

EDITORIAL

The United Kingdom National Audit Project Program - an opportunity for South Africa?

This edition of the journal contains a comprehensive review of the National Audit Projects (NAPs) from the United Kingdom.¹ This review is important for anaesthesiology in South Africa, as it provides the history and evolution of NAPs in the United Kingdom, the methodology adopted to establish the incidence of uncommon, yet important adverse outcomes, and the approach taken in establishing NAP priorities.¹ South Africa has the infrastructure and the personnel to conduct successful NAPs. These data would be especially advantageous to understanding anaesthesia related-morbidity in low- to middle income countries. We propose that South Africa adopt a similar 'audit' process to the United Kingdom NAPs in South Africa.

We believe that we can conduct successful NAP projects in South Africa. Firstly, through the financial support of the South African Society of Anaesthesiologists (SASA), the Anaesthesia Network for South Africa (ANSA) has established a standing committee of Safe Surgery SA, which provides the perfect platform for the establishment and maintenance of South African NAPs. The review by Thomas and Cook provides an understanding of how to establish the incidence of fairly rare outcomes. The methodology is interesting in that the numerator is provided through a national registry, and then the denominator is provided through an 'activity survey'.¹ ANSA would provide the platform necessary for the registry to establish the numerator, and then it would provide the portal for the subsequent activity survey.¹

Secondly, the need for an airway NAP has been identified in South Africa. The recently established South African Perioperative Research Group (SAPORG) undertook a national survey of perioperative research priorities, with the top 10 perioperative research priorities soon to be published in the South African Medical Journal.² Various perioperative research interest groups were established through this process, with the Perioperative Airway Management group of SAPORG identifying 'A national perioperative airway management and outcomes audit (similar to NAP 4)' as one of their immediate research priorities. Out of the 116 perioperative research priorities initially suggested, the only NAP-like priority was this one.

Is a national audit of airway management and outcomes necessary in South Africa? Although local data are sparse, there is certainly good evidence from abroad to show that airway outcomes are important contributors to morbidity.³ In South Africa, suboptimal airway care has been reported to contribute at least 10% to maternal mortality.⁴ Furthermore, it has been recognised that the application of airway management approaches from high income countries may be inappropriate in our setting, where available training, experience and equipment resources can be seriously constrained.⁵ While airway equipment standards have been produced by SASA, assessment of their adoption has yet to be performed.⁶

Safe perioperative airway management requires the availability of adequate and appropriate equipment, suitable personnel and training, and a recognition of the relationship between airway decisions and outcomes. Each of these facets can be assessed through audit. For instance, the natural cycle of modification of airway management

guidelines in response to rare events detected through audit is well demonstrated by the NAP4 findings being incorporated into the 2015 Difficult Airway Society guidelines.^{7,8} We have little data on the standard of airway management practices or outcomes, potential morbidity or mortality in South Africa, and for this reason, an airway NAP would be a reasonable starting point.

Finally, a successful NAP requires the participation of all the anaesthetists in the country.¹ The network of perioperative researchers established across South Africa through the South African Surgical Outcomes Study (SASOS), the African Surgical Outcomes Study (ASOS) and SAPORG suggests that it will not be difficult to take this project to the entire anaesthesia community in South Africa.

Following NAP4 in the United Kingdom, the decision was taken to invite formal applications for subsequent potential NAPs. Considering that the SAPORG research priorities process undertook a four stage Delphi process,⁹ and the only NAP-like priority out of the 116 proposals was for an airway management audit, it would appear that this should be our first NAP priority in South Africa. The process of deciding future NAPs in South Africa can be addressed at a later stage. We could adopt the formal applications with a review panel approach of the United Kingdom,¹ or a Delphi approach as was successfully adopted by SAPORG for research priorities.²

We expect that a NAP programme in South Africa would contribute to understanding and decreasing anaesthesia related morbidity in low- and middle income countries.

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