

National Bowel Cancer Audit (NBOCA) Outlier Responses 2024: Performance Indicator 3

NBOCA Performance Indicator 3			
Adjusted 90-day mortality after major resection (greater than 2 standard deviations from national average twice in three consecutive years)			
NHS Trust	Trust Response to NBOCA Confirmed Outlier Notification	Outlier 2023?	Outlier 2022?
Bradford Teaching Hospitals NHS Foundation Trust	We are grateful for the opportunity to respond to the audit data stating that we have greater than expected mortality outcomes. We have reviewed the n* deaths in this time period; n* planned palliative resection, n* elective and n* emergency cases (in n* of the emergency cases the cancers were incidental findings and not identified on pre-operative CT). Despite the high risk, it was a joint patient and clinician decision to undertake the surgery. NBOCA stated n* deaths however we have identified n* patients with mortality within 90 days. <i>[n* actual numbers suppressed due to small number of patients to protect patient anonymity]</i> NBOCA Project Team comment: For the indicator “90-day mortality after major resection” we encourage Trusts to review the total number of cases as well as the cases leading to mortality. We strongly recommend that the Trust review coding procedures going forward.		Performance Indicator not outlier reported 2023 & 2022.

National Bowel Cancer Audit (NBOCA) Outlier Responses 2024: Performance Indicator 4

NBOCA Performance Indicator 4			
Adjusted 30-day unplanned return to theatre after major resection (greater than two standard deviations from national average twice in three consecutive years)			
NHS Trust	Trust Response to NBOCA Confirmed Outlier Notification	Outlier 2023?	Outlier 2022?
Buckinghamshire Healthcare NHS Trust	Following communication between the NBOCA Project Team and Buckinghamshire Healthcare NHS Trust, we have reviewed the clinical coding of the Trust's Outliers in line with the information provided in response to our queries. We note that there is no coding that captures planned returns to theatre. Based on the information provided by NBOCA, we have carefully assessed each of the flagged patients. Based on this review we conclude that n* of the patients were incorrectly classified as returns to theatre for the following reasons: Planned Returns to Theatre – n* patients had scheduled returns to theatre. As there is currently no mechanism within Clinical Coding to indicate planned events, these cases have been flagged incorrectly. However, we would like to clarify that these re-visits were pre-planned. Incorrect Date Assignment – n* patients had incorrect date assigned meaning there was no return to theatre. Vacuum-Assisted Closure (VAC) Device Coding – n* patients coded with S57.7, which falls under NBOCA's list of OPCS codes considered to indicate an unplanned return to theatre. However, as these procedures were carried out in an ambulatory setting, we believe they should not be classified as returns to theatre. Additionally, we would like to highlight a significant increase in emergency patient presentations compared to pre-COVID times at Buckinghamshire Healthcare NHS Trust. Prior to COVID, the emergency presentation rate was 9%, increasing to over 30% post-COVID, and currently standing at 16% in this report. This shift has resulted in a higher likelihood of planned returns to theatre, which is not a typical practice in an elective setting. Furthermore, the increase in emergency presentations suggests a trend of later-stage diagnoses and more complex cases, which directly impacts elective outcomes, processes, and associated risks such as anastomotic leaks. <i>[n* actual numbers suppressed due to small number of patients to protect patient anonymity]</i> NBOCA Project Team comment: The NBOCA team notes that the performance indicator is risk-adjusted, including for mode of presentation.		Performance Indicator not outlier reported 2023 & 2022.

	As issues with coding and data quality were identified we strongly recommend that the Trust review coding procedures going forward. Unfortunately, there is currently no means of determining planned re-looks from the coding. However, the circumstances in which a “planned return to theatre” occurs are rare and unlikely to greatly affect results or be the sole cause of a trust becoming an outlier. We acknowledge that there were coding and data quality issues which affected the accuracy of this metric. Additionally, an independent review of all patients (not just those classified as having a return to theatre) after undergoing surgery in the relevant time period is required to identify potential systematic concerns in care.	
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NBOCA Performance Indicator 4			
Adjusted 30-day unplanned return to theatre after major resection (greater than two standard deviations from national average twice in three consecutive years)			
NHS Trust	Trust Response to NBOCA Confirmed Outlier Notification	Outlier 2023?	Outlier 2022?
James Paget University Hospitals NHS Foundation Trust	Thank you for sending the spreadsheet with details of patients who have been coded as unplanned return to theatre. After double checking on the Trust theatre system (ORMIS) and with the Trust’s Clinical Coding service our rate of unplanned return to theatre is 5.6% and not 12%. Detailed explanation as below. We have also included the spreadsheet for all those 11 patients after removing their PID details. Amongst 11 patients entered as unplanned return to theatre within a month of primary operation - only 5 were true unplanned return to theatre. We have liaised with Information Services about coding issues and the unplanned return is only 5 not 11. The remaining 6 patients who did not have unplanned return to theatre are as detailed in our full response. The Trust has taken measures to make sure the coding entered is correct by double checking before submission. <i>[Detailed clinical information for small number of patients removed to protect anonymity].</i> NBOCA Project Team comment: Further to an additional review of the Trust response, the NBOCA Project Team acknowledge that if coding issues were resolved the trust would not be an outlier on this occasion. We encourage the Trust to resolve these coding issues.		Performance Indicator not outlier reported 2023 & 2022.

NBOCA Performance Indicator 4

Adjusted 30-day unplanned return to theatre after major resection (greater than two standard deviations from national average twice in three consecutive years)

NHS Trust	Trust Response to NBOCA Confirmed Outlier Notification	Outlier 2023?	Outlier 2022?
Lewisham and Greenwich NHS Trust	Thank you for your letter of 22nd October 2024 informing us that Lewisham & Greenwich NHS Trust has been identified as a potential outlier for the performance indicator: Adjusted 30-day unplanned readmission after major resection. As requested we have reviewed the data provided, including the requested patient-level data. We have collated data for the relevant period from operating department and MDT records and compared this with the NBOCA data. We do not consider the NBOCA data to be accurate in comparison to trust records. The denominator was incorrect. Overall, we identified a further 33 patients who should have been included. N* patients included erroneously. From the 158 cases carried out on patients diagnosed between 1 April 2022 and 31 March 2023, there were 11 unplanned returns to theatre a rate of $11/158 = 7.0\%$. NBOCA data includes <i>[detailed clinical information removed for small number of patients to protect patient anonymity]</i>. We would be very happy to share the trust level data. NBOCA Project Team comment: Following our review of the Trust response to this, we acknowledge the issues given as an explanation relate to data coding and data quality and we recommend the Trust review its coding procedures to increase data quality going forward.		Performance Indicator not outlier reported 2023 & 2022.

National Bowel Cancer Audit (NBOCA) Outlier Responses 2024: Performance Indicator 5

NBOCA Performance Indicator 5			
Adjusted 30-day unplanned readmission after major resection (greater than 3 standard deviations from national average)			
NHS Trust	Trust Response to NBOCA Confirmed Outlier Notification	Outlier 2023?	Outlier 2022?
Bradford Teaching Hospitals NHS Foundation Trust	We are grateful to add a comment on the data from the published audit. On review of the 19 readmissions; n* were planned attendances at our SAU for review, bloods tests or medication collection. 11 patients had unplanned attendances at our SAU. These patients were all assessed and discharged directly home the same day. These attendances at SAU have been documented as readmissions which may not be the cases in other organisations. Of the n* true readmissions, n* had an acute pathology unrelated to their colonic surgery. We have increased our capacity of specialist nurses (ERAS and CNS) with patient telephone follow up on discharge which will hopefully reduce the unplanned attendances whilst maintaining appropriate support for the patients <i>[n*=actual numbers suppressed to protect patient anonymity]</i> NBOCA Project Team comment: For the indicator “30-day unplanned readmission after major resection” we acknowledge that issues with coding and data quality were identified. We strongly recommend that the Trust review coding procedures going forward.		Performance Indicator not outlier reported 2023 & 2022.

NBOCA Performance Indicator 5

Adjusted 30-day unplanned readmission after major resection (greater than 3 standard deviations from national average)

NHS Trust	Trust Response to NBOCA Confirmed Outlier Notification	Outlier 2023?	Outlier 2022?
Lewisham and Greenwich NHS Trust	Thank you for your letter of 22nd October 2024 informing us that Lewisham & Greenwich NHS Trust has been identified as a potential outlier for the performance indicator: Adjusted 30-day unplanned readmission after major resection. As requested we have reviewed the data provided, including the requested patient-level data. We have collated data for the relevant period from operating department and MDT records and compared this with the NBOCA data. We do not consider the NBOCA data to be accurate in comparison to trust records. The denominator was incorrect. Overall, we identified a further 33 patients who should have been included. N* patients included erroneously. From the 158 resections carried out on patients diagnosed between 1 April 2022 and 31 March 2023, there were 21 unplanned readmissions, a rate of $21/158 = 13.3\%$. We reviewed an additional 20 patients in our ambulatory care units following their surgery and these may have been classified as admission episodes, which would explain the NBOCA figure. We would be very happy to share the trust level data. NBOCA Project Team comment: Following our review of the Trust response to this, we acknowledge the issues given as an explanation relate to data coding and data quality and we recommend the Trust review its coding procedures to increase data quality going forward.		Performance Indicator not outlier reported 2023 & 2022.

NBOCA Performance Indicator 5

Adjusted 30-day unplanned readmission after major resection (greater than 3 standard deviations from national average)

NHS Trust	Trust Response to NBOCA Confirmed Outlier Notification	Outlier 2023?	Outlier 2022?
Maidstone and Tunbridge Wells NHS Trust	Thank you for the potential outlier letter. In your letter you noted that the MTW unplanned readmission rate following major resection was 19% against a national average of 11%. We have looked back at the data and have found 287 patients who underwent any surgery for bowel cancer (this includes a small number of patients having a de-functioning stoma rather than a major resection) treated at MTW during this time frame. Of these there were 36 unplanned re-admissions which equates to a rate of 12.5%. This remains higher than the national average however we bring a number of those with stomas back for blood tests to check electrolyte status and may give them IV fluids. This is done via a defined pathway through the surgical SDEC clinic but is coded as a readmission. We are looking further at this data to determine how we can submit more accurate data going forwards. NBOCA Project Team comment: The NBOCA team acknowledges a full response was received and accept the explanation given. As issues with coding and data quality were identified we strongly recommend that the Trust review coding procedures going forward.		Performance Indicator not outlier reported 2023 & 2022.

NBOCA Performance Indicator 5

Adjusted 30-day unplanned readmission after major resection (greater than 3 standard deviations from national average)

NHS Trust	Trust Response to NBOCA Confirmed Outlier Notification	Outlier 2023?	Outlier 2022?
North West Anglia NHS Foundation Trust	Thank you for highlighting and sending the NWAFT data which suggested that we are an outlier for the adjusted 30-day unplanned readmission after major colorectal resection. We had a chance to look through the data in detail. - Most of the re attendances in the trust are to Surgical Assessment Unit (at Peterborough City Hospital) and Ambulatory Care Unit or Emergency Department (at Hinchinbrook Hospital) for either planned review for bloods/wound check or TWOC. These were not re-admissions in true sense as patients were discharged from the settings after review on same day. - We have discussed in the Specialty Meeting about the need for SAU/ACU to be classed as a day case setting and not inpatient. We are working with Transformation team to have the attendance at SAU/SACT recorded as a clinic so going forward this should prevent this problem with the data. - There were n* patients in the list where we could not ascertain readmission episode. We could not find record of such in our system. - We attached detailed spreadsheet with the findings for your perusal. If we consider all these as non re admission, our data lies well within the national average. <i>[n* actual numbers suppressed due to small number of patients to protect patient anonymity]</i> NBOCA Project Team comment: The NBOCA team acknowledges a full response was received and accept the explanation given. As issues with coding and data quality were identified we strongly recommend that the Trust review coding procedures going forward. Noted that some of the readmissions included were to other Trusts.		Performance Indicator not outlier reported 2023 & 2022.

NBOCA Performance Indicator 5

Adjusted 30-day unplanned readmission after major resection (greater than 3 standard deviations from national average)

NHS Trust	Trust Response to NBOCA Confirmed Outlier Notification	Outlier 2023?	Outlier 2022?
University Hospitals of North Midlands NHS Trust	Thank you for your letter dated the 22nd of October 2024, and for the opportunity to allow us to analyse our data, specifically readmissions within 30 days of discharge following major resection for colorectal cancer. All patients aged 18 or over diagnosed between 1 April 2022 and 31 March 2023 who, according to NBOCA, underwent a major resection by 30th June 2023 were included. In your letter you cite our trust had a higher-than-expected rate of 30-day unplanned readmissions after major resection. The adjusted 30-day readmission rate of 20% for University Hospitals of North Midlands NHS Trust compares to an overall 30-day unplanned readmission rate for England and Wales of 11% (readmission rate adjusted for patient case-mix). The unadjusted 30-day readmission rate in our trust was 19.9%. We have undertaken an in-depth review by examining all individual patient electronic records. 59 patients of the 296-patient operated were identified, coded and reported in the 30-day readmission report - Elective surgery 240 (81.08%); Emergency Surgery 56(18.92%). 59 patients were therefore identified as possible unplanned readmissions related to the surgery. However, of this cohort, 18 patients (CD1) and 9 patients with CD2 were simply reviewed in our surgical assessment unit and discharged on the same day without being admitted to the hospital. Further n* patients with CD1 and n* patients with CD2 were discharged within 24 hr. 14 patients CD2 were discharged within 24 hrs of admission awaiting Imaging. This is part of the safety netting arrangements incorporated to our colorectal ERAS (Enhanced recovery after surgery) pathway. They should therefore be classified as re-attendances rather than readmissions. <i>[n* - actual numbers suppressed to protect patient anonymity, detailed clinical information for small numbers of patients suppressed to protect patient anonymity]</i> Taking the above into consideration, the true readmission number following major colorectal cancer resection for our unit for this period was a total of 35 patients rather than 59 incorporated in the report. This leads to a true unadjusted readmission rate of 8.10% which compares favourably with published national data. I am confident that you will update the NBOCA report as appropriate, ensuring accurate presentation of the high quality of surgery offered in our unit NBOCA Project Team comment: The NBOCA team acknowledges a full response was received and accept the explanation given. As issues with coding and data quality were identified we strongly recommend that the Trust review coding procedures going forward.		Performance Indicator not outlier reported 2023 & 2022.

NBOCA Performance Indicator 5

Adjusted 30-day unplanned readmission after major resection (greater than 3 standard deviations from national average)

NHS Trust	Trust Response to NBOCA Confirmed Outlier Notification	Outlier 2023?	Outlier 2022?
Wrightington, Wigan and Leigh NHS Foundation Trust	Thank you very much for the letter dated 22 October 2024 highlighting Wrightington, Wigan and Leigh NHS Foundation Trust as an outlier for adjusted 30-day unplanned readmission rates after major bowel resection. We have undertaken a review of the cases during that period and find that 12 out of 88 were incorrectly recorded as readmissions, but they were in fact reattendances, some booked and some not, but none of these patients were admitted. Eleven out of 88 were true readmissions giving us a rate of 12.5%. Hopefully, this readjusted rate should take us down within normal range. In answer to your question number one, does the Trust consider NBOCA data to be accurate in comparison to Trust records, your data is accurate, but how we record it is not. We are looking into the recording of data as a surgical division. We appreciate that there is a difference between reattendances, both planned and unplanned, versus true readmissions. I think it all comes down to coding and that is something that we need to address. NBOCA Project Team comment: We acknowledge that there may have been some cases which were wrongly coded as readmissions. We support and encourage the Trust's decision to review coding procedures.		Performance Indicator not outlier reported 2023 & 2022.

NBOCA Performance Indicator 5

Adjusted 30-day unplanned readmission after major resection (greater than 3 standard deviations from national average)

NHS Trust	Trust Response to NBOCA Confirmed Outlier Notification	Outlier 2023?	Outlier 2022?
Wye Valley NHS Trust	Thank you for providing patient-level data for review of the NBOCA data that identified Wye Valley NHS Trust as a potential outlier on adjusted 30-day unplanned readmission after major resection. Review of our data has revealed the following: 19 patients were identified as unplanned readmissions after major resection. Only 7 patients from the identified cohort were true readmissions after major surgery. The other 12 patients were not true readmissions. They were patients who attended the Surgical Same day Emergency Care service and were wrongly classed as readmissions due to local data recording. Surgical Same Day Emergency Care service was necessary as a 'back-stop' during the Covid recovery period as patients were unable to (reliably) access GP services for routine care (blood test etc.) and sometimes reassurance. The trust is currently in the process of changing its data acquisition methods to prevent SSDEC attendance being recorded as readmissions. The wider issue of patient access to GP services has improved but remains unresolved. NBOCA Project Team comment: We acknowledge that there may have been some cases which were wrongly coded as readmissions. We support and encourage the Trust's decision to review coding procedures to improve data quality.		Performance Indicator not outlier reported 2023 & 2022.

National Bowel Cancer Audit (NBOCA) Outlier Responses 2024: Performance Indicator 6

NBOCA Performance Indicator 6			
Adjusted 18-month unclosed ileostomy after anterior resection (greater than three standard deviations from national average)			
NHS Trust	Trust Response to NBOCA Confirmed Outlier Notification	Outlier 2023?	Outlier 2022?
Barts Health NHS Trust	No response received.		N/A for 2023 & 2022 due to multiple years of data required to calculate this metric.

NBOCA Performance Indicator 6

Adjusted 18-month unclosed ileostomy after anterior resection (greater than three standard deviations from national average)

NHS Trust	Trust Response to NBOCA Confirmed Outlier Notification	Outlier 2023?	Outlier 2022?
Hywel Dda Health Board MDT (West Wales General)	Thank you for the opportunity to review and comment on our 'Stoma Reversal Rates'. I would like to apologise for the time it has taken for us to reply to you. We have now reviewed the data and the data is summarised in the table below. One of the reasons for the delay was availability of data. Unfortunately, we haven't been able to source the original dataset submitted to the audit to validate it and make amendments as appropriate. You had suggested getting the dataset from our local CANISC team. As you probably have been made aware, we have migrated to a new system of data collection and it has been difficult to access the data from both the old and the new systems. I have therefore had to resort to data extracted from our theatre records/coding to identify all patients having stoma procedures and then select the ones having stoma procedures as part of their cancer treatment. A few of the APERS performed probably have not been captured due to lack of coding of the 'stoma' formation. Unfortunately as we do not have access to the CANISC data, I am unable to provide the exact numbers. <i>[Table with clinical data removed due to some small patient numbers to protect patient anonymity]</i> Reviewing the data specific to elective diversion ileostomies performed, 25 of 28 patients have been reversed in the 2022 cohort with a median time to reversal of 11 months. In addition, n* patients from the 2021 cohort have had their reversals in 2022. Of the 2023 cohort, only n* of the 14 are awaiting reversals. The median time to offer of reversal is 9 months at present. <i>[n* - actual number suppressed due to small numbers to protect patient anonymity]</i> We would like to point out some of the mitigating circumstances that we believe to have contributed to the current situation: 1. PEDW data set is not validated and unlike the HES data cannot be used reliably to identify an individual patient's pathway/ episode. This necessitates manual updating of the dataset. 2. Data entry and validation – while the old system would have provided opportunity to update the dataset during validation, there is lack of clarity on how we could do this in the current system. We also have been informed that we no longer need to validate this data. The concerns of inadequate/unvalidated data uploaded to NBOCA has now increased.		N/A for 2023 & 2022 due to multiple years of data required to calculate this metric.

	3. Potentially wrong classification of the intent of the stoma giving a false impression of the number of patients who would potentially be suitable for reversal. 4. Higher number of emergency stomas performed – these patients have either had more advanced disease or post-op complication reducing their survival and hence not providing an opportunity to reverse their stoma. 5. Significant workforce issues – since the pandemic, we have had a reduction in the surgical workforce/resources to be able to perform timely reversals. [Comment removed for reasons of protecting anonymity] Following this review, we will be instituting the following contingency measures to minimise such occurrence going forward: 1. Develop a local database to identify all patients having stomas 2. Prospectively document the intent of stoma formation by the Consultant performing the procedure 3. This will help tract the patients for timely reversal 4. Request Contrast study at MDT clinic when counselling the patient with the post-op histology 5. Explore and identify mechanisms to update the dataset when the reversal is performed. Hopefully we have been able to demonstrate that our ‘Stoma Reversal Rates’ for electively planned ileostomies are within acceptable timeframes. I will share this information with my colleagues at the next Business Meeting to ensure wider compliance with data quality. I hope these will improve the quality of data submitted and may speed the process of reviewing our practice if it ever becomes necessary. NBOCA Project Team comment: Following our review of the MDT response and given issues with coding and data quality were identified, we strongly recommend that the Health Board MDT review coding procedures going forward. NBOCA welcomes the planned measures to improve timely ileostomy closure and to help with this we invite Hywel Dda Health Board MDT (West Wales General) to join the NBOCA Quality Improvement initiative CLOSE-IT QUICK.	
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NBOCA Performance Indicator 6

Adjusted 18-month unclosed ileostomy after anterior resection (greater than three standard deviations from national average)

NHS Trust	Trust Response to NBOCA Confirmed Outlier Notification	Outlier 2023?	Outlier 2022?
Northern Care Alliance	Thank you for writing to us recently about the organisation being a potential outlier in relation to 18 month unclosed ileostomy following anterior resection. The figure provided to us is that our figure stands at 60.4% while the provided figures nationally is 38%. As mentioned, this relates to patients who underwent an anterior resection for rectal cancer between the 1 April 2017 to the 31 March 2022 and received an ileostomy within 30 days of that procedure. Many thanks indeed for raising this as a cause for concern. Our colorectal surgical department delivers a high volume of rectal cancer surgery with of course attached to it a significant number of defunctioning ileostomies. The department is also aware and conscious of the requirement to reverse these ileostomies as soon as is feasible given the psychological and physical stress this causes to our patients. As mentioned in the NBOCA report published in February 2024 the Covid pandemic has played a significant role in the delay to reverse ileostomies. As a cancer department we maintained our activity during the Covid pandemic and therefore priority was given to cancer resections during the pandemic but also during the recovery period which lasted several months after the end of the pandemic. With the help of our Clinical Audit Department, myself as Colorectal Cancer Lead and the Surgical Clinical Director have gone through the list of patients that NBOCA kindly provided us with. We reviewed the clinical details of every patient in order first of all to ascertain ourselves of the accuracy of the figures provided but also to find out the reason why patients had a reversal beyond 18 months or indeed did not have a reversal at all. Within the Oldham Care Organisation, we have identified 49 patients who had a defunctioning ileostomy during the mentioned period. - We found that 20 patients out of the list had their reversal in less than 18 months. This differs from the 16 patients identified by the NBOCA data sent to us. - That leaves us with 29 patients, with a non-compliance rate of 59%. - Thirteen (13) were reversed after 18 months. Reasons we identified were varied, including COVID, patient's choice and medical reasons. [Detailed clinical information removed for small number of patients to protect anonymity.] - Those who have not been reversed amount to sixteen (16). Sadly, eight patients died within the 18 month timeframe. [Detailed clinical information removed for small number of patients to protect anonymity.]		N/A for 2023 & 2022 due to multiple years of data required to calculate this metric.

	- I feel that the cohort of patients who sadly passed away within 18 months (8) and [detailed clinical information removed for small number of patients to protect anonymity] should be excluded from the non-compliance group. This amounts to fourteen patients out of the 29 'outliers'. If we were to exclude this group, the outlying number comes to fifteen, with a 30.6% of non-compliance. I propose that this figure is logged for the OCO. Moving forward: 1. Those patients who have been identified to be on the waiting list will now be expedited and have their stoma reversed as soon as is feasible. 2. The Clinical Audit Department will now hold a stoma register with a monthly review. There will be closer collaboration between the audit department and the surgical directorate and patients who have waited for longer than 12 months will be given priority to have their stoma reversed. 3. The surgical directorate will also hold its own database and ensure that patients are listed in a timely way. 4. There has been a previous agreement that the stoma therapist would alert the directorate about patients who have waited for a long time to have their stoma reversed. For some reason we feel that this has not been working well. We will now work closely with our stoma therapist group as a further safety net. 5. We will discuss this serious matter at our next colorectal cancer MDT operational meeting, held every three months, in order to raise awareness of the team. I firmly believe that with those measures we should be able to rectify the situation and I am confident that we will move closer to the national standards. NBOCA Project Team comment: Following our review of the Trust response, we note that 61% is a high rate of unclosed ileostomies. While there have been discrepancies between the sites in the Trust this remains a high rate overall for the Northern Care Alliance. We recommend the Northern Care Alliance apply to participate in the pilot phase of the Close-it Quick QI initiative which will focus on timely closure of ileostomy.	
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NBOCA Performance Indicator 6

Adjusted 18-month unclosed ileostomy after anterior resection (greater than three standard deviations from national average)

NHS Trust	Trust Response to NBOCA Confirmed Outlier Notification	Outlier 2023?	Outlier 2022?
Nottingham University Hospitals NHS Trust	NBOCA data suggested that 57.6% NUH patients had unclosed ileostomy at 18 months which is an outlier compared to the 38% national average. We have reviewed the electronic notes of the patients to which this applies, those having loop ileostomy formation from 2017 – 2022. The data included in NBOCA lacks context around ileostomy closures performed in the private sector that do not appear in the dataset and a large proportion of patients choosing not to have reversal. At least 18 patients (37%) fall into just these 2 categories and this is higher than we have historically observed. We would also note that we continued to resect during the first wave of the pandemic when many other centres paused. We created more end stomas in this period and our volume of loop ileostomy creation is therefore lower than expected in this period - this has the potential to skew the data. Clearly, other reasons such as co-morbidity, ongoing treatment, complications of treatment and concerns raised during surveillance contribute in some cases, as they do in all centres. We would seek to assure our patients that our waits for ileostomy closure are a focus for continuous improvement. We are grateful for NBOCA's acknowledgement of these factors. NBOCA Project Team comment: Following our review of the Trust response, the NBOCA team acknowledges a full and satisfactory response was received and accept the explanation given for the reasons why Nottingham University Hospitals NHS Trust was flagged as an outlier as a function of coding issues and closures within the independent sector. We would encourage the Trust to review coding going forward.		N/A for 2023 & 2022 due to multiple years of data required to calculate this metric.

NBOCA Performance Indicator 6

Adjusted 18-month unclosed ileostomy after anterior resection (greater than three standard deviations from national average)

NHS Trust	Trust Response to NBOCA Confirmed Outlier Notification	Outlier 2023?	Outlier 2022?
United Lincolnshire Hospitals NHS Trust	No response received.		N/A for 2023 & 2022 due to multiple years of data required to calculate this metric.

NBOCA Performance Indicator 6

Adjusted 18-month unclosed ileostomy after anterior resection (greater than three standard deviations from national average)

NHS Trust	Trust Response to NBOCA Confirmed Outlier Notification	Outlier 2023?	Outlier 2022?
Somerset NHS Foundation Trust	The clinical leads carried out a thorough review of the Trusts electronic patient records (PatientTrack, CrossCare, EPRO and Maxims) but was unable to find any information or a referral to Colorectal for 1 patient. Of the remaining 41 patients, 11 were delayed unclosed ileostomies without a valid exception, however, this was during covid and the service had a large waiting list following covid. <i>[Detailed clinical information given for a small number of patients has been removed to protect anonymity]</i> Following the review, the clinical leads have no concerns with practice and are assured that our patients are treated appropriately. COVID was the main contributing factor causing the delays, though we appreciate all hospitals were affected by this. As a trust we recognised this problem and this drove the implementation of the 'Day Case Ileostomy Closure Programme', which received National media coverage in view of its innovative use of technology to reduce waiting lists. The data in this		N/A for 2023 & 2022 due to multiple years of data required to calculate this metric.

	report is a from before this pathway was introduced and as such, we have already implemented a significant change which will ensure our patients are treated in a timely way in future. This review has highlighted that there is potentially a recording error and staff need to ensure the valid exceptions are recorded in the correct place on the patient's electronic record. In response to the questions raised by NBOCA, the review has found that: 1) Does the trust consider the NBOCA data to be accurate in comparison to trust records? On review of the data, we have found that practice is not accurately reflected on NBOCA. Trust action: accurate recording of exceptions in the correct fields. 2) Subject to the data being accurate, are there justifiable reasons for the variation that mean the trust should not be considered an outlier for this performance indicator? Please refer to the table above for the justifiable reasons <i>[Table removed to protect patient anonymity]</i> RECOMMENDATIONS • Carry out a review of where the data is recorded and where it should be recorded on the patients' electronic record. • Educate staff on where and how to record the exceptions. <i>NBOCA Project Team comment:</i> We ask the Trust to review its decision-making on ileostomy formation given the number of patients deemed unfit for reversal. We acknowledge that the Trust have identified unclosed ileostomy rate as a concern and have instigated an initiative to improve timeliness of ileostomy closure. This initiative is welcomed by NBOCA and we would be keen to hear more about the initiative and future evaluations of its effectiveness.	
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National Bowel Cancer Audit (NBOCA) Outlier Responses 2024: Performance Indicator 8

NBOCA Performance Indicator 8			
Adjusted severe acute toxicity after adjuvant chemotherapy for colon cancer (greater than three standard deviations from national average)			
NHS Trust	Trust Response to NBOCA Confirmed Outlier Notification	Outlier 2023?	Outlier 2022?
Milton Keynes University Hospital NHS Foundation Trust	No response received.	No.	No.

National Bowel Cancer Audit (NBOCA) Outlier Responses 2024: Performance Indicator 10

NBOCA Performance Indicator 10			
Adjusted 2-year survival rate after major resection (greater than three standard deviations from national average)			
NHS Trust	Trust Response to NBOCA Confirmed Outlier Notification	Outlier 2023?	Outlier 2022?
Bolton NHS Foundation Trust	No response received.	No.	No.

NBOCA Performance Indicator 10			
Adjusted 2-year survival rate after major resection (greater than three standard deviations from national average)			
NHS Trust	Trust Response to NBOCA Confirmed Outlier Notification	Outlier 2023?	Outlier 2022?
The Dudley Group NHS Foundation Trust	As requested, please find our response to your previous correspondence suggesting our Trust to be a potential outlier for the year 01/04/2020 to 31/03/2021. Does the trust consider the NBOCA data to be accurate in comparison to trust records? No. According to local records we have 38 deaths of 150 patients undergoing surgery between 01/04/2020 to 31/03/2021. N* of these deaths were operated at another site and should not be included in our records. According to our local data, our 2 year survival (unadjusted) is therefore calculated as: $n^*/N^* = 75.16\%$. NBOCA has risk adjusted our survival down versus the national average by 1.5% which is unusual given our frequently comorbid and low socioeconomic population. Reviewing our local data for performance status and comorbidity found during the relevant year, the following differences with the data tables provided by NBOCA were identified: No. comorbidities, NBOCA 0 : 76.94%, 1 : 18.61%, local trust 0 : 22.66%, 1 : 65.1%; NBOCA performance status 0 : 46.75%, 1 : 22.68%, 2 : 6.17%, 3 : 1.59%, local trust 0 : 49.33%, 1 : 30.66%, 2 : 13.33%, 3 : 6.66%. This corrected data shows our local population for this year to be more comorbid and have a higher performance status than the national average. Subject to the data being accurate are there justifiable reasons for the variation that mean the trust should not be considered an outlier for this performance indicator? In the preceding two years to 2020/2021 our trust 90 mortality was 2.8%, which spiked to 8.00% in 2020/2021 according to NBOCA data. Reviewing each of our 12 90-day deaths in the 2020/2021 year we found n* deaths directly attributable to COVID. With a total of n^*/N^* (n*%) dying within two years to be COVID positive deaths. Clearly this has a significant justifiable adverse effect upon our 2-year survival during this period. As written above, our local trust data for comorbidity and performance status data demonstrate our cohort to be more unfit than the national average. Additionally, in this year our patient population skewed older than the national average with fewer young patients, more older patients and 10% of our cohort being over 85 years old.	No.	No.

	According to our local data, 12/37 (32.43%) of our patients who died following surgery within two years of presentation were palliative at presentation. Whilst it seems an unusual decision to include palliative patients in this audit measure, clearly a high proportion of our patients who went on to die were justifiably expected to do so on the basis of their presenting cancer stage. Furthermore, the number of patients in our cohort presenting with metastatic disease was higher than the national average according to NBOCA supplied data tables by n*%, a finding alone which could predict an additional n* deaths at our site for this year. Having reviewed our data for this year, given our population is older, more comorbid with a higher performance status and higher incidence of metastatic disease than the national average, we believe our 2-year survival should actually be adjusted upwards. Taking this and our COVID mortality into account it seems likely our 2-year survival should be closer to the national average than stated. Trust Action Plan In light of being identified as a statistical outlier for the year 2020/2021 please see our initial planned trust response: 1. To liaise with trust cancer services and coding to improve HES data accuracy for colorectal cancer patients in future years 2. To undertake a robust early analysis of the following year to ensure 2020/2021 was a COVID related statistical aberration. To communicate transparently with NBOCA and relevant local and national stakeholders during this process. <i>[n* actual numbers suppressed due to small number of patients to protect patient anonymity]</i> NBOCA Project Team comment: Following our review of the Trust response, the NBOCA team would like to note that the indicator “2-year survival rate after major resection” is risk adjusted following the approach outlined at Risk Adjustment - National Bowel Cancer Audit. The data on co-morbidities used in our risk adjustment is taken from Hospital Episode Statistics (HES) data and relies on what co-morbidities are coded in this data and therefore may underestimate the number of co-morbidities compared to a review of clinical notes, however this would be the same for all Trusts included in the audit process. The NBOCA team encourage Trusts to review all cases not only cases of mortality.		
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NBOCA Performance Indicator 10

Adjusted 2-year survival rate after major resection (greater than three standard deviations from national average)

NHS Trust	Trust Response to NBOCA Confirmed Outlier Notification	Outlier 2023?	Outlier 2022?
East Kent University Hospitals NHS Foundation Trust	We note the findings of the National Bowel Cancer Audit (NBOCA) which has identified that EKHUFT is a national outlier for adjusted 2-year survival for patients undergoing surgical treatment for Bowel Cancer. A review of all cases has been carried out by consultants from each of our two hospitals. They have reviewed the audit results and case records for these patients in order to identify areas of learning and improvement. • William Harvey Hospital identified 30 deaths from a cohort of 115 cases. • Queen Elizabeth Queen Mother Hospital identified 47 deaths from a cohort of 207 cases. The following themes identified. 1. Data quality issues a. Theatre/ operation type was incorrect in 25 cases. These have potentially skewed the mortality rates negatively. The following actions are underway - Provide a list of patient identifiers provided to NBOCAP - Development of process to ensure clinical validation of audit data collection. To address any future data entry / incorrect coding issues entailing Primary Procedure recording, the Trust will introduce a new validation process for named Consultant level sign off on this recorded system data, including Source of Referral, ASA, Care Planned Intent, Curability, Mode of Operation and Surgical Access, before C.O.S.D. and NCRAS data submissions deadlines. 2. COVID pandemic Some patients in this cohort would have presented at a point when there was still disruption of services due to the pandemic response. Including presenting at a later stage and with more advanced disease. 3. Emergency presentations This cohort of patients had more advanced disease at presentation. On detailed review it was opinion of the clinical reviewer that care was appropriate and it was unlikely that outcomes could have been improved in those patients who died.	No.	No.

	4. Elective presentations Improvements have been introduced during this audit period which will improve patient outcomes in the future. a. Introduction of a POPS service b. More detailed staging CT enabling identification of patients for whom neo-adjuvant chemotherapy or immunotherapy is indicated If you need any further information for clarification please do not hesitate to contact me. <i>NBOCA Project Team comment:</i> Thank you for your detailed review undertaken in response to outlying performance. The NBOCA Project Team acknowledge the data quality issues given as an explanation as a contributing factor to the outlying performance. This metric only includes those undergoing major resection and so the NBOCA calculated denominator of 289 is lower than the 322 cases mentioned in your letter. The difference in number is likely to be due to our exclusion of non-eligible surgical cases and more general NBOCA exclusion. We welcome the Trust's review and development of its coding procedures to increase data quality going forward. The indicator "two-year survival rate after major resection" is risk-adjusted, therefore the COVID pandemic and Emergency presentation would not be considered relevant nor explain outlying performance as the same is applicable for all Trusts included in the audit process. We welcome the improvements to elective presentations including the introduction of the POPS service and more detailed staging CT enabling identification of patients for whom neo-adjuvant chemotherapy or immunotherapy is indicated.		
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NBOCA Performance Indicator 10			
Adjusted 2-year survival rate after major resection (greater than three standard deviations from national average)			
NHS Trust	Trust Response to NBOCA Confirmed Outlier Notification	Outlier 2023?	Outlier 2022?
Liverpool University Hospitals NHS Foundation Trust	No response received.	No.	No.

NBOCA Performance Indicator 10

Adjusted 2-year survival rate after major resection (greater than three standard deviations from national average)

NHS Trust	Trust Response to NBOCA Confirmed Outlier Notification	Outlier 2023?	Outlier 2022?
South Tyneside and Sunderland NHS Foundation Trust	The unadjusted mortality at two years is 31 out of 165 patients, resulting in an 81.2% survival rate. It is important to note that this figure is unadjusted, and the NBOCAP dataset suggests a survival rate of 70% after adjustment. This discrepancy is significant and can likely be explained by under reporting of comorbidities. Upon review of all deaths, we have found that 13 out of the 31 (42%) were emergency presentations. This suggests that the comorbidities and ASA grades may be significantly under reported in these cases. From the elective patient cohort provided by your team, there were only a small number of patients who would have been classified as ASA 2. Unfortunately, the dataset we received does not include detailed information on comorbidities, which would help explain the lower adjusted survival rates. This issue is not unique, as there have been previous instances where comorbidities and ASA grades were not appropriately recorded. Additionally, I would like to point out that there are n* patients in the dataset who did not undergo a major resection but instead had a de-functioning stoma. Excluding these patients would result in a revised two-year survival rate of 83% (27/161). In conclusion, my overall impression is that the situation is not as concerning as the letter may suggest. We need more information on the ASA grades used by NBOCAP, which have not been provided in the dataset and have been advised as unavailable to review. Furthermore, we can exclude the n* patients who did not undergo resection surgery, as palliative surgery patients typically experience short survival times due to the advanced nature of their disease. Thank you for your attention to this matter. I look forward to receiving an update on the advised revision along with the requested ASA data so we can work collaboratively to address any concerns. <i>[n* actual numbers suppressed due to small number of patients to protect patient anonymity]</i> NBOCA Project Team comment: The NBOCA team acknowledges a full response from the Trust was received. With ineligible patients removed from the analysis the trust would no longer be an outlier. We recommend that the trust works to ensure accurate coding of colorectal cancer procedures in data provided to the Cancer Registry.	No.	No.

NBOCA Performance Indicator 10

Adjusted 2-year survival rate after major resection (greater than two standard deviations from national average twice in three consecutive years)

NHS Trust	Trust Response to NBOCA Confirmed Outlier Notification	Outlier 2023?	Outlier 2022?
Walsall Healthcare NHS Trust	Thank you for the opportunity to review and respond to the data provided. After a detailed analysis, we have confirmed the data's general accuracy. To better understand the higher mortality rates, we conducted a thorough review of all patients with 2-year mortality of the dataset following major colorectal surgery. Below is a summary of our findings and the steps we are taking to address the issues: Key Findings Demographics and Risk Factors: - Of the 24 patients who died, 20 were over 70 years old, and 15 were over 80 years old. - Fifteen surgeries were emergency procedures, with the remaining nine being elective. - The majority of patients (21/24) were classified as ASA III or above, with 9 classified as ASA IV or above. - Seven ASA IV patients underwent surgery <i>[detailed clinical information for a small number of patients removed to protect anonymity]</i> Outcomes: <i>[Detailed clinical information for a small number of patients removed to protect anonymity]</i> Additional Observations: <i>[Detailed clinical information for a small number of patients removed to protect anonymity]</i> Overall Surgical Workload: In total, 54 elective and 27 emergency procedures were performed. Challenges Identified - A significant proportion (62%) of the colorectal cancer population presented as ASA III or above, reflecting the complexity of managing these high-risk patients. - Social deprivation is a key factor in Walsall, with a high index level impacting healthcare outcomes. - Over 35% of colorectal cancer patients presented as emergencies (e.g., obstruction or perforation), contributing to poor short- and long-term outcomes. Acknowledged Issues We recognise that some poor outcomes were influenced by clinical decision-making. Specifically: - A higher number of surgeries were performed on palliative patients. - Major surgeries were sometimes undertaken instead of less invasive palliative approaches aimed at improving comfort.	Yes	No

	Steps for Improvement In response to these findings, we launched the Colorectal Improvement Project last year. This comprehensive initiative targets key areas for improvement: Community Engagement and Early Diagnosis: - Strengthened collaboration with GPs to streamline referrals. - Public awareness campaigns to promote recognition of bowel habit changes and increase participation in bowel cancer screening programs. Patient Optimisation: - Implementation of a pre-habilitation program. - Preoperative assessments are conducted by dedicated consultant anaesthetists for all major colorectal resections. Enhanced Surgical Pathways: - Revision of the Enhanced Recovery After Surgery (ERAS) pathway. - Standardised use of mechanical and chemical bowel preparation for elective colorectal cancer patients. - Introduction of standardised anaesthesia protocols and the use of dedicated colorectal anaesthetists. Postoperative Care Improvements: - Daily ward rounds are conducted by consultants for all elective and major colorectal resections. - Enhanced involvement of community nurses and stoma care teams post-discharge to prevent readmissions. Conclusion We remain committed to addressing the challenges outlined above and improving outcomes for colorectal surgery patients. By focusing on preventative measures, patient optimisation, and enhanced perioperative care, we aim to reduce mortality rates and provide better overall care for our patients. Since the introduction of the program, we have observed significant improvements in short-term outcomes. Notable areas of progress include reductions in length of stay, 30-day mortality, return-to-theatre rates, readmissions, and adverse events. While these improvements are encouraging, we continue to strive for further advancements to ensure the highest standards of care for our patients. Continuous evaluation and refinement of our interventions remain a priority as we move forward. We also invited Royal College of Surgeons to review our measures. In their provisional report they considered our measures as satisfactory. NBOCA Project Team comment: We would like to express thanks to the Trust for this very thorough response. We would also like to acknowledge the positive progress made to date as, although remaining an outlier, we can see improvement relative to previous reports.	
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NBOCA Performance Indicator 10

Adjusted 2-year survival rate after major resection (greater than two standard deviations from national average twice in three consecutive years)

NHS Trust	Trust Response to NBOCA Confirmed Outlier Notification	Outlier 2023?	Outlier 2022?
Wye Valley NHS Trust	Thank you for providing patient-level data for review of the NBOCA data that identified Wye Valley NHS trust as a potential outlier on adjusted 2-year survival rate after major resection. Review of our data has revealed the following: 16 patients were identified in the patient level data sent by NBOCA. 15 patients had advanced disease at diagnosis – (T3/T4 disease, node positive and vascular invasion), and [detailed clinical information for small number of patients removed to protect anonymity]. 9 patients died within 24 months of metastatic disease - more than 90 days postop. Of these, [detailed clinical information for small number of patients removed to protect anonymity]. Our two-year mortality rate was significantly skewed by 6 deaths within 90 days of surgery. <i>[Detailed clinical information for small number of patients removed to protect anonymity]</i> NBOCA Project Team comment: We advise that comprehensive risk-adjustment is used in reporting two-year mortality after major resection of bowel cancer. This metric is an indicator of how the whole multidisciplinary team is delivering care.	No	No