Letters and comments

Hospital mortality under surgical care

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Australian and New Zealand Audit of Surgical Mortality
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CORRESPONDENCE TO

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COMMENT ON

Aziz O, Fink D, Hobbs L, Williams G, Holme TC. Hospital mortality under surgical care. *Ann R Coll Surg Engl* 2011; **93**: 193 – 200
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The article by Aziz *et al* reviews the use of the 'hospital standardised mortality ratio' (HSMR) in England as a measure of hospital performance as well as highlighting the inadequacies in its current form. A general surgeon's data were used to evaluate accuracy of this system. Alarming, the results showed that at least 30% of cases were incorrectly attributed to the surgeon, that none of the surgeon's cases were externally peer reviewed, that there was no clear evidence of adverse events being possibly attributed to the mortality to see if they could have been avoided and that there were so many missing data regarding co-morbidities.

Clinical quality registries play an increasingly important role to improve the quality of healthcare in Australia. The 2009 Australian Institute of Health and Welfare report on the proposed national quality indicators emphasised the importance of having national registries, particularly in high cost areas of medicine.¹ Indicator 36 (independent peer review of surgical deaths) stated that the original template of the Scottish Audit of Surgical Mortality (SASM) should be adapted for use in Australia. It recommended that these data sources be reported nationally, ensuring standardisation of reporting methods across all states and territories in Australia. We can report that this is now the case with the Australian and New Zealand Audit of Surgical Mortality (ANZASM) being set up in 2006.

Aziz *et al* further pointed out that the HSMR cases are not reviewed externally and that the public could therefore be misinformed by seeing these crude mortality data (the validity and accuracy of the data being in question), especially when in many cases the risk of death is high in this group of patients. In our 2009 national report, the surgeon considered the risk of death to be expected in 11% of cases, considerable in 40% and moderate in a further 19%.² Co-morbidity was another significantly important factor in the study by Aziz *et al*, with 94% of cases recorded as having an ASA (American Society of Anesthesiologists) grade >1. The Western Australian Audit of Surgical Mortality (WAASM),

the Tasmanian Audit of Surgical Mortality (TASM) and SASM reported co-morbidity as 86–99%.^{3–5}

In the 2009 Australian national report, 91% of cases reported at least one co-morbidity and 75% had at least two co-morbidities while only 6% were ASA grade 1 or 2.² These levels of data and statistical analysis can only come from full surgical participation and a robust surgical case form applied across all states and territories. ANZASM agrees that the UK HSMR methodology looks at hospital mortality in isolation rather than from a regional or national perspective and is therefore open to flaws in interpretation in its analysis of data, as Aziz *et al* clearly point out.

Aziz *et al* go on to say that they consider HSMRs to be inadequate and suggest surgeons participate in large audits similar to SASM, WAASM and TASM. The Royal Australasian College of Surgeons (RACS) and Australian state and territory Departments of Health have committed to the national audit of surgical mortality. To reinforce the importance of the activity, participation in ANZASM was deemed a mandatory part of the Continuing Professional Development (CPD) programme (Category 1 – Surgical Audit and Peer Review) in January 2010. The ethos for this was to ensure complete participation by fellows in the audit process.

There is tremendous benefit in having a common surgical case form questionnaire and being able to collect the same data set over a wide spectrum of surgical interventions (and therefore reducing variation in the levels of accuracy in the reporting methodology). Having this national system in Australia across all states and territories, encompassing surgeon reporting and peer review, enables accurate data collection, surgeon reflection and general education by sharing de-identified cases in case note reviews. This can only be a beneficial process to all concerned.

The RACS fully encourages the audit programme as it is fully owned by the surgeons with the understanding for the need to have partnerships with governments and other bodies. Surgeon participation in an independent peer review mortality audit process would therefore be an ideal way to better inform the college, as well as the general public, in terms of its accountability in the profession of providing quality care to its patients.

References

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