

NBOCAP Report 2012

NCUH outlier for high *adjusted* mortality Aug 2010 – July 2011

NBOCAP

- National Bowel Cancer Audit Project
- Detailed audit of bowel cancer treatment and outcomes in England & Wales
- Reports since 2006, initially voluntary
- All trusts participating from 2009 report
- NORCCAG
 - Northern Colorectal Cancer Audit Group
- NCUH data extracted from NORCCAG until 2011

July 2012 – letter from NBOCAP

- **adjusted 30-day mortality**
- **12.5%** NCUH
- **3.3%.** England & Wales
- **adjusted 90-day mortality**
- **15.0%** NCUH
- **5.0%.** England & Wales

- 1 in 40 chance of this being random variation

Crude 90 day mortality



Adjusted 90 day mortality



Mortality in Preceding Years

- NORCCAG reports up to 2009:
 - NCUH always within expected range
 - Even outlier for below expected mortality in some years

Preceding years

2010 NBOCAP

2% crude 30 day	2.7% adjusted 30 day
5.7	6.5 <i>Northumbria</i>

2011 NBOCAP

3.5 crude 30 day	4.8% adjusted 30 day
3.5 crude 90 day	4.5% adjusted 90 day
6.9	7.2 <i>30 day Northumbria</i>
9.2	9.9 <i>90 day Northumbria</i>

Assessing the issues

- Data collection
 - Had we counted all the cases? 108 ? Not enough
- Was the data accurate?
 - Factors affecting *adjusted* figures
- Why had the deaths occurred?
 - Were they ‘expected’?
 - Preventable deaths or common factors?
 - Should they have had surgery?

Case ascertainment

- Comparison with MDT records
- Comparison with pathology database
- 14 unreported cases found
 - 1 additional death within 30 days
 - 7% mortality, so no effect on overall figures

Adjusted figures – why so bad?

No. cases reported to the Audit	No. cases identified in HES / WCISU	Case ascertainment %	No. cases having major surgery according to the Audit	Data completeness for patients having major surgery %
170	216	79%	108	76%
<i>N'thum 323</i>	<i>347</i>	<i>93%</i>	<i>186</i>	<i>89%</i>

ASA grades – patient fitness

		E & W	%	NCUH	%
ASA grade	1	2,315	15.1	24	26.1
	2	8,471	55.2	46	50.0
	3	4,078	26.6	21	22.8
	4 or 5	476	3.1	1	1.1
	Missing	2,071		16	

Palliative ops/Emergency ops

Cancer Network / Trust	Nº	Patients with distant metastases at time of surgery (%)	Major surgery carried out as urgent or emergency procedure (%)
England/Wales	17,537	12.0	18.9
North Cumbria	108	<i>25 missing data</i> 3.3	<i>6 missing data</i> 14.3
Northumbria	186	11.2	12.4

Evaluation of 10 deaths

- 10 case notes obtained
- Even spread among colorectal surgeons
 - None under locum consultants
- Total 3 emergencies
 - 1 emergency: three ops by breast & upper GI cons
- Mean & median age 77
- All had multiple comorbidity

Evaluation of 10 deaths

- 1 death probably related to leak from bowel join after emergency op*
- 1 chemotherapy death at 61 days
- 1 death from advanced disease at 39 days
- 3 respiratory
- 2 MI
- 2 sepsis (including leak*)
- 1 gastric aspiration

Evaluation of 10/11 deaths

- Even in hindsight
 - Decision to operate questionable in only 1 case

Preview of following year

- August 2011 – July 2012
 - For NBOCAP Report 2013
 - Uploaded to NBOCAP in December 2012

3 deaths in 109 cases uploaded

ASA grade 1: 13%

Conclusions

- High crude mortality probably due to chance
 - But must be a stimulus to renew efforts
 - Perioperative care
 - Patient selection
 - Surgical techniques
- Adjustment exaggerated by poor data
 - Specific measures.....

Data improvement plan

- MDT to confirm details,
 - eg ASA grade, emergency op, pathological grading
- MDT coordinators at CIC *and* WCH to enter data after MDT meeting
- Review of data before upload to NBOCAP
 - comparison with pathology database

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