







National Bowel Cancer Audit

Annual Report 2020 Outlier Responses

NBOCA: Annual Report

Date of publication: Thursday 10th December 2020

About HQIP, the National Clinical Audit and Patient Outcomes Programme and how it is funded:

The Healthcare Quality Improvement Partnership (HQIP) is led by a consortium of the Academy of Medical Royal Colleges, the Royal College of Nursing, and National Voices. Its aim is to promote quality improvement in patient outcomes, and in particular, to increase the impact that clinical audit, outcome review programmes and registries have on healthcare quality in England and Wales. HQIP holds the contract to commission, manage, and develop the National Clinical Audit and Patient Outcomes Programme (NCAPOP), comprising around 40 projects covering care provided to people with a wide range of medical, surgical and mental health conditions. The programme is funded by NHS England, the Welsh Government and, with some individual projects, other devolved administrations, and crown dependencies.

www.hqip.org.uk/national-programmes

| NHS Trusts | 90-day mortality NHS Trusts Comment | | |
|---|--|-------------------------------------|-------------------------------------|
| | | Outlier 2019 Annual Report | Outlier 2018 Annual Report |
| East Kent Hospitals University NHS Foundation Trust | Thank you for your letter dated 25th September 2020 notifying the East Kent Hospitals NHS Trust for having been found to have a higher than expected rate of 90-day mortality after major colorectal resections. East Kent Hospitals NHS trust is a large trust serving a wide geographical catchment area. Thanet in particular has several pockets of deprived population. Owing to the large geographical area and population served, major colorectal resections are carried out at two of the larger hospitals in the trust - Queen Elizabeth the Queen Mother hospital, Margate and William Harvey Hospital, Ashford. Of the 286 major resections included for the 2018-19 NBOCAP audit period, 19 patient records were identified for 90-day mortality outcome measure. Our surgeons have reviewed every patient record through respective MDTs. Seven patients underwent elective surgery while twelve patients underwent emergency surgery through unplanned admissions. [Clinical information was given on these patients which has been removed to protect their identities] Our surgeons similar to many other trusts operate on elderly patients, including those with significant comorbidities as well as for palliation. Our population mix additionally does pose some challenges as some of the patients especially elderly and patients with poorer health states present late. The in-hospital mortalities are discussed thoroughly at our monthly morbidity and mortality meetings and the lessons learned are widely dissipated to embed them in our practice. The Subjective Judgement Review (SJR) process has been there in our trust for many years which also helps to objectively look at the quality of care for the patients. More recently the trust has appointed a retired medical director to act as medical examiner/reviewer for mortalities as an additional robust system to objectively look at the quality of care in our trust. Actions taken • Work is underway to start Prehabilitation programme to improve pre-operative health states to reduce peri-operative morbidity and | No | No |

| NHS Trusts | Comment | Outlier 2019 Annual Report | Outlier 2018 Annual Report |
|---|---|-------------------------------------|-------------------------------------|
| Liverpool University Hospitals NHS Foundation Trust - Aintree Hospital | Thank you for the opportunity to clarify the outcomes of the data you analysed. We acknowledge there were gaps in the data e.g. complete TNM, ASA and PS and flaws in the interpretation of the audit questions by our Trust cancer services, which was not brought to Consultant attention until your letter. A consultant led analyses of 1136 patients over the period in question, addressed the urgent question of mortality. This was undertaken out-of-hours and therefore took a while to complete. We submitted 143 patients of which NBOCA analysed 115. This significantly affected the denominator. Our analyses yielded the following: Total no. of patients undergoing major resection: 143 | No | No |
| | Deaths within 12 months: 25 Deaths between 12 and 24 months: 15 72 patients had no/error ASA allocation | | |
| | UNADJUSTED 2 YEAR MORTALITY OF 27.5%. | | |
| | These changes would significantly affect the adjustments, and we are confident our Trusts adjusted mortality will be found to be in line with observed national outcomes. All the deaths were then reviewed by the Trust Mortality Lead and the Surgical Mortality lead. No deaths were identified as having had 'poor care or very poor care'. | | |
| Betsi Cadwaladr University Health Board - Glan Clwyd | Ysbyty Glan Clwyd received notification from NBOCAP that it had a higher than expected rate of two year mortality after major colorectal cancer resection for patients undergoing surgery between 1 st April 2016 and 31 st March 2017. Ysbyty Glan Clwyd has never received an outlier notification previously for this parameter. Our previous two year mortality rates were 19.3% (2017 NBOCAP report), 21.2% (2018 NBOCAP report), and 20.8% (2019 NBOCAP report). | No | No |
| Hospital | All the 33 deaths within 2 years of major colorectal resection identified in this current report were reviewed by the MDT clinical lead, MDT co-ordinator and clinical lead for anaesthesia using hospital notes, MDT records, pathology and radiology reports, PEDW data and post mortem reports where available. Cases were cross-referenced to departmental Morbidity and Mortality meeting records. | | |
| | We believe the high mortality rate identified in this report reflects a particular patient case mix during this audit period which included a significant number of high-risk patients having emergency surgery, palliative surgery, attempted curative surgery with poor prognosis and very locally advanced tumours. | | |
| | The finding of our review was that the vast majority of the deaths within two years of major colorectal resection were unavoidable. 11 of the 33 cases presented as surgical emergencies. 26 of the 33 patients were recorded as having surgery with curative intent; <i>[number redacted]</i> of these patients should have been recorded as surgery with palliative intent. 11 of the operations were therefore ultimately done with palliative intent in order to control symptoms and improve quality of life. 21 of the 33 patients (64%) had progressive metastatic disease as their underlying cause of death. These patients were either unsuitable for adjuvant or palliative oncological treatment or further surgical treatment, or their disease progressed on adjuvant or palliative treatment including second and third line chemotherapy. All of these particular metastatic cancer-related deaths were unavoidable. There were a few unavoidable but unpredictable deaths. Many of these cases were not directly attributable to the surgery itself or complications of surgery. | | |

| NITO TRUSTS | Comment | Outlier 2019 | Outlier 2018 |
|---|--|-----------------|-----------------|
| 30-day unplanne NHS Trusts | - | Outlier | Out! |
| Gloucestershire Hospitals NHS Foundation Trust | The Trust has undertaken a detailed review of cases and concluded that the marginally increased longer-term mortality does not reflect standards of peri-operative or cancer treatment care. Detailed analysis of cases did not reveal any areas of clinical concern. | No | No |
| | was due to cardiac complication and aspiration following an abdomino-perineal resection 5 days after surgery. The case was referred to coroner. Two patients underwent emergency surgery for bowel perforation due to an obstructing bowel cancer: one patient died a day after surgery as a result of sepsis secondary to faecal peritonitis and was referred to coroner, and the other patient had a prolonged post-operative period due to frailty and died 45 days after surgery. Among the remaining 20 patients, 6 patients underwent palliative surgical intervention with metastatic cancer noted either at the time of surgery or prior to surgery. 8 patients were noted to have poor prognostic indicators on histopathological analysis such as T4 disease, tumour perforation, mucinous morphology, lymphovascular invasion etc. which later led to either local recurrence or development of distance metastases. 6 other patients died due to unrelated causes. [Clinical information was given on patients which has been removed to protect their identities] Therefore, considering the cohort of 119 patients, our crude 24-month mortality would be 19.3 % (23/119). We noted that the overall national 24-month mortality is 18.4%. This is the first time that our trust was informed of potential outlier status for 24-month mortality. Our immediate post-operative mortality rate is within acceptable limit [numbers redacted] in a cohort of 119 patients. Patients who underwent palliative procedures had poor outlook. Those patients who developed recurrent disease had unfavourable prognostic indicators on histopathological analysis. | | |
| Blackpool Teaching Hospitals NHS Foundation Trust | to our healthcare services. Take up of bowel screening remains lower than target in the local population. Thank you for informing us of outlier status relating to 24-month mortality rate for the year April 2016- March 2017. We have carried out analysis of our own data during the stated period and performed a detailed review of the computerised records of the deceased including comparison with the NBOCA data provided. We noted that we had a cohort of 119 patients during the period, and 23 patients died within 2 years following bowel surgery. Out of those patients, there were 3 postoperative deaths - 1 elective and 2 emergency surgery. The death from elective operation | No | No |

| | | Annual Report | Annual Report |
|--|---|------------------|------------------|
| 2020 Annual Rep | ort outlier alarm on measure (>988) | l. | 1 |
| University Hospitals of North Midlands NHS Trust | Thank you for your letter dated the 25th September 2020, and for the opportunity to allow us to analyse our data, specifically readmissions within 30 days of discharge following major resection for colorectal cancer. 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 24.5% for University Hospitals of North Midlands NHS Trust compares to an overall 30-day unplanned readmission rate for England and Wales of 11.8% (readmission rate adjusted for patient case-mix). The unadjusted 30-day readmission rate in our trust was 24.0%. We have undertaken an in-depth review by examining all individual patient records. 54 patients were identified, coded and reported in the 30- day readmission report. There was mismatch of 1 NHS number- patient was not operated in our unit. 5 further patients were wrongly classed as unplanned readmission related to their operation. [Clinical information was given on these patients which has been removed to protect their identities] 48 patients were therefore identified as possible unplanned readmissions related to the surgery. However, of this cohort, 24 patients were simply reviewed in our surgical assessment unit and discharged on the same day without actually being admitted to the hospital. 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. Taking the above into consideration, the true readmission number following major colorectal cancer resection for our unit for this period was a total of 24 patients rather than 54 incorporated in the report. This leads to a true readmission rate of 10.6% which compares favourably with published national data. I am confident that you will update the NBOCAP report as appropriate, ensuring accurate presentation of the high quality of surgery offered in our unit. | Yes | Alert |
| University Hospitals of Leicester NHS Trust | Thank you for your letter dated 25 October 2020, and for the opportunity to allow us to analyse our data, specifically readmissions within 30 days of discharge after major colorectal resection. Major colorectal cancer resections within University Hospitals of Leicester (UHL) take place at two hospital sites, Leicester Royal Infirmary (LRI) and Leicester General Hospital (LGH). In the time period in question, you informed us that 38 of our patients had been readmitted to UHL after major colorectal surgery; you kindly gave us the patient details for further analysis. You also informed us that our readmission rate was 22.9% unadjusted. Therefore, we have calculated that the denominator you are working from is 166 patients. We have run a further report using the NBOCA database and have identified that 269 patients were diagnosed with colorectal cancer between 1st April 2018 and 31st March 2019 and underwent a major resection before 31st October 2018. Taking your data that shows that 38 patients were readmitted to hospital, we calculate the rate of unplanned readmission to in fact be 14.1%. | Yes | Alert |

Of these 38 patients who were readmitted, in four patients we can find no readmission to UHL within 30 days of major surgery. Nine patients attended one of our two surgical triage areas for a 'ward attender' review but were not formally admitted to a ward, Of the nonpatients who stayed just a few hours... [Clinical information was given on these patients which has been removed to protect their identities]

Of the 38, 25 patients were therefore readmitted to a ward for one day or more; their data were analysed carefully to identify potential predictive factors. At operation for the primary cancer, the patients' median age was 69 years. 17 operations were elective and 8 emergencies. The readmissions were evenly split between the two hospital sites (12 LRI, 13 LGH). There was no trend between site of primary tumour/operation performed and readmission, nor was there any association with mode of access (lap/open/robotic).

Length of hospital stay at the index admission for the primary tumour was 6 days (IQR 5-11). The number of days between surgery and readmission was a median of 16 days (IQR 12-31); between date of discharge after primary surgery and readmission was a median of 9 days (IQR 4-12). Once readmitted, length of stay was a median of 3 days (IQR 2-5). No patients died during their readmission.

Of the 25 patients readmitted...[Clinical information was given on these patients which has been removed to protect their identities].

Actions taken:

- 1. Work continues to ensure that ward attender visits (planned and unplanned) are correctly coded
- 2. UHL is due to undergo a major reconfiguration of colorectal services, with the two units merging onto the Leicester Royal Infirmary site in 2021. We will use the data contained in this response to inform our pathways for the future in order to avoid unplanned and potentially unnecessary readmissions to hospital for our patients.
- 3. We would be keen to undertake further work with you to understand the apparent discrepancy between our and your interpretation of the number of cases attributed to UHL on the NBOCA database.

2019/20 Annual Report double alert on measure (>95)

North Bristol NHS Trust

Thank you for your letter dated the 6th October, and for the opportunity to review and respond in relation to the National Bowel Cancer Audit North Bristol NHS Trust potential outlier for unplanned readmissions within 30 days.

The 2020 report, although not published, cites an adjusted 30-day unplanned readmission rate of 20.9% compared to an overall 30-day unplanned readmission rate for England and Wales of 11.8%. Unadjusted 30-day readmission was quoted as 20.5%. You kindly draw reference to the previous year report.

NBOCA have helpfully provided the raw NHS numbers of those patients logged nationally as readmissions, a total of 15 patients, to allow for a local review of these in relation to the National Bowel Cancer Audit logged frequency. We have audited each of these and note that 7 were clinic or day attenders. 8 were readmissions to the ward from a cohort of 73 patients giving an unadjusted 30-day readmission rate of 10.9%. We have identified that coding practice in North Bristol NHS Trust include Surgical Hot Clinic day

Yes Alert

| attendances, some day Stoma therapy attendances and all ward day attendances for catheter removal as readmissions. Our findings are consistent with that of 2019. In 2019 you cite an adjusted rate of 20.6% compared to a rate for England and Wales of 10.8%. Unadjusted 30-day readmission rate was quoted as 21.1%. A local review of this data by examining individual patient records was conducted. A local review of these 28 patients indicated 16 were readmissions to the ward, from a cohort of 133 patients giving an unadjusted 30-day readmission rate of 12%. We believe that these coding issues explain the apparent outlying data and that the information from our audit is reassuring that true readmission to the inpatient service in North Bristol NHS Trust is at an 'as expected' level. We welcome our work with the National Bowel Cancer Audit in clear patient capture, generating productive information in the future | | |
|---|--|--|
| Thank you for your letter dated 25 th September 2020 informing the Royal Berkshire NHS Foundation Trust that it had been identified as an outlier for 30-day unplanned readmissions after major resection in both the 2019 & 2020 annual reports. The 2020 report, although not published, identified an adjusted 30-day unplanned readmission rate of 18.5% for the Trust in comparison to the overall 30-day unplanned readmission rate for England and Wales of 11.8 %. The 2019 report identified an adjusted 30-day unplanned readmission rate of 17.9% for the Trust in comparison to the overall 30-day unplanned readmission rate for England and Wales of 10.8%. | Yes | Alert |
| The Trust had been aware of this issue after the publication of the 2017 report, as part of its review process for all relevant National audit reports and results. Although not identified as an outlier in the 2017 report it was noted that the adjusted readmission rate was higher for this trust compared to the national average. Review by the Clinical Lead established that this was a data issue – post surgical patients who attended for a wound check, drain removal & review were reviewed on the Surgical Assessment Unit and sent home within several hours, and were never admitted to a bed. However, because of the way the data was captured within the Trust these patients were being "admitted" on the Trust's electronic systems, resulting in an apparent re-admission. This anomaly was rectified last year so that this cohort of patients will now be recorded as a clinic attendance. We are confident that these amendments will be rectified when the 2021 report, based on 2019/20 data is released. We appreciate you bringing this to our attention and giving us the opportunity to respond. | | |
| | are consistent with that of 2019. In 2019 you cite an adjusted rate of 20.6% compared to a rate for England and Wales of 10.8%. Unadjusted 30-day readmission rate was quoted as 21.1%. A local review of this data by examining individual patient records was conducted. A local review of these 28 patients indicated 16 were readmissions to the ward, from a cohort of 133 patients giving an unadjusted 30-day readmission rate of 12%. We believe that these coding issues explain the apparent outlying data and that the information from our audit is reassuring that true readmission to the inpatient service in North Bristol NHS Trust is at an 'as expected' level. We welcome our work with the National Bowel Cancer Audit in clear patient capture, generating productive information in the future Thank you for your letter dated 25th September 2020 informing the Royal Berkshire NHS Foundation Trust that it had been identified as an outlier for 30-day unplanned readmissions after major resection in both the 2019 & 2020 annual reports. The 2020 report, although not published, identified an adjusted 30-day unplanned readmission rate of 18.5% for the Trust in comparison to the overall 30-day unplanned readmission rate for England and Wales of 11.8 %. The 2019 report identified an adjusted 30-day unplanned readmission rate for England and Wales of 10.8%. The Trust had been aware of this issue after the publication of the 2017 report, as part of its review process for all relevant National audit reports and results. Although not identified as an outlier in the 2017 report it was noted that the adjusted readmission rate was higher for this trust compared to the national average. Review by the Clinical Lead established that this was a data issue – post surgical patients who attended for a wound check, drain removal & review were reviewed on the Surgical Assessment Unit and sent home within several hours, and were never admitted to a bed. However, because of the way the data was captured within the Trust these patients were being "adm | are consistent with that of 2019. In 2019 you cite an adjusted rate of 20.6% compared to a rate for England and Wales of 10.8%. Unadjusted 30-day readmission rate was quoted as 21.1%. A local review of this data by examining individual patient records was conducted. A local review of these 28 patients indicated 16 were readmissions to the ward, from a cohort of 133 patients giving an unadjusted 30-day readmission rate of 12%. We believe that these coding issues explain the apparent outlying data and that the information from our audit is reassuring that true readmission to the inpatient service in North Bristol NHS Trust is at an 'as expected' level. We welcome our work with the National Bowel Cancer Audit in clear patient capture, generating productive information in the future Thank you for your letter dated 25 th September 2020 informing the Royal Berkshire NHS Foundation Trust that it had been identified as an outlier for 30-day unplanned readmissions after major resection in both the 2019 & 2020 annual reports. The 2020 report, although not published, identified an adjusted 30-day unplanned readmission rate of 18.5% for the Trust in comparison to the overall 30-day unplanned readmission rate for England and Wales of 11.8 %. The 2019 report identified an adjusted 30-day unplanned readmission rate for England and Wales of 10.8%. The Trust had been aware of this issue after the publication of the 2017 report, as part of its review process for all relevant National audit reports and results. Although not identified as an outlier in the 2017 report it was noted that the adjusted readmission rate was higher for this trust compared to the national average. Review by the Clinical Lead established that this was a data issue – post surgical patients who attended for a wound check, drain removal & review were reviewed on the Surgical Assessment Unit and sent home within several hours, and were never admitted to a bed. However, because of the way the data was captured within the Trust these patients were being "a |