

# National Bowel Cancer Audit Report 2008 Public and Executive Summary

Prepared in association with:  
Healthcare Quality Improvement Partnership HQIP  
Association of Coloproctology of Great Britain and Ireland

Prepared in partnership with:





# National Bowel Cancer Audit

## Report 2008 Public and Executive Summary

The National Bowel Cancer Audit covers all patients in England and Wales with a diagnosis of bowel cancer. The aim of the audit is to better understand the quality of care given to patients with bowel cancer and thereby help services to improve. This will be achieved by evaluating trusts' processes of care and outcomes of treatment and measuring these outcomes against national standards.

This third Public and Executive Summary of the annual report from the National Bowel Cancer Audit presents findings on data submitted to the National Bowel Cancer Audit for 2008.

The full National Bowel Cancer Audit will be available to download from: <http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/audit-reports> and [www.acpgbi.org.uk](http://www.acpgbi.org.uk)

The Public and Executive Summary can be ordered from The NHS Information Centre for health and social care (The NHS IC) Contact Centre 0845 300 6016 or email: [enquiries@ic.nhs.uk](mailto:enquiries@ic.nhs.uk) quoting document reference **978-1-84636-268-2**. For further information about this report, email: [enquiries@ic.nhs.uk](mailto:enquiries@ic.nhs.uk).

# Contents

<b>i</b>	<b>Main Recommendations</b>	<b>i</b>
	<b>The Audit</b>	<b>i</b>
	<b>Main Findings</b>	<b>1</b>
	MDT Discussion	1
	Clinical Nurse Specialist	
	Pre-operative staging	
	Pre-operative radiotherapy	
	Emergency Surgery	
	Post-operative mortality	
	Post-operative length of stay	2
	Laparoscopic surgery	
	Lymph node analysis	
	Abdomino-perineal excision (APER) Rates	
	Circumferential Excision Margin	
	<b>Local Action Planning</b>	<b>4</b>
	<b>2009 Annual Report</b>	<b>5</b>
	<b>Data Collection</b>	<b>6</b>

### Main Recommendations

All trusts should aim to discuss 100 per cent of their patients at the MDT meeting. Furthermore, the MDT should take responsibility to ensure that all relevant data is submitted to the audit.

Trusts should offer all colorectal cancer patients a pre-operative CT scan of the chest and abdomen and, for elective patients with rectal cancer, pre-operative staging with an MR scan of the pelvis.

Trusts should aim for 100 per cent of their non-emergency patients to be seen by a specialist nurse or stoma nurse therapist.

Post operative length of stay should be minimised by using non-invasive techniques to remove early small cancers, by avoiding surgery in frail patients and those with disseminated disease who will not benefit from major surgery, by stenting large bowel obstructions and by introducing laparoscopic surgery and enhanced recovery programmes.

Trusts should continue to minimise permanent stoma rates in patients having elective surgery for potentially locally curable rectal cancer.

Trusts should ensure that the circumferential resection margins of resected surgical specimens are examined for tumour involvement and the results recorded.

Trusts should record the number of patients having pre-operative radiotherapy.

Trusts should ensure that there are sufficient resources to facilitate participation in the audit.

Trusts should discuss the national audit results with their local teams and develop action plans to improve the quality of care as an integral part of participation in the audit.

Trusts should ensure that their audit data is as complete as possible in order to ensure that their risk-adjusted reporting in the 2009 report is representative of their service.

### The Audit

The National Bowel Cancer Audit is commissioned by the Healthcare Quality Improvement Partnership (HQIP) having taken over responsibility for the National Clinical Audit and Patients Outcomes Programme from the Healthcare Commission in April 2008. The audit is run jointly by the National Clinical Audit Support Programme (NCASP), in the NHS Information Centre, and the Association of Coloproctology of Great Britain and Ireland (ACPGBI).

#### Participation

The 2008 annual report of the National Bowel Cancer Audit shows a significant increase in trust participation and case ascertainment has increased to 18,504 patient records for this reporting period.

## Main Findings

**This report presents the audit findings on key processes of care. The measures for this audit, have been developed within the audit team and agreed with the Healthcare Commission and the ACPGBI Executive and, where appropriate, are based on existing national guidance.**

### MDT discussion

64 per cent of bowel cancer patients whose data was submitted to the audit had their treatment discussed at a multidisciplinary team (MDT) meeting of all professionals involved with their care. The National Institute for Clinical Excellence (NICE) guidance states that all (100 per cent) patients should be discussed at an MDT. The MDT includes radiologists, pathologists, anaesthetists and surgeons who discuss the options available for the patient's treatment to ensure that they receive the maximum benefit of available care. The National Institute for Clinical Excellence (NICE) guidance states that all (100 per cent) patients should be discussed at an MDT.

### Clinical Nurse Specialist

The average number of patients seeing a specialist nurse was 37 per cent. The range was 0.3 – 100 per cent, probably indicating a high level of incomplete data. Units are encouraged to collect this data accurately in order to monitor their performance against the NICE guidance which is that all patients should see a nurse specialist. It is preferable that this takes place pre-operatively, although this is difficult to achieve in emergency cases. The complexity of colorectal cancer treatment requires specialist nurses to guide patients through the various pathways. Some trusts use stoma therapy nurses to carry out this role and in the future the audit may need to differentiate between stoma therapy and specialist nurses.

### Pre-operative staging

NICE and ACPGBI guidelines are that pre-operative staging by CT scanning should be made available to all patients with colon or rectal cancer.

CT scanning was achieved in 53 per cent of the cases in the audit.

21 per cent of cases reported to the audit were receiving pre-operative staging of their cancer in accordance with the ACPGBI guidance.

Pre-operative staging identifies those patients with early disease and suitable for minimal surgery and those who have extensive disease not suitable for surgery. This is an important part of patient care and although it may be more difficult to manage in an emergency case it would help to identify large bowel obstruction, disseminated disease and patients best treated by an internal colonic stent – without surgery.

### Pre-operative radiotherapy

Approximately 20 per cent of rectal cancer patients whose data was submitted to the audit have had pre-operative radiotherapy. The percentage of rectal cases having pre-operative radiotherapy is poorly recorded by trusts, but the data suggests that, where high quality data is provided, the provision of short course radiotherapy (SCRT) varies from 2 to 25 per cent, and long course radiotherapy (LCRT), from 2 to 30 per cent of rectal cancer patients. Pre-operative radiotherapy is understood to reduce the likelihood of local recurrence of the tumour in some patients.

### Emergency surgery

10 per cent of the cases submitted to the audit had emergency surgery, with a range of 0 – 33 per cent (which includes some tertiary units that do not operate on emergency cases). Patients who have emergency surgery are at higher risk of post-operative death. Emergency cases often have a shorter history before surgery. It is important to identify these cases as they will significantly affect the risk adjustment of a unit's overall post-operative mortality.

### Post-operative mortality

Post-operative mortality has decreased from 7 per cent in 2001 to 5 per cent in 2007. Date of surgery is used to calculate the 30 day mortality but this important information is not always provided, making it impossible to calculate whether there was a death within 30 days of surgery for these patients.

Post-operative mortality is an important measure of the quality of care and risk-adjusted 30 day post-operative mortality will be reported on a trust identifiable basis in the 2009 Annual Report.

The decrease in post-operative mortality, to some extent, will be due to better selection of patients who are able to tolerate and benefit from major surgery (through pre-operative staging). Improvements in

trust infrastructure and the provision of optimal post-operative care, along with improved surgical techniques, will also have contributed to the decrease in post-operative mortality.

### Post-operative length of stay

The median post-operative length of stay is 10 days, the same as in 2006 but down from 11 in 2005.

The unadjusted median length of stay for 2007, ranges from 7-13.5 days across the Cancer Networks.

Length of stay has continued to decrease since 2002, though adequate data was only submitted for 68 per cent of patients undergoing surgery for the 2007 reporting period. Risk adjusted post-operative length of stay will be reported on a trust identifiable basis in the 2009 Annual Report.

Length of stay is a surrogate marker of the quality of care provided to patients. Improved pre-operative staging, which identifies patients suitable for major surgery, colonic stenting of patients with large bowel obstructions and disseminated disease, the introduction of laparoscopic surgery and enhanced recovery programmes, will all result in a shorter length of stay for patients.

### Laparoscopic surgery

8 per cent of patients are having laparoscopic surgery, which is a marked increase on the less than 5 per cent of all resections being done by a laparoscopic procedure in 2006/07. The use of laparoscopic surgery, where appropriate, helps to reduce the length of stay and improve the patient's recovery.

### Lymph node analysis

The majority of trusts submitting data to the audit are meeting NICE and ACPGBI guidance and achieving a median harvest of 12 lymph nodes for their relevant patient population.

Examination of the lymph nodes in a surgical specimen will help to improve the staging of the cancer and provide more information to determine whether or not the patient will benefit from adjuvant chemotherapy.

Trusts are encouraged to collect this data accurately in order to monitor their performance against NICE

guidance which states that there should be a median of 12 lymph nodes removed and examined from each surgical specimen. Nodal harvest data was missing in 10 per cent of all eligible cases

In the 2009 Annual Report the number of lymph nodes harvested will be risk-adjusted and reported on a trust identifiable basis. However previous risk-adjustment has shown that there is little difference between risk-adjusted and non risk-adjusted data.

The number of lymph nodes harvested is affected by the mode and nature of surgery and whether pre-operative radiotherapy has been administered. Emergency surgery is likely to result in fewer lymph nodes being harvested and effective pre-operative radiotherapy will often result in a reduced number of enlarged lymph nodes being available for retrieval.

Two Cancer Networks had an average across their trusts which fell below the level in the NICE guidance.

### Abdomino-perineal excision (APER) rates

Some patients require an abdominoperineal resection of rectum (APER) which produces a permanent colostomy. National guidance is that, whilst it is a procedure performed for rectal cancer, APER should be kept to a minimum.

The rate of APER for this report period is 28 per cent. APER rates are now calculated on elective cases only, removing emergency cases for this analysis, and are not comparable to previously published results. However, application of the new analysis to previous data shows that the rate has not changed over recent years.

Risk-adjusted abdomino-perineal excision rates in potentially curative rectal cancer surgery will be reported on a trust identifiable basis in the 2009 Annual Report.

### Circumferential resection margins in rectal cancer

Nearly all of trusts submitted data to indicate whether or not individual pathology reports included a comment on the involvement of cancer in the circumferential resection margin. A comment on margin involvement was actually made in 48 per cent of reported rectal cancer cases included in the audit.

Data suggests that in trusts where the CRM has been recorded the range of rectal cases having CRM commented on is between 5 – 100 per cent of cases. This indicates either a wide range in procedure or a high level of incomplete data. Audit contributors must improve the recording of this data. When this is regularly reported and the data is of sufficient quality the audit will be able to monitor CRM positive rates and report on this important outcome.

The proportion of cases having an involved CRM after surgery is a surrogate marker of the quality of the totality of care received by rectal cancer patients. The CRM positive rate will reflect how accurately patients have been selected for pre-operative chemo-radiotherapy and the quality of surgery. A positive result is also an indicator of the risk of local recurrence, which is a more difficult parameter to measure.

## Local Action Planning

As an integral part of participation in the audit, trusts should discuss the national audit results with their local teams and develop action plans to improve the quality of care. As part of the National Bowel Cancer Audit, the National Cancer Audit Support Programme (NCASP) have been tasked by Healthcare Quality Improvement Partnership (HQIP) to produce an action planning toolkit to help support Cancer Networks in converting national audit data into changes in clinical practice and outcomes.

Local action plans can be used to identify areas of data collection and clinical practice that may fall below national standards and need improvement. Local action plans have the potential to convert local audit data into important changes in practice and thereby close the audit loop.

NCASP will provide draft local action plans as a toolkit to facilitate service improvement. The implementation of this is the remit of the hospitals, trusts and networks concerned. Local action plans will be linked to both Peer Review and the Annual Health Check in the near future. There is also potential for using the results in conjunction with The Clinical Negligence Scheme for Trusts (CNST).

The National Bowel Cancer Audit will develop local action plans based on the recommendations of the 2008 annual report.

## 2009 Annual Report

In addition to the variables contained in this report, the 2009 Annual Report will present four more risk-adjusted clinical outcomes which will be reported on trust-identifiable basis:

- post-operative mortality
- length of stay
- permanent colostomy rates in patients having curative elective surgery for rectal cancer
- lymph node retrieval.

The audit data shows that in submitting trusts there is a wide variation in data completeness. Trusts should ensure that their audit data is as complete as possible so that they can monitor their performance against professional and NICE guidance and to ensure that the findings of the audit are accurate and not limited due to incomplete data.

High national coverage, case ascertainment and data completeness are essential in order to accurately report and maximise the benefits of reporting these outcomes. Trusts will not only be able to benchmark their care against national standards or average but also against other trusts, adopt best practice and improve practice and patient care. In order to achieve the aims of the 2009 Annual Report, there needs to be a further increase in case ascertainment and data completeness.

The main aim of the audit is to measure processes of care and clinical outcomes to allow comparisons between trusts and where necessary, bring about improvements in practice and patient care. As an integral part of participation in the audit, trusts should discuss the national audit results with their local teams and develop action plans to improve the quality of care.

## Contact details

If you would like further information about the audit, please visit the audit website using the following link:

<http://www.ic.nhs.uk/canceraudits>

The website contains additional user documentation including the quick-start guide, dataset, csv file specification and the data user certificate.

Alternatively, please contact:

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