<table>
<tr><th colspan="4">Measure: Risk-adjusted 2-year mortality rate after major resection greater than three standard deviations</th></tr>
<tr><th>NHS Trust</th><th>Comment</th><th>Outlier 2022</th><th>Outlier 2021</th></tr>
<tr><td>Walsall Healthcare NHS Trust</td><td>
The Trust was aware of the outlier status prior to your letter and has put in place an improvement programme which is chaired by myself [Chief Medical Officer] and our Chief Nursing Officer.

The programme involves improvements in clinical pathways, the structure of the service supported by a training and development programme.

Briefly, the areas of improvement include:
<table>
<tr><th>Areas to improve</th><th>Desired outcome</th><th>Action Plan</th></tr>
<tr><td>Patient selection</td><td>Appropriateness and optimal clinical outcome</td><td>Patient selection will involve:
• Multi-disciplinary Team (MDT) approach
• Scoring systems, to facilitate decision making</td></tr>
<tr><td>Pre-op Optimisation</td><td>Optimal recovery and clinical outcome</td><td>Prepare patients pre-operatively, involving MDT (physiotherapist, geriatrician, anaesthetist, surgeon, nursing, pharmacist, microbiologist)</td></tr>
<tr><td>Intra-Op Processes</td><td>Optimal clinical outcome</td><td>Two Surgeons operating for rectal and complex cases</td></tr>
<tr><td>Post-Op Recovery</td><td>Optimal recovery and clinical outcome</td><td>• Enhanced care for post-op patients, to optimise recovery
• Mobilising patients early to promote fitness level recovery</td></tr>
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We have been tracking the outcome data closely and have seen improvements including:

LOS > 5 days reduced from 73.4% to 67.65% (target < 60%)

30 day post op mortality reduced from 6.3% to 2.44 % (target 1.7%)

30 day unplanned return to theatre reduced from 6.3% to 2.86% (target <6.8%)

I am satisfied that we have a good governance structure to address the concerns and have taken on board the recommendations to improve.
</td><td>No</td><td>No</td></tr>
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Measure: Risk-adjusted 2-year mortality rate after major resection greater than two standard deviations on two or more of the past three years			
NHS Trust	**Comment**	**Outlier 2022**	**Outlier 2021**
Wrightington, Wigan and Leigh Teaching Hospitals NHS Foundation Trust	In response to the letter on potential outlier on 2 -years mortality rate outcome measure, we followed your recommendation and undertook a detailed audit of the cases provided to us and attached in the appendix to this letter. The audit has reviewed the 12 cases of post-operative mortality whose demographics and relevant outcome measure (30 days unplanned return to theatre, 30 days mortality rate, tumour stage, ASA grade, performance status, Charlson comorbidity index and cause of death) were extracted from the MDT minutes, clinical notes and Somerset data. We went to great extend to ascertain the cause of death including by contacting the coroner's office for cases who died in community with no hospital information available and succeeded to identify it in all but two patients. **[Clinical information was given on these patients which has been removed to protect their identities]** The remaining 11 patients underwent elective colectomies by two established Colorectal Consultant surgeons both with over 20 years of practice. **[Clinical information was given on these patients which has been removed to protect their identities]** The above narrative is summarized below with ranking of frequency of causes of death: **[Clinical information was given on these patients which has been removed to protect their identities]** We believe it is generally accepted that metastatic colorectal disease in patient over 80 years old is generally not treated with curative intent (resection and/or chemotherapy) and inevitably contributes to 2 years mortality alongside frailty and associated comorbidities seen in this group. Similarly, further 25% of cases were attributed fatal disease unrelated to colorectal cancer and therefore we believe that these two groups of patients would have same outcomes irrespective of the unit providing their care. We have noticed some inaccuracies in estimating the Charlson comorbidity index due to under-recording of full range of comorbidities and this will be addressed via a local quality improvement project. - Wrightington, Wigan and Leigh Teaching Hospitals NHS Foundation Trust *The NBOCA Project team note the Trust's response and advises that comprehensive risk adjustment has already been applied in reporting 2 year mortality after major resection of bowel cancer, a key quality indicator of how the whole multidisciplinary team is delivering care. Additionally, an independent review of all patients (not just those who unfortunately died) after undergoing surgery in the relevant time period is required to identify potential systematic concerns in care. The Trust has nevertheless already identified areas for improvement in postoperative care in managing anastomotic leak and failure to salvage after surgical resection. An action plan to address these issues would be advisable as this is the second consecutive year of alert category status.* - NBOCA Project Team	Yes	No

Measure: Risk-adjusted 2-year mortality rate after major resection greater than three standard deviations			
NHS Trust	**Comment**	**Outlier 2022**	**Outlier 2021**
Ysbyty Wrexham Maelor Hospital MDT	Thank you for your letter of 20th October notifying the Health Board of the potential outlier status re the 33% 2-year adjusted mortality rate after major resection at Ysbyty Maelor (YM) in the 2023 NBOCAP report. This was an unexpected notification as mortality data from YM in recent years has been consistent (2020-2021 13.7% adjusted 2-year mortality, 2019-2020 22.5%, 2018-2019 10.3%), and we have shown good KPI's in terms of laparoscopic rates, lymph node yield, and negative CRM rates, indicating good quality of surgery. We have reviewed all cases identified within the national data, including cross-checking of death certification and notes review. 88% of patients were treated electively during this period (n=131). Overall, 62.6% of patients had stage 1 or 2 disease. Of the subgroup requiring treatment urgently or as an emergency (n=13), only 30.7% has stage 1 or 2 disease. Of the 29 deaths which occurred during the audit period, 7 deaths occurred due to unrelated events in curative patients, either from Covid-19 infection (n=2), or unrelated medical events and trauma (n=5). These deaths were unexpected and unavoidable. Although 8 deaths occurred in patients who received initial surgery urgently or as an emergency (mean survival 395 days), there were no deaths in this group within 28 days of surgery, indicating good perioperative care. **[Clinical information was given on a number of patients which has been removed to protect their identities]** These post-op deaths were all reviewed at our hospital Morbidity and Mortality meetings. This rate of perioperative mortality would be within that expected for major colorectal surgery. It is worthy of note that a prehabilitation programme has been formally introduced at YM since the period covered in this audit. We hope that this structured pre-operative optimisation will help reduce peri¬operative morbidity and mortality in future. There are a number of learning points we will take away from this review. Attention is required to ensure that risk assessment, and communication of risk, is clear pre-operatively and during the consent process. This will help identify patients who may benefit from optimisation and enhanced post-op care, or those in whom non-operative care may be more appropriate. Perioperative complications require ongoing scrutiny to identify learning points, and in particular, the decision making around the whether to anastomose or perform a stoma remains an area likely to benefit from routine critical review. This will continue to occur through our internal processes and morbidity and mortality meeting review. Thank you for providing us with the opportunity to review and provide context on the findings of the audit.	No	No