – Provider results

### Imperial College Healthcare NHS Trust

RM Partners A17

The Imperial College Healthcare NHS Trust incorporates Charing Cross Hospital, St Mary's Hospital Paddington, and Hammersmith Hospital in London <u>https://www.imperial.nhs.uk/<https://www.imperial.nhs.uk/></u>

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

### Data Quality

All Patients:	Trust	Network	National
Number of patients in Audit	201	1245	29766
Case ascertainment (%)	103	87	90
Data completeness of:			
– Pre-treatment TNM (%)	93	86	83
– Performance status (%)	100	97	85

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

Number of patients in Audit	118	720	16499
ASA grade 1 (%)	10	9	10
ASA grade 2 (%)	48	58	53
ASA grade 3 (%)	36	29	30
ASA grade 4+ (%)	6	2	3
ASA grade not recorded (%)	0	2	4
Data completeness of:			
7 Audit items for risk-adjustment (%)	97	68	86

### Key:

> 80% 50 - 80% < 50%

# Management of all patients

All Patients:	Trust	Network	National
Number of patients in Audit	201	1245	29766

All Patients:	Trust	Network	National
Seen by Clinical Nurse Specialist (%)	96	94	86

All patients deemed potentially curative	Trust	Network	National
Number of potentially curative patients	54	324	7226
Undergoing major resection (%)	89	91	86

# Management of patients having major resection

Patients having major resection:	Trust	Network	National
Number of patients in Audit	118	720	16474
Distant metastases (%)	4	б	6
Urgent or emergency surgery (%)	20	13	15
At least 12 lymph nodes excised (%)	97	68	84
Laparoscopic surgery attempted (%)	57	62	72
Risk-adjusted length of stay > 5 days (%)	61	72	62

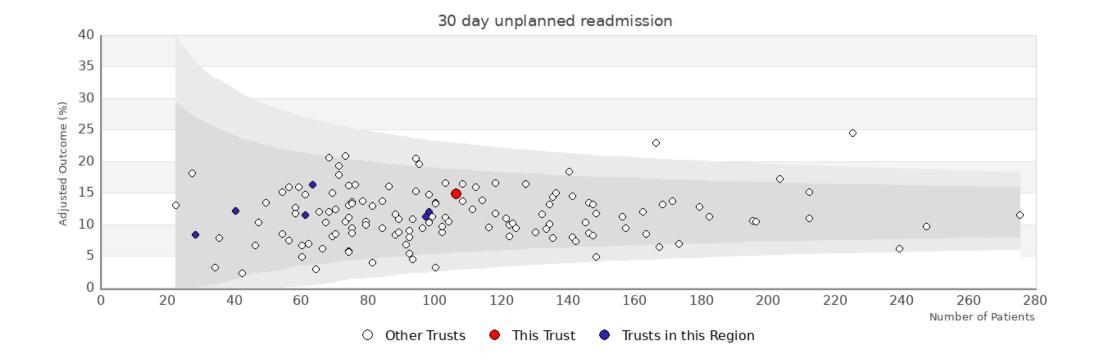
Patients having major resection for stage III colon cancer: Trust Network National
--

Number of patients in audit	79	470	10641
Adjuvant chemotherapy (%)	56	58	61

## Rectal cancer patients

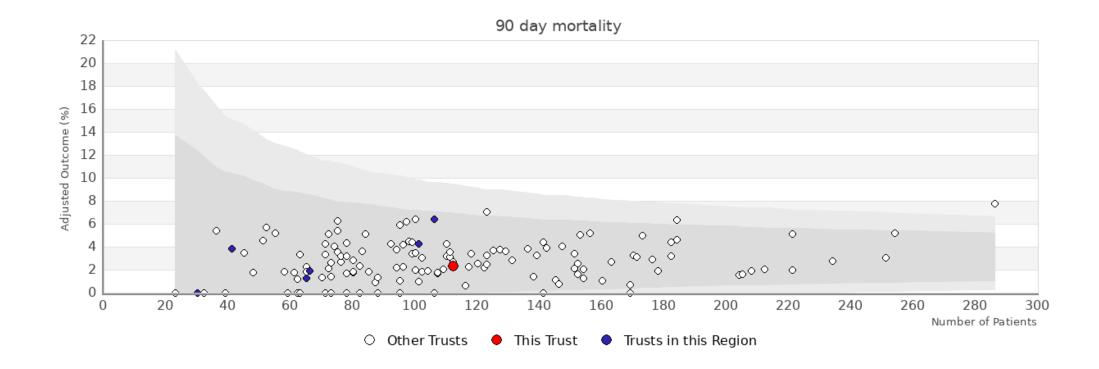
Patients having major resection:	Trust	Network	National
Number of patients in Audit	18	159	3899
Neoadjuvant therapy (%)	7	24	32
Circumferential resection margin: Recorded (%)	94	69	86
Circumferential resection margin: Negative (%)	83	62	79
Rectal volume	N/A	N/A	N/A

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



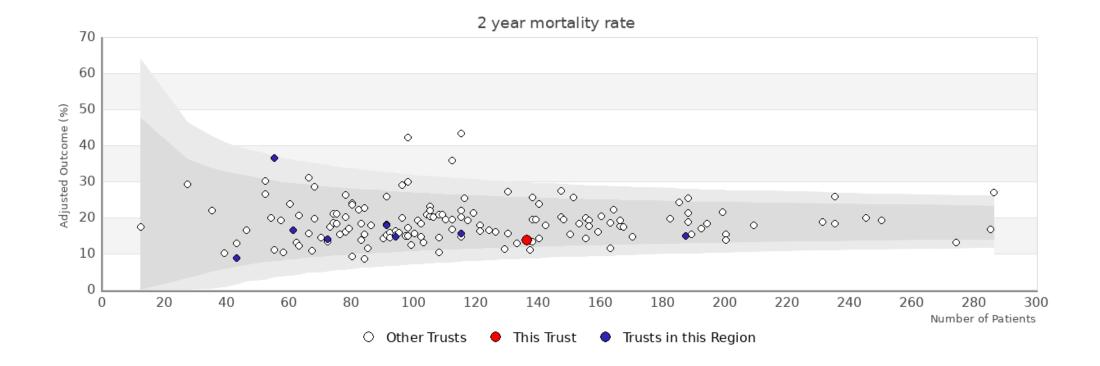
Trust	Number	Adjusted	Observed	
Imperial College Healthcare NHS Trust	106	14.9%	15.1%	
Other trusts within the region: RM Partners				
Chelsea and Westminster Hospital NHS Foundation Trust 40 12.2% 12.5%				
Croydon Health Services NHS Trust	61	11.5%	11.5%	

Trust	Number	Adjusted	Observed
Epsom and St Helier University Hospitals NHS Trust	98	12%	11.2%
Kingston Hospital NHS Foundation Trust	97	11.2%	10.3%
The Hillingdon Hospitals NHS Foundation Trust	63	16.3%	15.9%
The Royal Marsden NHS Foundation Trust	28	8.4%	10.7%



Trust	Number	Adjusted	Observed
Imperial College Healthcare NHS Trust	112	2.3%	2.7%
Other trusts within the region: RM Partners			
Chelsea and Westminster Hospital NHS Foundation Trust	41	3.8%	4.9%
Croydon Health Services NHS Trust	66	1.9%	1.5%

Trust	Number	Adjusted	Observed
Epsom and St Helier University Hospitals NHS Trust	106	6.4%	5.7%
Kingston Hospital NHS Foundation Trust	101	4.3%	4%
The Hillingdon Hospitals NHS Foundation Trust	65	1.3%	1.5%



Trust	Number	Adjusted	Observed
Imperial College Healthcare NHS Trust	136	13.8%	12.5%
Other trusts within the region: RM Partners			
Chelsea and Westminster Hospital NHS Foundation Trust	94	14.6%	18.4%
Croydon Health Services NHS Trust	55	36.7%	31.9%

Trust	Number	Adjusted	Observed
Epsom and St Helier University Hospitals NHS Trust	115	15.7%	16.7%
Kingston Hospital NHS Foundation Trust	91	17.9%	18.7%
London North West Hospitals NHS Trust	187	14.9%	12.3%
St George's Healthcare NHS Trust	61	16.6%	14.2%
The Hillingdon Hospitals NHS Foundation Trust	72	13.9%	15.3%
The Royal Marsden NHS Foundation Trust	43	8.8%	4.7%