

European Surgical Outcomes Study (EuSOS)

An international seven day study of standards of care and clinical outcomes after non-cardiac surgery

Background

As many as 234 million major surgical procedures are performed worldwide each year. We know very little about the peri-operative care of these patients or their clinical outcomes. However, because so many procedures are performed, it is very likely that complications following major surgery are a leading cause of morbidity and mortality. Patients who develop complications but survive will still suffer reductions in functional independence and a substantial decrease in medium and long-term survival.

We urgently need to learn more about the differences in quality of peri-operative care across nations and to confirm the frequency of poor surgical outcomes. Without this robust epidemiological data many will not be convinced of the importance of good quality peri-operative care or the need for more research to improve this further. The mismatch in peri-operative care resource provision could be widespread or confined to just a few nations. Either way, because so many patients undergo surgery, even small improvements in their care could have a massive impact.

The EuSOS study will investigate peri-operative care across Europe to provide a very large but simple dataset. This data could trigger a step-change in the care of non-cardiac surgical patients and will provide a strong basis for new clinical trials to raise standards still further.

What questions will EuSOS answer?

EuSOS has been designed to answer a range of simple questions including:

- What is the in-hospital mortality rate for patients undergoing non-cardiac surgery?
- What is the duration of hospital stay for patients undergoing non-cardiac surgery?
- What is the current standard of peri-operative critical care provision non-cardiac surgery?
- What is the current standard of haemodynamic (cardiac output) monitoring?
- Are there differences in peri-operative care provision in different health-care systems?
- Are there differences in hospital stay and mortality following surgery in different nations?

How will the study work?

Hospitals will collect data describing the care of all adults undergoing in-patient non-cardiac surgery within a seven day period in the spring of 2011. We will include elective and non-elective surgery but exclude day-case surgery, cardio-thoracic surgery, neurosurgery, radiological or obstetric procedures. Each hospital will then be asked to provide information on the length of hospital and survival of these patients.

JOIN THE CLINICAL TRIAL NETWORK !

Does it involve a lot of work?

In most hospitals, the study will work like a large clinical audit. We need to recruit a minimum of 150 hospitals in ten or more nations and it is important that the investigators in these hospitals are able to collect accurate data. We have taken care to request only information which is both useful and easy to collect. For most patients this will mean only a single one-page data sheet, easily completed by the anaesthetist in charge of each case. We will provide a user-friendly website to transfer the anonymous patient data to the lead centre.

What do you need from me today?

We are asking for volunteers to act as local co-ordinators in their hospitals, to ensure complete and accurate data collection which complies with local rules. Some volunteers will be invited to act as national co-ordinators in their own countries. All local and national co-ordinators must be approved by the EuSOS team.

How will I benefit from taking part?

Good question! The most important reason for taking part is to improve the standards of patient care; however there are some other benefits. Centres will receive an individual report allowing comparison of their dataset to that of their national cohort and the overall dataset. We hope to be able to offer free registration for a future ESA annual congress to the local co-ordinators in each hospital. Investigators will also be welcome to propose further analyses using the EuSOS dataset although these must first be approved by the EuSOS team. The work of all local and national co-ordinators will be publicly acknowledged.

How do I get involved?

Please provide your details on an expression of interest form or for more information, contact Rupert Pearse (chief investigator) by e-mail (r.pearse@qmul.ac.uk) or telephone (+44 20 7377 7299) or through the ESA Secretariat (research@euroanaesthesia.org).

***Further information: www.euroanaesthesia.org and
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