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Overview of surgical death investigations: could a dreaded experience be turned into an opportunity?

The prospect of an investigation into the death of a patient often raises apprehension among surgeons, even when there are no allegations of negligence.[1] Although a focus on identifying system failures and prevention is promoted, investigations may be emotionally charged, examine events with the benefit of hindsight, removed from the context of the 'lived experience' and judged against the benchmark of an ideal surgeon. This propensity to revert to a model of 'medical perfectionism' characterized by unrealistic expectations can result in the development of a culture of blame which can lead to resistance towards active engagement with investigations.

The primary purpose of death investigations is to improve care and ensure patient safety, a goal shared with all surgeons. Unfortunately, many surgeons first learn about them when they are in the midst of one. We fear what we do not know, especially if it threatens our personal identity and professional life.[1] Trainees and fellows should be better informed of the purpose and process of various types of death investigations, which may allow a potentially negative experience to be an opportunity to improve the care of their patients.

Surgical death investigations can be broadly classified into medical or legal processes. Although examining the same event, each has its own particular perspective with respect to patient safety (Fig. S1, Appendix S1).

Mortality audits have an educational rather than disciplinary purpose. They tend to focus on the technical aspects of clinical care, representing an invaluable opportunity for surgeons to reflect on their practice, improve patient safety and reveal system failures. The resulting practical recommendations are disseminated within surgical craft groups under the umbrella of the Royal Australasian College of Surgeons (RACS), which administers such an audit, compulsory for its Fellows.[2] RACS has also developed a guideline for the conduct of local morbidity and mortality audits.[3] There is evidence that these audits reduce mortality, but is uncertain what proportions of recommendations are implemented and whether their impacts are subsequently evaluated.[4]

Aggregate data provide a reliable and contemporary representation of the state of surgical care at a national level and of trends in mortality.[2] However, such assessments often do not involve other stakeholders, and thus may lack the breadth of analysis provided by other investigations. Utilizing only a surgical specialist approach may lead to a missed opportunity for cross-disciplinary interventions. In addition, their benefits may be elusive to patients, as reports are not released to the public in a comprehensible form.

Hospital internal investigations, despite being confidential, lead to concern among surgeons as they are often seen as being synonymous with misconduct determinations. Nevertheless, the involvement of non-surgical experts and witnesses means that broader system failures are more readily identified. They represent a complementary tool that help ensuring system-wide compliance with healthcare standards and their more open, broader approach tends to maintain surgeons' credibility with the public. *Medical board investigations* shift the focus to maintaining public safety through the examination of individual clinical behaviours. These can lead to drastic and long-lasting consequences on employability, reputation and insurance status. In Australia, 30% of complaints to medical boards result in some regulatory action.[5] Yet again, a potentially painful experience may be turned into an enriching one for surgeons with sufficient insight. In addition, surgeons may appeal to administrative tribunals to overturn sanctions, while patients cannot. While medically based, these investigations operate within formal quasi-legal procedures that provide an avenue through which patients are able to engage and express their concern. Unlike civil claims in negligence, where the terms of a settlement may be confidential between the parties, information from medical board investigations is publicly available and can contribute to patient injury prevention, although empirical evidence supporting this is limited.

Coronial investigations are legal enquiries examining system failures on a patient's journey. They involve non-surgical experts who have significant experience in identifying system failures likely to be present in health care that contributed to a death, without focusing solely on the contribution of the surgeon.[6] Such investigations are typically lengthy, to the extent that local policies may have already changed by the time coroners deliver their finding. While coroners do not have the power to enforce implementation of their recommendations, nor to impose sanctions or determine civil liability, healthcare organizations may be required to respond to published recommendations. *Civil litigation and criminal prosecution* is a further legal avenue with emphasis on surgeons' actions and responsibilities. It is a private dispute between the plaintiff and the defendant, focused on compensation. As a result, it has far less potential for improving patient safety. Many cases are unrepresentative of broader system concerns, and judgements are often shrouded in confidentiality clauses that restrict learning.[7] Rarely, gross medical negligence leads to a criminal prosecution. Although the role of criminal courts is primarily to identify and punish criminal wrongdoing, proceedings may identify system failure and foster confidence in the overall healthcare system.

Anxiety induced by these investigations could be reduced by enhancing understanding of their nature and purpose. This could be

achieved by making death investigations a compulsory component of pre-vocational and specialty training curricula. Like other aspects of surgery, preparation is key. By increasing their familiarity with death investigations, surgeons can turn a potentially harrowing experience into an opportunity for personal and professional development.

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Supporting information

Additional Supporting Information may be found in the online version of this article at the publisher's web-site:

Figure S1. Medicolegal investigations into surgical deaths with example cases.
Appendix S1. References for Figure S1.

Noha Ferrah,* MD
Joseph E. Ibrahim,* FRACP, FAFPHM
David L. Ranson,† FRCPA, FFFLM
Charles Barry Beiles,‡ FRACS (Vasc)
**Department of Forensic Medicine, Monash University, Melbourne, Victoria, Australia, †Victorian Institute of Forensic Medicine, Melbourne, Victoria, Australia and ‡Victorian Audit of Surgical Mortality, Royal Australasian College of Surgeons, Melbourne, Victoria, Australia*

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