

Sarah Wilkinson – Tauranga Hospital (older adults pharmacist prescriber)

With the support of NZHPA I completed the Monash University 2026 PeriopMed Cardiovascular Short Course run by the department of anaesthesiology and perioperative medicine. (Course website: [Home - PeriopMed Cardiovascular Short Course](#)) This 12-week online course provides training in the assessment, optimisation and perioperative management of patients with cardiovascular disease undergoing non-cardiac surgery. Topics included cardiovascular risk assessment, coronary artery disease, valvular heart disease, heart failure, pulmonary hypertension, echocardiography, arrhythmias and perioperative haemodynamic management.

The purpose of my application for this course was to further develop my expertise in perioperative cardiovascular medicine and enhance my contribution to the care of older adults being reviewed in the perioperative care of older people undergoing surgery (POPs) and those requiring acute orthopaedic surgery. Older orthopaedic patients frequently present with multiple comorbidities and polypharmacy which increase perioperative risk. As a geriatric pharmacist prescriber, I wanted to strengthen my understanding of cardiovascular assessment and optimisation to support multidisciplinary decision making and improve patient outcomes.

Each module was 4 to 6 hours of study and included a good balance of reading material, journal articles and video content, making the course engaging and practical. I have already incorporated several learnings from the course into my clinical practice.

One of the most valuable modules focused on the management of blood pressure in the perioperative period. This covered both the assessment and management of hypertension to reduce perioperative risk, and the management of postoperative hypotension. The module provided practical guidance on the stepwise reintroduction of antihypertensive medications following surgery, which is highly relevant to medication management in older adults following surgery.

A new concept for me was autoregulation, which is the body's ability to maintain perfusion through a specific range of blood pressures. Outside of this autoregulatory range, blood flow can no longer be maintained effectively, increasing the risk of tissue ischaemia. In patients with severe or long-standing hypertension the lower limit of autoregulation shifts upwards and autoregulation range may become narrower. This is one reason why hypotension is not the only important haemodynamic variable and individualised blood pressure and MAP targets are used.

Another particularly useful module was on cardiovascular risk assessment. It introduced me to the use of biomarkers as a risk stratification tool for more accurate risk prediction for cardiovascular adverse effects. The biomarkers included in guidelines include the use of natriuretic peptides and troponin. This module also

introduced risk predication models for cardiac risk estimation (The Revised Cardiac Risk Index (RCRI) and American College of Surgeons National Surgical Quality Improvement Program (NSQIP)).

A key resource used throughout the course was the 2024 AHA/ACC Guideline for Perioperative Cardiovascular Management for Noncardiac surgery, which provides an evidence-based framework for many of the topics discussed. This course has strengthened my understanding of perioperative cardiovascular medicine and will help me contribute to multidisciplinary assessment and optimisation prior to surgery.

I would like to sincerely thank NZHPA for supporting my participation in this professional development opportunity.

