



ANZCA
FPM

Perioperative medicine

A better
experience
for surgical
patients



Better together: How perioperative medicine is improving patient care and reducing costs

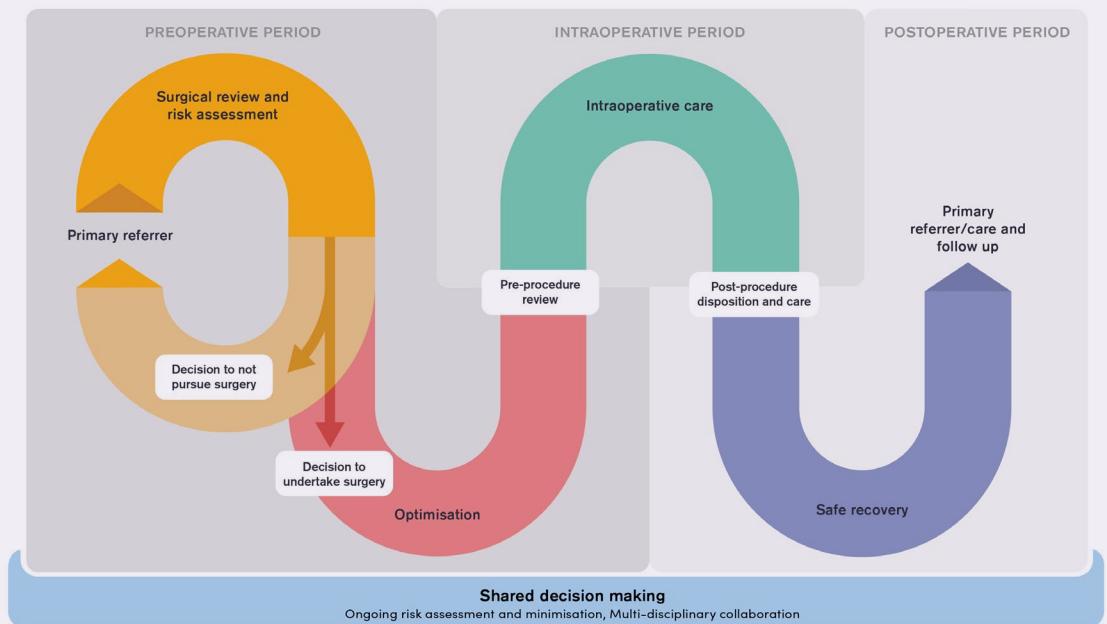
Perioperative medicine is the care patients receive before, during, and after any surgical procedure involving anaesthesia, starting and ending with their general practitioner.

Australia and New Zealand are two of the safest places in the world to have an operation under anaesthesia. The chances of dying due to complications during surgery are extremely low (1:100,000 cases). But complications arising after surgery are the third leading cause of death in the developed world.

In the Australia and New Zealand Perioperative Patient Pathway developed by ANZCA (see below) patients are referred to a perioperative care team as soon as surgery is contemplated. One of the doctors on the team, in many cases an anaesthetist, will oversee patient care throughout the pathway. The patient's general practitioner can raise other medical problems, so the perioperative care team can plan for complications and identify risks up front. All decision-making is shared with the patient.

The perioperative care team may implement programs to stop smoking, reduce alcohol intake, improve diet, or increase exercise to improve organ function and fitness prior to surgery.

Australia and New Zealand Perioperative Patient Pathway



After surgery, the perioperative care team oversees patient recovery.

This pathway is particularly important for the growing group of more than one million people at high risk of complications if they have surgery, who account for more than four-fifths of post-surgical deaths.

Repeat visits by patients to hospital can be complicated and consume many resources. Implementing perioperative medicine pathways creates a simpler approach to patient care, lowers the occurrence of postoperative issues and readmissions, and results

in improved quality of life for the patient.

The perioperative care approach is gradually being established in hospitals and healthcare systems around Australia and New Zealand.

ANZCA has developed the Course in Perioperative Medicine and is working with stakeholders to continue to promote and expand perioperative medicine across Australia and New Zealand.

Professor Dave Story, FANZCA, GChPOM
ANZCA President (2024–2026)

Why perioperative medicine is valuable



Whole-of-patient care

The treatment of patients in a holistic way is central to perioperative medicine. Medical care under current models is made up of brief, separate encounters with various clinicians. A whole-of-patient approach including the patients own goals of care improves the patient experience. It is safer, more efficient, reduces postoperative complications, reduces inpatient hospital days and reduces early re-admissions following surgery.



Better approach for high-risk patients

Perioperative medicine screening and preparation processes allow sicker, more complex patients to access surgical services.



Planning for an ageing population

Australia's over-65 population will more than double in the next 40 years.³ This cohort accounts for 17 per cent of the population yet 40 per cent of public hospital visits.⁴ Perioperative medicine ensures a more efficient and effective utilisation of surgeries for this growing cohort.



Avoiding futile surgeries and complications

Postoperative complications affect 21–45 per cent of adult surgical patients in the first 30 days.¹ These can significantly affect a patient's quality of life and lead to longer stays in hospital. The perioperative care journey offers more precise risk stratification, better preoperative optimisation and earlier identification and management of postoperative complications.²



Embedding "top of scope" ways of working

The perioperative medicine clinician co-ordinates the perioperative journey, supervising different craft groups (other clinicians, nurses, physios, pharmacists etc.) This allows medical practitioners to do more complex, value-add tasks. Team-based care allows all craft groups to work at the top of their scope and is a mechanism for relieving current workforce pressures while supporting clinician wellbeing.

1. https://www.researchgate.net/publication/377668979_General_physicians_and_perioperative_medicine_What_is_on_the_horizon
2. Ibid
3. <https://treasury.gov.au/sites/default/files/2023-08/p2023-435150-fs.pdf>
4. <https://www.ama.com.au/sites/default/files/2024-04/2024-public-hospital-report-cprd.pdf>

The benefits of perioperative medicine

Enhanced Postoperative Care (EPOC) Units save lives

Patients assigned to enhanced postoperative recovery resulted in

1/3

fewer deaths than those who recovered in ordinary wards.⁵

EPOC leads to fewer ICU admissions

Enhanced postoperative recovery care after surgery leads to fewer ICU admissions and reduced length of stay.⁶



EPOC saves costs

One hospital saved \$A1081 for each patient assigned to enhanced postoperative recovery care. Each of these patients spent 4.3 more days at home (patients within 90 days of surgery).⁷

<1%



Reduced cancellations

Introduction of perioperative care support roles at a Victorian hospital has led to a decrease in expensive day-of-surgery cancellations to less than 1 per cent.

Shorter hospital stay

High-risk surgical patients have a shorter hospital stay if treated by a multidisciplinary perioperative medicine team.⁸



5. Outcomes of Postoperative Overnight High-Acuity Care in Medium-Risk Patients Undergoing Elective and Unplanned Noncardiac Surgery (Ludbrook et al., 2023)
6. Enhanced Perioperative Care for Major Spine Surgery (Dagal et al., 2019)
7. The Cost-Effectiveness of Early High-Acuity Postoperative Care for Medium-Risk Surgical Patients (Leaman & Ludbrook, 2024)
8. A multidisciplinary perioperative medicine clinic to improve high-risk patient outcomes: A service evaluation audit (Fullbrook et al., 2022)

How perioperative medicine is already working

Hospitals across Australia and New Zealand are already benefiting from perioperative medicine programs.



“Nurse navigators” guide surgical patients

Austin Health (Vic)

Nurses within the department of anaesthesia focus on providing structure, continuity and co-ordination for complex patients in the anaesthesia pre-admission clinic.

Results:

- Preventable day-of-surgery cancellation statistics now less than 1%.
- Reduction in patient wait times from consent to being deemed medically ready for care.
- Increase in referrals due to greater clinic capacity.
- Improved communication and the exchange of information between the anaesthesia team and the surgical units.
- Staff and patient satisfaction has increased.

Royal
Adelaide
Hospital

Patients home safer and sooner with ARRC

Royal Adelaide Hospital (SA)

In an example of an Enhanced Postoperative Care (EPOC) unit at the hospital, the Advanced Recovery Room Care (ARRC) model, ‘medium risk’ patients are closely monitored for 12-24 hours by a team of doctors, nurses and physiotherapists.

Results:

- Half the rate of complications.
- At least six fewer days in hospital or supported care for each patient.
- One-third fewer deaths, when compared to equivalent patients who recovered in regular wards.

Gold Coast Health
always care



Rapid discharge list

Gold Coast University Hospital (Qld)

Criteria-led theatre lists that target emergency surgical patients based on procedures that 1. Were reliably quick. 2. Experienced the most delays 3. Led to rapid discharge postoperatively.

Results:

- Cost savings equal to the cost of running nine theatre sessions each week.
- Combats hospital bed pressures.
- Increases emergency surgery capacity.
- Improves both healthcare efficiency and the patient journey through faster access to surgery.

Partnering with patients on fasting protocols

Sydney Perioperative Clinical Academic Group (NSW)

In 2024-25, the Sydney Health Partners (SHP) translational research organisation led a co-ordinated initiative to adapt the “Sip Til Send” model across five public hospitals to reduce unnecessarily prolonged fasting before surgery. Critical to this success has been meaningful involvement of patients and consumers.

Results:

- Consumer insights informed revision of patient-facing materials and implementation plan leading to clearer language, simplified examples, and visual prompts.

DASI: A functional capacity assessment

Christchurch Hospital (NZ)

The Duke Activity Status Index (DASI) questionnaire is a comprehensive preoperative risk assessment via a simple 12-item questionnaire. A Christchurch Hospital study involved patients awaiting hip or knee surgery, shoulder arthroplasty, smaller joint surgery or spine surgery.

Results:

- Better identification of both low and higher risk patients assists with triage and aids decision-making on whether additional assessment is required.
- Earlier identification of higher risk patients allows a more targeted anaesthesia consultation, improving efficiency and allowing for more individualised perioperative plans.

“Ready for Surgery” perioperative pathway

Sunshine Coast University Hospital (Qld)

The new pathway has three elements:

1. Changed nursing roles including patient screening, theatre list preparation and waitlist management.
2. Early (within 48 hours) high-quality screening that is evidence-based, locally adapted and adjusted for different surgical and patient cohorts.
3. A traffic light system that divides patients into a green pathway (low-risk patients having low risk surgery), an amber pathway (patients referred to the anaesthesia clinic), and a red pathway (high-risk patients).

Results:

- A nurse-led model of care for less complex patients, has freed up the anaesthesia clinic.
- Triage based on a refined health questionnaire has reduced staff workload.
- High-risk patient pathway results in improved surgical decision making early and optimisation during waitlist waiting time.

Multidisciplinary high-risk preoperative clinic

Launceston General Hospital (Tas)

The clinic focuses on a thorough risk assessment to optimise surgery and shared decision-making for patients more at risk of adverse perioperative outcomes. Over 200 appointments were assessed in the first three years.

Results:

- More than a quarter of patients underwent a non-surgical management strategy, and there have been no day-of-surgery cancellations, resulting in considerable savings and better patient outcomes.

Dietitian led, low-calorie clinic for non-bariatric surgery patients

Logan Hospital (Qld)

The preoperative Very Low Calorie Diet (VLCD) clinic offers weight loss interventions to optimise, or “prehabilitate” patients with complex obesity. Dietitian-led VLCD resulted in significant weight loss and waist circumference reduction.⁹

Results:

- Effective and safe in achieving significant weight loss and improving comorbidities two–12 weeks before surgery.
- A reduction of six minutes in operating time for laparoscopic cholecystectomy patients and difficult aspects of the procedure improved.¹⁰
- 141 eligible participants in a study demonstrated clinically significant weight loss and five participants avoided surgery due to weight loss-related improvements in their condition.¹¹

9. <https://pubmed.ncbi.nlm.nih.gov/38220220/>

10. <https://pubmed.ncbi.nlm.nih.gov/34836028/>

11. <https://pubmed.ncbi.nlm.nih.gov/37953146/>



Western Health

Guidelines at your fingertips thanks to app

Western Health (Vic)

The app algorithmically steps users through the hospital's approved complex perioperative guidelines on their phones.

Results:

- Convenient and simple access to established and trusted hospital guidelines.





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Contributing colleges and societies

- Australian College of Rural and Remote Medicine (ACRRM)
- College of Intensive Care Medicine (CICM)
- Royal Australasian College of Physicians (RACP)
 - Australian and New Zealand Society for Geriatric Medicine (ANZSGM)
 - Internal Medicine Society of Australia and New Zealand (IMSANZ)
- Royal Australasian College of Surgeons (RACS)
- Royal Australian College of General Practitioners (RACGP)
- Royal New Zealand College of General Practitioners (RNZCGP)

ANZCA perioperative medicine resources



Perioperative
medicine website
and promotional
material



Perioperative
care framework



Course in
perioperative
medicine