



Delay in Transit

A review of the quality of care provided to patients aged over 16 years with a diagnosis of acute bowel obstruction

Executive summary

Key messages

This study has highlighted significant opportunities to improve the care of patients with acute bowel obstruction. The overarching finding was that there were significant delays in the pathway of care for this group of patients, from requesting imaging, diagnosis, decision-making and availability of an operating theatre.

There were delays in imaging in 57/276 (20.7%) of the cases reviewed and the delays increased if an abdominal X-ray was performed as well as an abdominal CT. Furthermore a delay in imaging led to a delay in diagnosis in 35/57 (61.4%) patients whereas only 14/219 (6.4%) patients had a delay in diagnosis if there was no delay in imaging.

Delays in consultant assessment led to a delay in diagnosis in 13/32 (40.6%) patients. Only 23/147 (15.6%) patients who were seen in a timely manner by a consultant experienced a delay in diagnosis. Following diagnosis 72/368 (19.6%) patients experienced a delay in access to surgery and in 38/72 (52.8%) patients the delay was due to non-availability of theatre and in 34/72 (47.2%) it was due non-availability of an anaesthetist.

In addition to the delays, there was found to be room for improvement in the clinical care of this group of patients. Risk and frailty assessments were variable. Risk assessment is important as patients who had a risk assessment had better escalation of care, however this was inadequate in 98/219 (44.7%) patients. Similarly, only 34/124 (27.4%) patients over 65 years of age had their frailty score assessed on admission to the ward and if patients did have a Rockwood frailty score of 5 or higher this was more likely to result in discussions around mortality, resuscitation status and treatment options.

To prevent malnutrition and acute kidney injury, nutrition and hydration status are fundamental to care in patients with an acute bowel obstruction, these were often not well assessed. Only 163/686 (23.8%) patients had their hydration status recorded, 105/254 (41.3%) patients either had no nutritional status assessment or the assessment was inadequate and only 88/233 (37.8%) patients had a nutrition assessment on discharge.

The areas for improvements in care highlighted in the report, and the recommendations made, have the potential to improve the care of a large proportion of surgical patients. This should lead to measurable improvements in outcomes and enhanced patient care.



Recommendations

These recommendations have been formed by a consensus exercise including all those listed in the acknowledgements. They highlight a number of areas that are suitable for local audit and quality improvement initiatives to address any areas of care that are below the expected standard. The result of the audits or quality improvement initiatives should be presented at a quality or governance meeting and action plans shared with the Executive Board.

- 1 Undertake a CT scan with intravenous contrast promptly, as the definitive method of imaging* for patients presenting with suspected acute bowel obstruction. Prompt radiological diagnosis will help ensure admission to the correct specialty, so the time to CT reporting should be audited locally.
**unless the use of IV contrast is deemed inappropriate by a senior clinician, in which case CT without contrast should be performed – in line with NICE CG169 (Emergency Medicine, Admitting Clinicians, Radiologists, Quality Improvement Leads)*
- 2 Undertake a consultant review in all patients diagnosed with acute bowel obstruction as soon as clinically indicated and at the latest within 14 hours of admission to hospital. Discussion with a consultant should occur within an hour for high-risk patients*
**As recommended by the RCP London and NHS England ('High risk' is defined as where the risk of mortality is greater than 10%, or where a patient is unstable and not responding to treatment as expected) (Consultant Surgeons)*
- 3 Admit patients with symptoms of acute bowel obstruction as necessary, but patients who have a definitive diagnosis of acute bowel obstruction should be admitted under the care of a surgical team.
(Clinicians, Clinical Directors)
- 4 Assess pain in all patients with symptoms of acute bowel obstruction and give analgesia in line with local and national guidelines. Ensure that:
 - a. Pain is assessed at presentation to the emergency department
 - b. Pain is assessed throughout the admission
 - c. Referral to the acute pain team is undertaken when pain is difficult to manage, while ensuring the referral does not cause a delay in any definitive treatment.
(Clinicians, Acute Pain Teams)
- 5 Measure and document hydration status in all patients presenting with symptoms of acute bowel obstruction in order to minimise the risk of acute kidney injury (AKI). Ensure that hydration status is:
 - a. Assessed at presentation to the emergency department
 - b. Assessed throughout the admission
(Clinicians)

- 6 Undertake, record and act on nutritional screening in all patients who present with symptoms of acute bowel obstruction. This should include:
 - a. A MUST score on admission to hospital
 - b. A MUST score at least weekly throughout the admission
 - c. Review by a dietitian/nutrition team once a diagnosis has been made
 - d. A MUST score, and if required a dietitian/nutrition team assessment at discharge

As recommended by BAPEN

(Clinicians, Dietitians, Nutrition Teams)

- 7 Ensure patients with a high frailty score (eg. Rockwood 5 or more) receive:
 - a. A multidisciplinary team discussion for shared decision-making, including care of the elderly
 - b. A risk assessment, with input from critical care relevant to the patient's needs
 - c. A treatment escalation plan
 - d. Their resuscitation status recorded
(Clinicians including Care of the Elderly)
- 8 Ensure local policies are in place for the escalation of patients requiring surgery for acute bowel obstruction to enable rapid access to the operating theatre.* This should be regularly audited to ensure adequate emergency capacity planning.
**e.g. The NCEPOD Classification of Intervention can be used to ensure that patients are treated within a clinically acceptable timeframe (Medical Directors, Clinical Directors, Quality Improvement Leads)*
- 9 Agree joint clinical network pathways of care that enable improved access to stenting services for those patients with acute large bowel obstruction who require the service.
(Medical Directors, Division Leads, Commissioners, Clinical Networks)
- 10 Calculate morbidity and mortality risk for all patients admitted with, and before any surgery for, acute bowel obstruction, to aid:
 - a. Shared decision-making between the patient, carers and clinicians, with regard to the treatment options available and to ensure the appropriate informed consent is taken
 - b. Assessment of the risk and predicted outcome associated with undertaking a laparotomy
(Surgeons)
- 11 Minimise delays to diagnosis and treatment for acute bowel obstruction. Development of an evidence-based pathway for acute bowel obstruction, including recommendations 1-10 could facilitate this. The pathway should be audited at specific time points such as:
 - a. Time from arrival to CT scan
 - b. Time from arrival to diagnosis
 - c. Time from decision to operate to start of anaesthesia
(Clinicians, Medical Directors, Clinical Directors, Quality Improvement Leads)