



## 30 years on: Comparing 2017 with findings from the original 1987 CEPOD report.

DJ Freeman & D Whitelock

**AIM:** To analyse the 30 day perioperative deaths at a single NHS Trust by comparison to the original confidential enquiry into perioperative deaths of 1987.

**METHOD:** Data on patients dying within 30 days of an operative procedure during calendar year of 2016 was extracted from Bluespier, a Theatre Management System.

Individual patient records were then examined against the CEPOD findings of the 1987 report.

### FINDINGS:

	Decrease in value
	Increase in value
	No change in value

	1987	2017	30 Years on
Overall Mortality postop within 30 days	0.7%	0.8%	Overall postoperative mortality has increased
Proportion of deaths from total number of patient deaths	3.0%	10.1%	Postoperative deaths are a greater proportion of overall patient deaths
Deaths under 15 years old	1.0%	0.0%	No deaths occurred in under 15 year olds
Time from operation for half of postoperative deaths	7 days	12 days	Greater proportional of patients die later postoperatively
% patients over 65 years old	79.0%	87.0%	Patients are older
% Patients ASA 2 or less	24.8%	10.4%	Reduced proportion of patients with no or mild systemic comorbidities
Age of patients having highest mortality in AAA surgery	70 - 79 years old	70 - 79 years old	Same age group of patient having highest mortality in AAA surgery
Peak Surgical Start Times	09:00, 12:00 & 14:00	09:00, 12:00 & 14:00	Peak start times are the same
% of operation started within normal working hours	80.0%	87.0%	Increased proportion of operations within normal working hours
% operations carried out over weekend	11.0%	16.1%	Increased proportion of operations at weekends
Consultant Surgeon present in theatre (# NOF surgery)	47.0%	47.0%	Same Consultant surgeon presence in theatre for #NOF surgery
Consultant Surgeon present in theatre for Emergency AAA surgery	62.0%	100.0%	Increased Consultant surgeon presence in theatre for AAA surgery
Consultant Anaesthetist in theatre during # NOF surgery	42.0%	88.0%	Increased Consultant Anaesthetist presence in theatre for AAA surgery
Location of death outside an acute hospital setting	1.5%	18.0%	Increased proportion of patient deaths outside an acute hospital setting
Deaths on the wards	72.0%	56.0%	Reduced proportion of deaths on the wards
Deaths within Critical Care Unit	19.0%	16.0%	Reduced proportion of deaths in the Critical Care Unit
Deaths within High dependency unit	0.5%	4.0%	Increased proportion of patient deaths within high dependency areas
Deaths within Theatre	4.2%	4.0%	Same proportion of patient deaths within theatres

### TAKE HOME MESSAGE:

In comparison there is an increase in overall mortality of patients dying within 30 days of an operation. These patients tend to be older, have increased comorbidities, die later and are a greater overall proportion of deaths. There is greater consultant presence in theatre.