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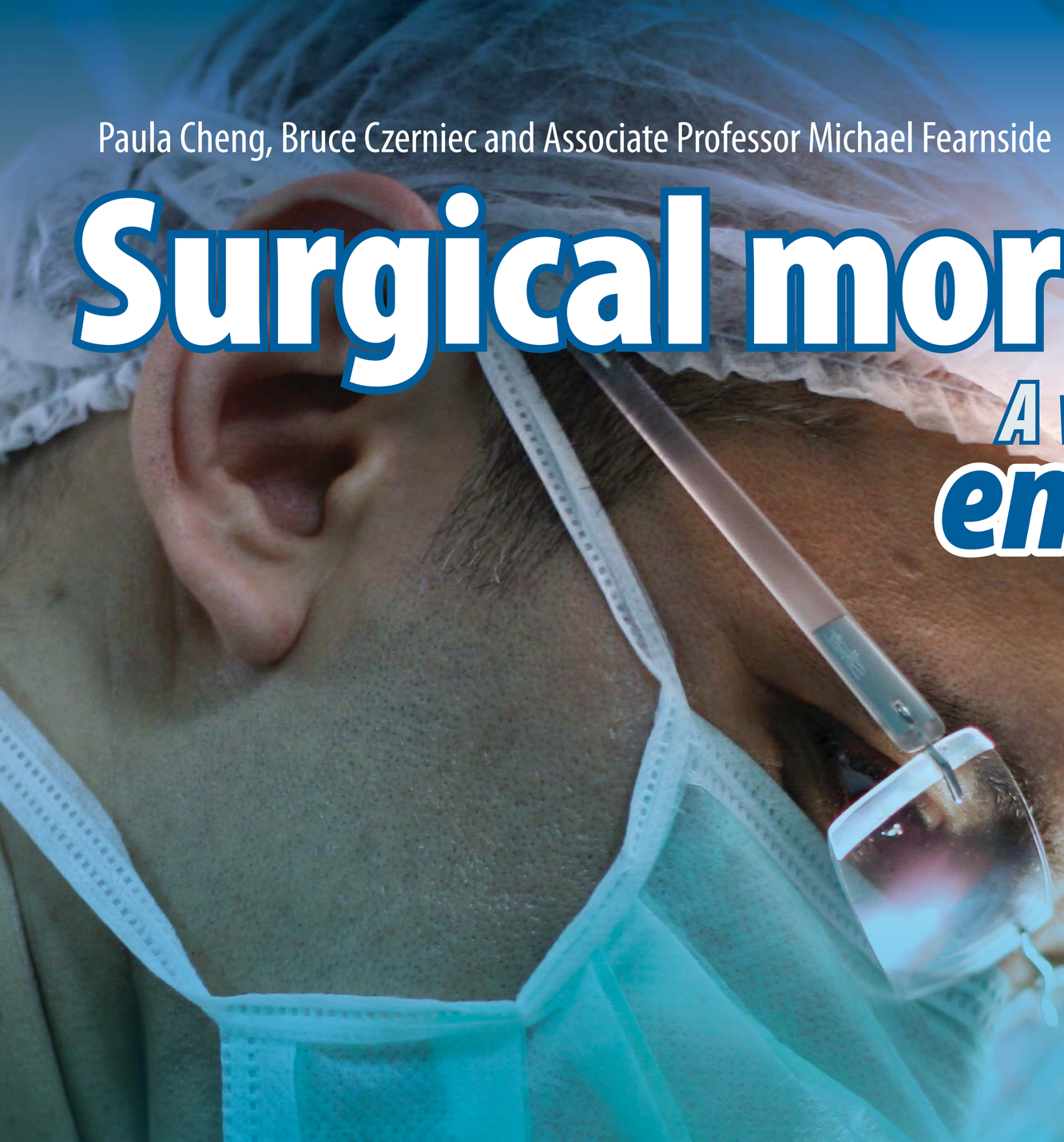
Surgical mortality audit

A way of engaging surgeons in improving patient safety



CONTEXT

The Collaborating Hospitals' Audit of Surgical Mortality (CHASM) is administered jointly by the Clinical Excellence Commission and the State Committee of the Royal Australasian College of Surgeons (RACS) in New South Wales (NSW), Australia. It is overseen by an expert committee whose members include surgeons, health executives and experts in anaesthesia, health and medical laws, forensic pathology and human factors safety. The committee reports to the NSW Minister for Health. A project team manages the audit process by working with all surgeons and public hospitals in NSW.

PROBLEM

Patient safety is an increasing priority for clinicians and hospitals. Surgeons are under enormous pressure to provide comprehensive care and perform safe surgery to patients with scarce health resources. Following a two-staged retrospective medical record review, Kable et al[1] identified adverse events in 22% of surgical admissions during 1992 in two Australian States. Almost half of the adverse events were preventable (48%), with 13% resulted in permanent disability and 4% in death.

STRATEGY FOR CHANGE

CHASM is an education program led by surgeons for surgeons. It involves an independent and systematic audit of deaths associated with surgical care using peer review methodology developed by the Scottish surgeons 18 years ago. CHASM collects information about the clinical management of the patient before death using a self-administered questionnaire, which is sent to the consultant surgeon who cared for the patient. The completed questionnaire is de-identified and sent for peer review. If this review identifies potential deficiency of care or there is insufficient information for assessment, a second peer review of the case notes will be arranged.

CHASM provides constructive feedback to surgeons to facilitate reflective learning and improvement in surgical care. The feedback process involves

- a confidential report on each audited death to the surgeon involved
- an annual case book with selected cases to feature a clinical issue identified for improvement
- an annual individualised report providing summary of the surgeon's data and aggregated data of their peers and other participating surgeons to enable comparison.
- an annual program report with de-identified and aggregated data to enable benchmarking and monitoring of trends
- annual submission of audit data for national reporting to the Royal Australasian College of Surgeons

MEASUREMENT OF IMPROVEMENT

This study compared the data collected by CHASM over two periods of 18 months to assess change in surgical management. The data collected on 11 indicators relating to clinical management and clinical incidents of the audited deaths were analysed and chi-squared test was used to assess difference in the data between the two periods. The results demonstrate significant reported improvement in the delivery of planned surgery , referral to intensive care or high dependency unit and prophylactic management of venous thromboembolism of patients whose deaths were notified to CHASM between 2008 and 2010 ($P<0.05$).

EFFECTS OF CHANGES

The feedback on the audited deaths has facilitated some modest improvement in the clinical management of surgical patients. In a recent survey of surgeons in NSW, 117 surgeons reported that they had shared their peer review reports through discussions at morbidity and mortality meetings, through teaching of junior medical staff and at clinical reviews

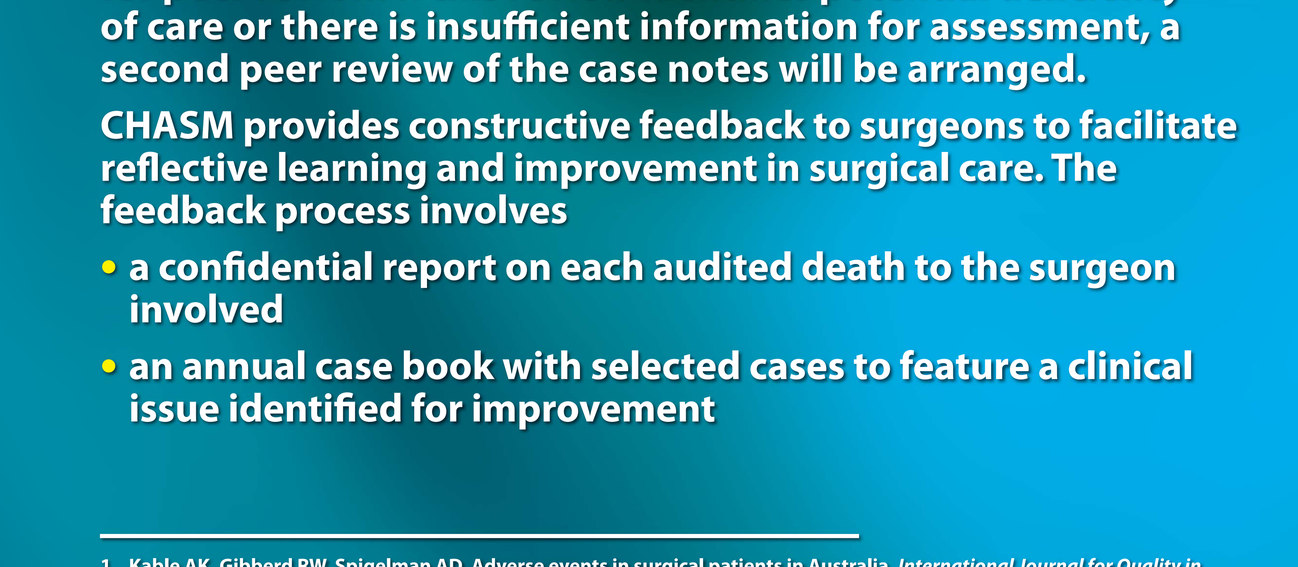
LESSONS LEARNT

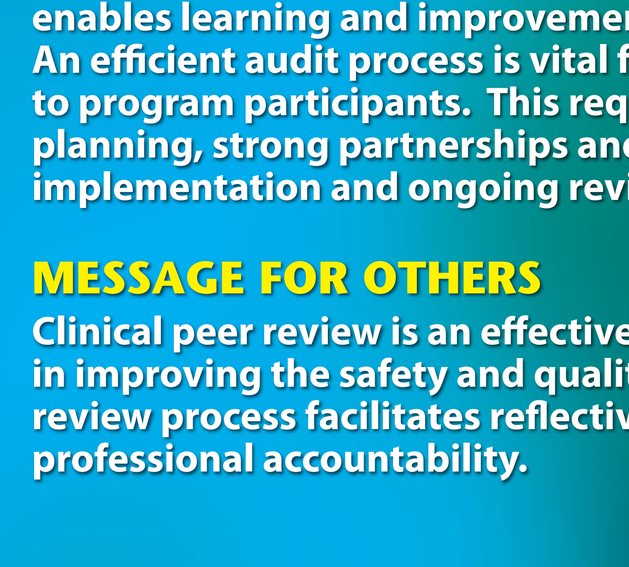
Feedback is a powerful educational tool. Constructive feedback enables learning and improvement within a supportive setting. An efficient audit process is vital for providing timely feedback to program participants. This requires detailed program planning, strong partnerships and adequate resources for implementation and ongoing review and improvement.

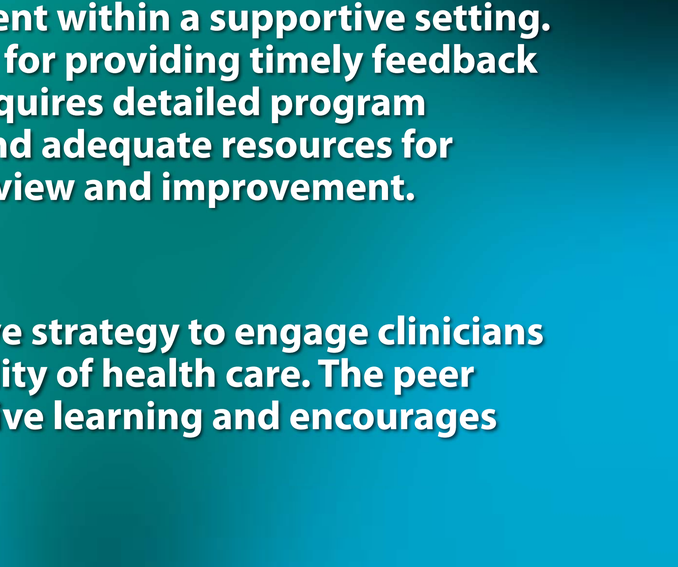
MESSAGE FOR OTHERS

Clinical peer review is an effective strategy to engage clinicians in improving the safety and quality of health care. The peer review process facilitates reflective learning and encourages professional accountability.

1 Kable AK, Gibberd RW, Spigelman AD. Adverse events in surgical patients in Australia. *International Journal for Quality in Health Care 2002*; Volume 14, Number 4 pp269-276.







CLINICAL EXCELLENCE COMMISSION

CHASM Collaborating Hospitals' Audit of Surgical Mortality

Royal Australasian College of Surgeons