



The Royal College of Surgeons of England

Findings from the National Bowel Cancer Audit

Clinical Effectiveness Unit

Royal College of Surgeons of England

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Outline



- 1. Main findings from the 2011 Audit**
- 2. Bias in mortality in the Audit**
- 3. Case-mix adjustment model for bowel cancer surgery**

Outline



1. Main findings from the 2011 Audit

- **Summary of patients in the 2011 Audit**
- **Improvements 2008 – 2010**
- **NICE guidelines**
- **Performance monitoring**

Main findings from the 2011 Audit



Summary of patients in the 2011 Audit

28,260 patients with a 1st diagnosis of bowel cancer
01/08/2009 - 31/07/2010

All NHS trusts in England & Wales

Some regions of Scotland, RoI, NI – reported separately

Main findings from the 2011 Audit

		N	%
Cases reported		28,260	
Surgically treated		21,306	75
Major resections		17,161	61
Sex	Male	16,017	57
	Female	12,239	43
	Missing (% of total)	4 (0.0%)	
Age group	<65 yrs	7,875	28
	65-74 yrs	8,654	31
	75-84 yrs	8,508	30
	85+ yrs	3,223	11
Cancer Site	Colon	17,748	63
	Rectosigmoid	1591	6
	Rectum	8773	31
	Unknown (% of total)	148 (0.5%)	

Main findings from the 2011 Audit

Improvements 2008 - 2010

Case-ascertainment in England

	2007-08	2008-09	2009-10
Patients identified in HES	28,143	28,304	29,577
Patients identified in the audit	19,248	22,257	26,251
% case ascertainment	68	79	89

HES = Hospital Episodes Statistics database

11 trusts <50% ascertainment

37 trusts <80% ascertainment

Main findings from the 2011 Audit

Improvements 2008 - 2010

Data completeness

	2007-08	2008-09	2009-10
Patients undergoing resection	13,173	14,755	17,161
Complete data on 6 key items	8,431	10,654	12,801
% data completeness	64	72	75

24 trusts <50% complete

75 trusts <80% complete

Main findings from the 2011 Audit

Improvements 2008 - 2010

Postoperative mortality

	2007-08	2008-09	2009-10
Patients undergoing resection	13,173	14,755	17,161
Died within 90 days of surgery	836	892	957
%	6.4	6.1	5.6

% patients getting resection has stayed constant

Main findings from the 2011 Audit



NICE guidelines

95 to 100% of patients should be discussed at an MDT meeting

In 89% of trusts at least 95% of patients were discussed at an MDT meeting

Overall 97% of patients were discussed at an MDT meeting

Main findings from the 2011 Audit



NICE guidelines

100% of patients should be seen by a specialist nurse

In 75% of trusts over 80% of patients saw a CNS*

Overall 83% of patients saw a CNS*

*Amongst patients where this data is recorded (missing in 25%)

Main findings from the 2011 Audit



NICE guidelines

100% of patients should have a CT scan

In 79% of trusts over 80% of patients reported to have CT scan

Overall 83% of patients reported to have CT scan

Main findings from the 2011 Audit



NICE guidelines

Patients with invasive rectal cancers for whom surgery is being considered should have magnetic resonance imaging (MRI) scans before treatment begins

In 65% of trusts at least 80% of rectal cancer patients undergoing major surgery reported to have MRI scan

Overall 82% of rectal cancer patients undergoing major surgery reported to have MRI scan

Main findings from the 2011 Audit



NICE guidelines

Laparoscopic surgery (including laparoscopically assisted surgery) is recommended as an alternative to open surgery for people with colorectal cancer if: both laparoscopic and open surgery are suitable for the person and their condition.

Main findings from the 2011 Audit

NICE guidelines

Laparoscopic surgery

	N	%
Patients undergoing surgery*	17,814	
Open surgery	11,555	65
Laparoscopic then open	486	3
Laparoscopic converted to open	607	3
Laparoscopic completed	5,166	29

*with data recorded on laparoscopic surgery (12% missing)

Main findings from the 2011 Audit



NICE guidelines

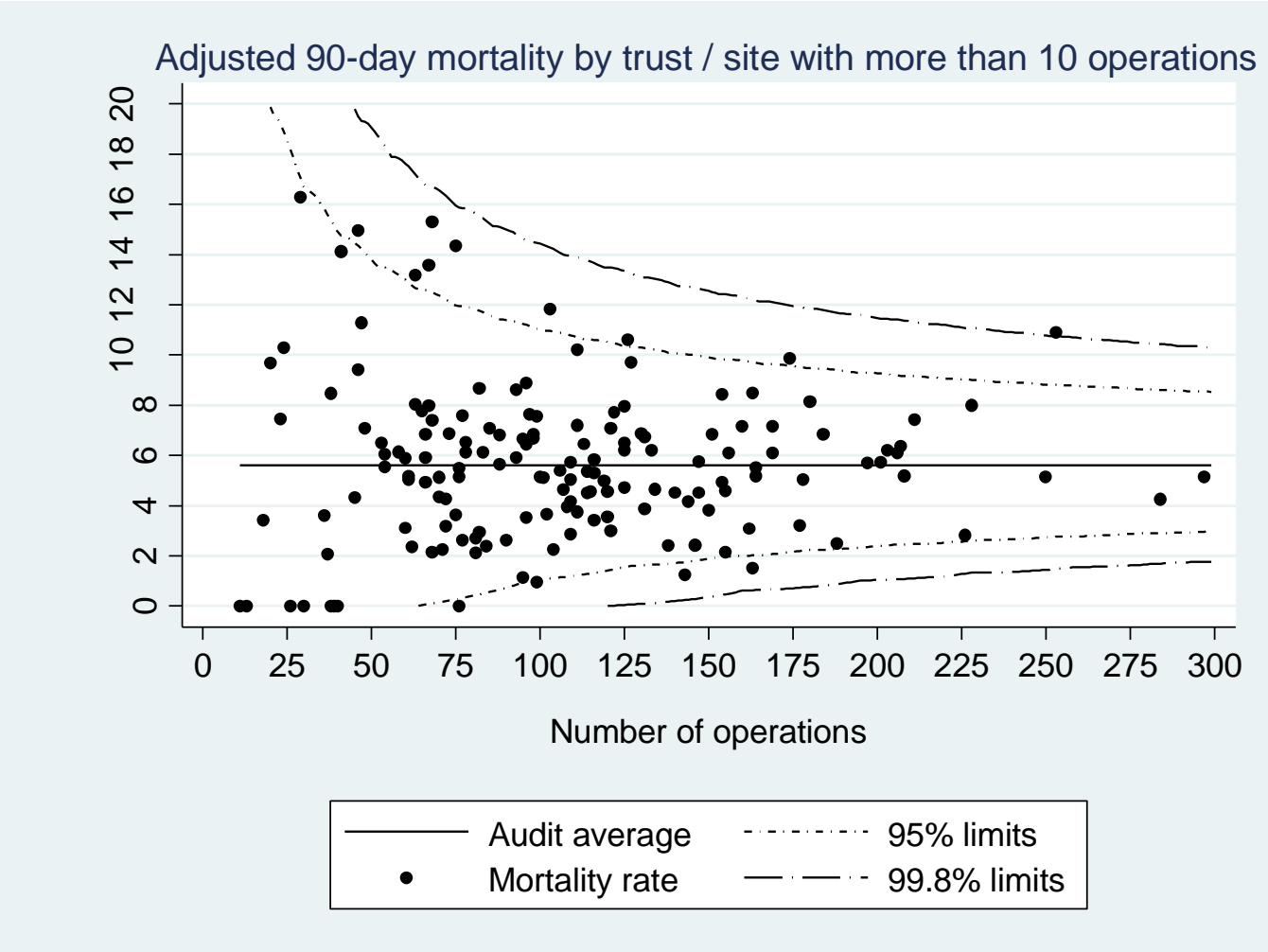
The overall proportion of rectal cancers treated by APER should be less than 30%

In 2/3 of trusts <30% of rectal cancer patients undergoing major surgery had an APER

Overall 25% of rectal cancer patients undergoing major surgery had an APER

Main findings from the 2011 Audit

Performance monitoring



Main findings from the 2011 Audit



Performance monitoring

Getting closer to the reasons for postoperative mortality

Return to theatre - variation across trusts
 - reasons for return to theatre

Mortality amongst patients who return to theatre –
“failure to rescue”