Adventist HealthCare

Summer 2026

San Doctor

collaborating with our GPs to provide coordinated community care

Message from Brett Goods, Chief Executive Officer

Welcome to the first edition of San Doctor for 2026. It is always a pleasure to share the work of our specialists and highlight how innovation, evidence-based practice and clinical leadership continue to shape exceptional patient care at the San.

In this edition, we spotlight a major advancement for the San's neurological services, and the evolution of axillary surgery in the treatment of breast cancer.

Other stories include the first thumb joint replacement, new insights into robotic-assisted knee replacement, and a contemporary clinical perspective on the management of obesity.

I would like to thank our specialists for generously sharing their expertise, and I hope you find this edition of San Doctor informative, thought-provoking and clinically relevant.

Brett Goods, CEO

Chief Executive Officer
Adventist HealthCare Limited

References for articles are available on request.

AN ARTICLE FEATURING **Dr Brendan Steinfort**

A new era for neurointerventional care at the San

Every minute counts when treating complex neurological emergencies. Stroke remains a leading cause of death and long-term disability in Australia, with more than 55,000 strokes occurring each year and numbers rising as the population ages.

This year, Sydney Adventist Hospital will launch a $1.9 million biplane imaging system, as part of a new hybrid biplane theatre, a major advancement for the San's neurological and neurosurgical services. This dual-plane imaging technology provides real-time visualisation from two angles simultaneously, enabling faster diagnosis, greater procedural precision and improved outcomes for patients with stroke, aneurysms and other complex neurovascular conditions. By expanding the San's ability to manage these cases in-house, the biplane will reduce treatment delays, limit the need for inter-hospital transfers and support timely, life-saving intervention.

Ahead of the launch, we spoke with Dr Brendan Steinfort, Interventional Neuroradiologist, about what this technology means for clinicians and, most importantly, patients.

From an interventional neuroradiology perspective, how does a biplane imaging system fundamentally change the way you diagnose and treat patients?

The hybrid biplane theatre being installed at Sydney Adventist Hospital is a state-of-the-art operating room that will bring cutting edge care to patients now and into the future.

It is a theatre which has a biplane angiogram capability, as well as the capability to perform open neurosurgical procedures.

Biplane angiography is a system that allows for simultaneous viewing of two live angiographic images from two different orientations, as well as merging advanced 3D imaging. It allows for treatment of the most complex neurovascular disease.

Having the addition of open neurosurgery in the room allows for an expansion into other cutting-edge care, with combined open and endovascular procedures – such as tumour embolization and resection, giant aneurysm decompression and clipping, cerebral arteriovenous malformation embolization and resection, chronic subdural haematoma embolization and drainage; performed in the one room, with the one anaesthetic.

The addition of a biplane hybrid theatre means the full scope of complex neurovascular procedures can be offered at Sydney Adventist Hospital.

Can you explain how dual-plane imaging improves procedural speed and accuracy compared with single-plane systems, particularly in time-critical cases?

Obtaining two sets of images at once halves the amount of iodinated contrast media required, and halves the acquisition time for those runs.

It also allows for more precise visualisation of complex cerebral vascular anatomy and pathology, which in turn allows for treatment of many more conditions.

A single plane angiogram unit would only be considered safe to treat about 30% of neurovascular patients. Most endovascular treated neurovascular patients can only safely be treated on a biplane machine.

How does faster and more precise imaging translate into better neurological outcomes?

“Time is brain” for acute strokes with two million neurons dying per minute. The sooner these patients can be treated, the better.

Precision is at the core of neurovascular procedures. More precise imaging allows for better understanding of pathology, better treatments and better outcomes.

Being able to combine endovascular and open procedures reduces the number of general anaesthesia episodes a patient has, and the risks associated, and it is also a lot more convenient for the patient.

Currently, some patients require transfer to other hospitals for biplane-supported intervention. What are the clinical risks of these delays, and how will having this capability on-site at the San change that?

On the single plane angiosuite we can care for our San patients with some conditions: diagnostic cerebral angiography, carotid stenting and venous sinus stenting for intracranial hypertension/pulse synchronous tinnitus.

With the addition of the hybrid biplane theatre, this will expand to the full scope of care for neurovascular patients including endovascular neurointerventional procedures, and open neurovascular procedures which require endovascular support.

This includes cerebral aneurysm treatment, both acutely ruptured and planned repairs, arteriovenous malformation repair, dural arteriovenous fistula repair and acute stroke treatment. These patients are currently transferred out of the San, which can incur lengthy delays and long distances.

Can you share a real-world scenario where biplane imaging would have changed or will change patient outcomes?

A patient with any cerebrovascular condition such cerebral aneurysm or stroke who presents to the San can be cared for at the San. Saving a trip to a more distant hospital for the patient, and often many trips for their loved ones.

When looking at patient outcomes, the individual pooled data meta-analysis of the ECR stroke trials showed that for every second of delay, there is a loss of 2.2 hours of healthy life. If we can save 30 mins of delay, that means we will be saving an average of over six months of healthy life for every patient treated.

Dr Brendan Steinfort

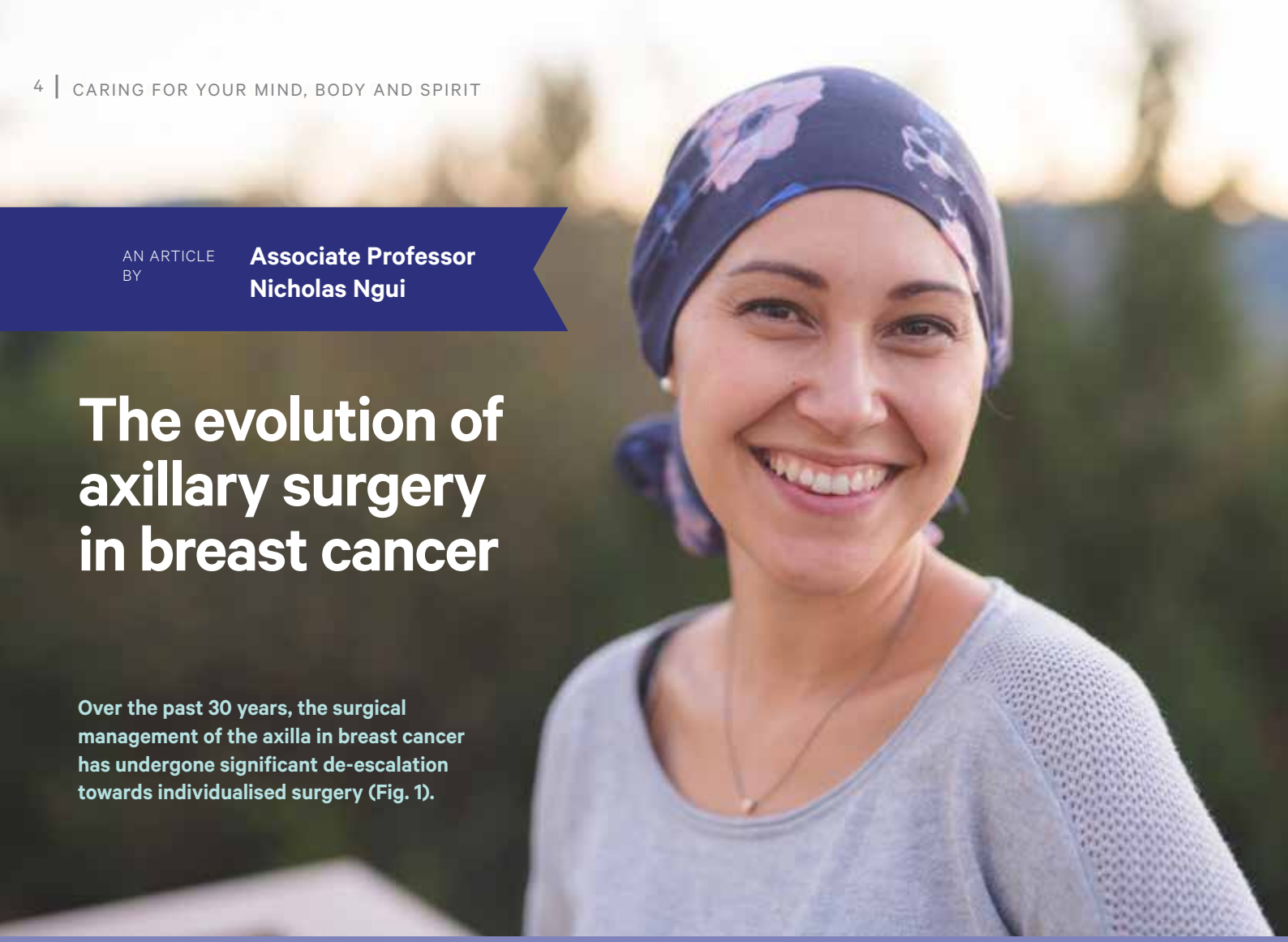
MBBS FRANZCR

Dr Brendan Steinfort is a specialist trained Interventional Neuroradiologist (INR). His fellowships were completed at Royal North Shore Hospital and The National Hospital of Neurology & Neurosurgery, Queens Square London.

Dr Steinfort has extensive experience with neurovascular disease with special interest in cerebral aneurysms, AVM and dural AV fistula embolisation, intracranial stenting and internal carotid artery stenting. He works full time managing patients from consultations to procedures to follow up.

CONTACT INFORMATION

1300 553 339
(02) 8580 5208
admin@sevs.com.au



AN ARTICLE BY **Associate Professor Nicholas Ngui**

The evolution of axillary surgery in breast cancer

Over the past 30 years, the surgical management of the axilla in breast cancer has undergone significant de-escalation towards individualised surgery (Fig. 1).

Until the early 2000s, a full axillary lymph node dissection was the norm, even in women whose lymph nodes were uninvolved. This shift away from radical surgery occurred because many patients derived no oncologic benefit from full axillary lymph node dissection (around 80% of breast cancers are node-negative), as well as the considerable risk of complications such as lymphoedema (Fig. 2) seen in approximately 25% of women following axillary lymph node dissection, pain, numbness, cording and reduced upper-limb mobility.

Sentinel node biopsy, in which only the first draining lymph node(s) are selectively removed, was first performed for breast cancer in the early 1990s. In 2003, Umberto Veronesi published the first randomised trial demonstrating that a full axillary lymph node dissection could be safely avoided when the sentinel lymph node was free of cancer. It was routine then to proceed to a full axillary node dissection if the sentinel node contained cancer.

In 2010, the landmark American College of Surgeons Oncology Group Z11 trial was published. This study showed that women with early breast cancer who underwent breast-conserving surgery followed by whole-breast radiotherapy, and who had one or two positive sentinel lymph nodes, gained no oncologic benefit from proceeding to full axillary dissection. Approximately 27% of patients with positive sentinel nodes would have had additional nodal disease if a full dissection were performed. However, the omission of further surgery did not adversely affect recurrence or survival. As a result, axillary lymph node dissection rates for patients with positive sentinel nodes steadily declined across Australia and New Zealand over the following decade (Fig 3).

Patients who are node-positive prior to neoadjuvant systemic therapy (chemotherapy, immunotherapy or targeted therapy) may now undergo a targeted axillary dissection (TAD). In this approach, the previously involved lymph node is removed along with the sentinel lymph node after neoadjuvant treatment. If these nodes show no residual disease, a full axillary dissection can be safely avoided. HER2 positive and triple negative breast cancers are the most likely cancer subtypes to achieve no residual disease or pathologic complete response (pCR). Historically, these patients would have required a full axillary clearance if they proceeded directly to surgery without neoadjuvant treatment, but in the past five years, TAD has become standard of care. TAD sees the involved lymph node marked with a clip prior to neoadjuvant therapy and subsequently excised using localisation techniques such as the Scout reflector, which is now routinely performed at the Sydney Adventist Hospital.

More recently, the SOUND (2023) and the INSEMA (2024) trials from Europe investigated the omission of sentinel lymph node biopsy altogether in patients with early breast cancer who had clinically negative lymph nodes. Both trials demonstrated no difference in overall survival or disease-free survival at five years. Although these findings have not yet been fully integrated into routine clinical practice, pending longer-term follow-up and real-world validation, they offer a glimpse into the potential future of axillary management. At present, it is reasonable to consider omitting axillary surgery in very elderly or frail patients, or in those with an incidental small focus of invasive cancer identified during surgery for DCIS, in view of the recent SOUND and INSEMA data.

Fig 1.
Evolution of axillary surgery over the past century.

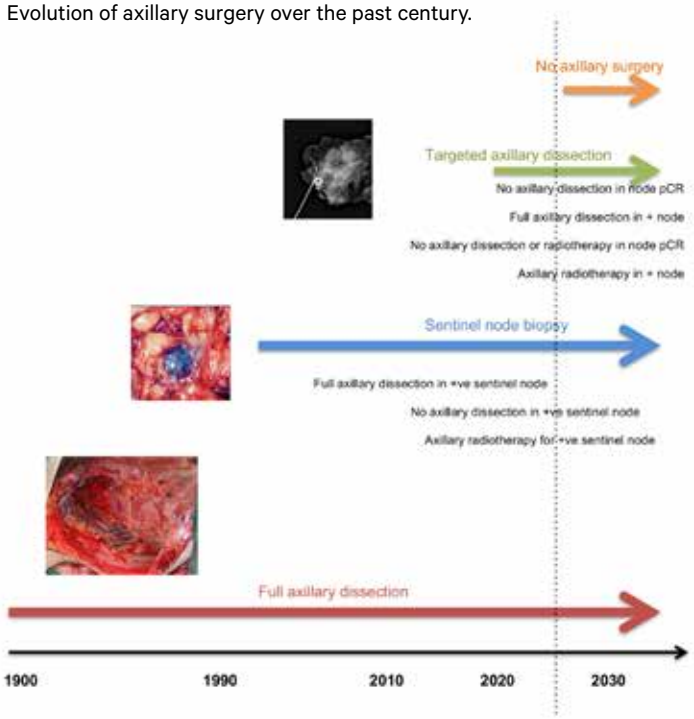
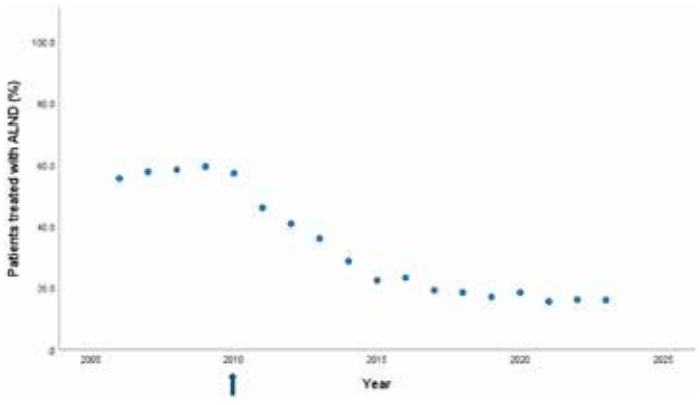


Fig 2.
Patient with chronic left arm swelling due to lymphoedema from breast cancer treatment

Fig 3.
Trend in axillary lymph node dissection rates in Australia and New Zealand in patients with a positive sentinel node. Arrow indicates the year of the Z11 trial publication.



A/Prof Nicholas Ngui

BSc (Med) MBBS (UNSW, Hons) FRACS

Associate Professor Nicholas Ngui is a highly experienced surgeon who has been working at Sydney Adventist Hospital since 2014, consulting at Northern Surgical Oncology (NSO) onsite at the San. He completed his medical degree with honours from the University of NSW in 2003 and was awarded FRACS in 2011 after completing his surgical training. This was followed by further postgraduate surgical oncology fellowship training in breast and endocrine surgery. He is a full member of BreastSurgANZ and ANZ Endocrine Surgeons.

A/Prof Nicholas Ngui is a Clinical Associate Professor with the Australian National University at the Sydney Adventist Hospital. He is heavily involved in the training of medical students, junior doctors and instructs on several courses with the Royal Australasian College of Surgeons. He attends weekly multidisciplinary cancer meetings with other health specialists, discussing the care and management of cancer patients to ensure that the most up to date, evidence-based treatment is provided. He is a strong advocate of practicing current up to date evidence-based medicine.

A/Prof Nicholas Ngui specialises in breast surgery, thyroid & parathyroid surgery, skin cancer surgery and general surgery including laparoscopic and open surgery.

CONTACT INFORMATION

Northern Surgical Oncology,
San Clinic
Suite 4, Level 4,
185 Fox Valley Road
WAHROONGA
(02) 7227 6363
(02) 9473 8949

AN ARTICLE BY **Dr Jobe Shatrov**

Robotic Patella Tracking: The Forgotten Space in Total Knee Replacement

Despite a technically successful knee replacement, up to one in three patients report ongoing difficulty with stairs, stiffness or anterior knee pain.

Total knee arthroplasty (TKA) is one of the most successful operations in modern medicine, delivering reliable pain relief and functional improvement for most patients with advanced knee arthritis. Despite this success, a significant proportion of patients remain dissatisfied, with contemporary arthroplasty data suggesting that between 10% and 30% experience ongoing patellofemoral joint (PFJ) symptoms after TKA, even when the patella has been resurfaced.

These residual symptoms are familiar to most clinicians and include difficulty with stairs, anterior knee discomfort, a sense of tightness, or persistent stiffness despite an otherwise well-aligned and well-fixed knee replacement. Importantly, these symptoms are often difficult to predict pre-operatively and challenging to explain post-operatively, particularly when standard imaging appears satisfactory.

Why the Patellofemoral Joint Matters

While much of the focus in knee replacement has traditionally been on restoring alignment and balance in the tibiofemoral compartments, the patellofemoral joint plays a critical role in everyday function. Activities such as stair climbing, rising from a chair, kneeling, and deep flexion all place substantial demands on the extensor mechanism and the patellofemoral articulation.

A key intra-operative consideration during TKA is patella tracking - the pathway the patella follows as the knee moves from extension into flexion. Optimal patella tracking helps preserve the mechanical efficiency of the quadriceps mechanism and minimise abnormal contact forces across the PFJ. Conversely, subtle abnormalities in tracking can contribute to pain, stiffness, and functional limitation after surgery.

Despite its importance, the way surgeons assess patella tracking during TKA has changed remarkably little over the past several decades.

A Long-Standing Surgical Blind Spot

Traditionally, patella tracking has been assessed using a visual and subjective method often referred to as the “rule of no thumb,” first described in the late 1970s. In simple terms, the patella is considered acceptably balanced if it does not visibly tilt, subluxate, or dislocate as the knee is passively flexed during surgery.

While this approach has stood the test of time, it provides only a crude assessment of a highly dynamic joint. It does not quantify how the patella moves, how closely the reconstructed joint replicates the patient’s native anatomy, or how changes made during surgery alter patellofemoral mechanics through flexion. In an era where millimetres and degrees matter elsewhere in arthroplasty, this represents a clear limitation.

Robotics: Precision for the Tibia and Femur - but Not the Patella

Robotic-assisted technology has rapidly become established in knee replacement surgery. These systems allow surgeons to plan bone resections, implant positioning, and ligament balance with a level of precision not previously possible. However, to date, almost all commercially available robotic platforms have focused exclusively on the tibiofemoral compartments.

Despite being a common source of residual symptoms, the patellofemoral joint has largely remained outside the scope of intra-operative robotic assessment.

Previous research has demonstrated that robotic systems can measure patella motion accurately in laboratory and cadaveric models. However, practical barriers have prevented translation into routine clinical practice. These include the need to rigidly fix tracking devices to the patella, raising fracture risk, and the difficulty of tracking a structure that must be everted during resurfacing and surgical exposure.

A New Way to Measure What Matters

Recent work has addressed these challenges by developing a novel, clinically practical method to assess patella tracking using robotic technology during live knee replacement surgery. This approach allows surgeons to dynamically track patella movement through an arc of flexion without attaching hardware to the patella itself.

For the first time, surgeons can visualise how the patellofemoral joint changes from the patient's native state to the post-implantation state in real time, during surgery. Importantly, this method has been shown to be as accurate as previous laboratory-based techniques, while avoiding their inherent risks and limitations.

Early data using this approach reveal substantial variation in how patella tracking is altered by knee replacement surgery, even when implants are well positioned and alignment targets are met. This variability may help explain why some patients continue to experience anterior knee symptoms despite an otherwise successful operation.

From Static Judgement to Dynamic Understanding

Traditionally, concerns about "over-stuffing" or "under-stuffing" the patellofemoral joint have focused on measurements taken in full extension, based on the thickness of the anterior femur and patella. However, the patellofemoral joint functions predominantly in flexion, where the trochlea behaves as a curved, dynamic surface rather than a flat plane.

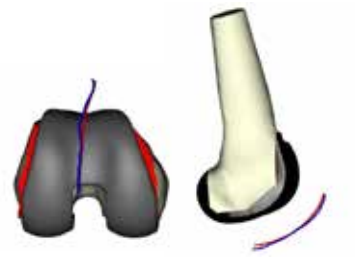
A dynamic assessment allows surgeons to better understand patellofemoral offset throughout knee flexion and to adjust patella resection thickness accordingly. Over-stuffing has been associated with extensor mechanism lengthening, increased joint contact forces, stiffness, and pain in deep flexion, while under-stuffing may compromise quadriceps efficiency. Having objective, real-time feedback offers the potential to more precisely restore native patellofemoral mechanics.

Why This Matters

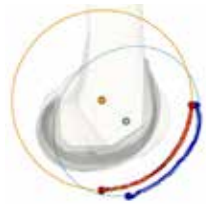
Anterior knee pain and dissatisfaction after knee replacement can be frustrating for both patient and clinician. While many factors contribute, improved understanding and measurement of patellofemoral mechanics may represent an important step toward reducing these symptoms.

As robotic technology continues to evolve, expanding its focus beyond alignment alone to include dynamic joint function may help refine surgical decision-making and, ultimately, patient outcomes. Ongoing research is now analysing larger clinical datasets to better define what constitutes "normal" patella tracking and how this information can be used to guide intra-operative adjustments.

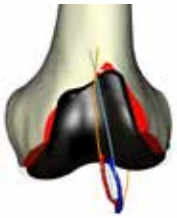
While this work is still evolving, it reflects a broader shift in knee replacement surgery: moving from simply placing implants to a pre-determined alignment, to restoring how the knee actually moves with consideration for the individual patient anatomy.



Robotic patella tracking. Intra-operative visual feedback allows comparison of patella tracking in the native (pre-resurfaced) state (red) and the post-implantation state (blue) during total knee arthroplasty.



Robotic patella tracking. Intra-operative robotic feedback allows the surgeon to visualise and compare native patella tracking with post-implantation tracking, highlighting any changes that occur during total knee arthroplasty.



Robotic visualisation of patella tracking during knee flexion, demonstrating how patellofemoral motion can be assessed dynamically during total knee replacement.

Dr Jobe Shatrov

FRACS FAOrthoA MBBS (Hons) Bsc. (Physio) Grad Dip. (Surgical Anatomy)

Dr Jobe Shatrov is an orthopaedic surgeon with a subspecialty interest in knee surgery. At the forefront of research, innovation and teaching, he has completed prestigious fellowships, including at the FIFA Medical Centre of Excellence in France focusing on robotic knee surgery; and the Centre Orthopedic SANTY, a leading treatment centre for professional footballers from across Europe and the Fortius Clinic in London, UK, centre responsible for managing acute sports injuries for premier league football players and international level sports players.

He is currently undertaking a PhD focused on the patellofemoral joint in total knee arthroplasty.

CONTACT INFORMATION

San Clinic
Suite 601C, 185 Fox Valley Road
WAHROONGA
(02) 9157 9049
(02) 9159 3940

AN ARTICLE BY **Dr Lianne Bissell**

First Thumb Joint Replacement at San Day Surgery Hornsby

Thumb arthritis is the most commonly affected single joint in the hand worldwide and typically begins to wear from around the age of 40. Given the thumb accounts for approximately 50% of hand function, patients with thumb arthritis are often significantly limited by pain and loss of function.

As a hand surgeon, I most commonly see patients between 50 and 60 years of age seeking help to manage their symptoms. Traditionally, those who failed non-operative management faced surgical options associated with a prolonged recovery of 6–12 months. For many younger, active patients, this level of downtime has been difficult to accommodate.

In December, I performed the first thumb joint replacement at San Day Surgery Hornsby. With this new approach, we now expect recovery within weeks rather than months. In fact, patients are performing so well post-operatively that we often need to remind them to slow down during their recovery.

Historically, thumb joint replacements have been plagued with complications since their introduction in the 1970s. Early silicone-based implants caused synovitis and osteolysis, while later cemented ball-and-socket prostheses had high rates of dislocation.

Pyrocarbon spacers trialled in the early 2000s frequently dislocated or migrated, and the Artelon joint spacer introduced in 2005 was withdrawn due to high rates of foreign body reaction and synovitis.

Building on the success of hip replacement surgery, the same principles and technology have now been applied to thumb joint replacement. Dual mobility implants, which have been available in Europe for around a decade, were introduced in Australia in 2024 and are expected to launch in the United States in 2026. Current evidence demonstrates a 2–5-year implant survival rate of 90–96%, with over 90% of patients reporting satisfaction and returning to work within 2–6 weeks post-operatively. We are also seeing improved grip strength compared with traditional surgical techniques.

The first patient to undergo this procedure at the San was a 59-year-old right-hand-dominant female with left thumb arthritis who had failed all non-surgical treatment options. Traditionally, surgery would have involved an excisional arthroplasty, where the trapezium is removed to create a gap or 'pseudo-joint'. Over time, a range of techniques have been used to stabilise this space, including tendon interposition or more recently a strong suture sling between the flexor carpi radialis (FCR) and abductor pollicis longus (APL) tendons.

For the joint replacement procedure, an incision is made over the dorsum of the first carpometacarpal joint and the arthritic surfaces are removed. The implant is available in a range of sizes, allowing for a patient-specific, anatomically matched replacement. The bone surfaces are prepared to accept uncemented metal components coated in hydroxyapatite, a biocompatible ceramic that facilitates osseointegration and provides secure, long-term fixation. Intraoperative X-ray imaging is used to confirm accurate positioning and joint stability before the procedure is completed.

Post-operatively, patients typically wear a splint for comfort for around three weeks before returning to normal daily activities. Sport and higher-level exercise are generally permitted at approximately 12 weeks.

It is important to note that thumb joint replacement is not suitable for all patients. Strict selection criteria apply, including moderate disease severity and adequate bone stock. In more advanced arthritis, multiple joints are often affected, and this procedure replaces only one.

In summary, we have now reached a level of technology in thumb arthritis surgery that rivals the long-established success of hip and knee replacements. This advancement has transformed our ability to offer patients a faster return to function with pain-free, functional hands and represents a significant step forward in the surgical management of thumb arthritis.

Dr Lianne Bissell

FRACS FAOrthA MBChB (Hons) MSc

Dr Bissell is an Orthopaedic Surgeon who specialises in the surgical treatment of bony and soft tissue hand and wrist conditions. She has a special interest in complex fractures, sports injuries, dupuytrens, trigger finger and nerve conditions such as carpal tunnel. She also treats general orthopaedic trauma injuries. She is experienced in microsurgical techniques and has taught these skills to other doctors on the University of Sydney microsurgical course.

Dr Bissell graduated with Honours in Medicine and Surgery from the University of Leicester, UK and later completed a Masters in Sports Medicine and Biomechanics from the University of Dundee, UK. She worked in the NHS and attained Membership of the Royal College of Surgeons of England before migrating to Sydney in 2010. She commenced her Orthopaedic specialist training in the greater Sydney area as well as spending time rurally in Lismore and Canberra Hospitals. She is a fellow of the Royal Australasian College of Surgeons (RACS) and the Australian Orthopaedic Association (AOA).

After general orthopaedic training she underwent a formal fellowship in hand and wrist surgery through the Australian Hand Surgery Society. During this time, she was privileged to work with a number of highly respected Plastic & Orthopaedic Hand Surgeons. Today, as a member of the Australian Orthopaedic Association and Australian Hand Surgery Society she is passionate about providing personalised and high-quality care to all her patients.

Suite 1, 49 Palmerston Road
HORNSBY
(02) 8880 1984
(02) 8000 1984

AN ARTICLE BY **Dr Dhan Thiruchelvam**

Treating Obesity and Obesity-Related Comorbidities: A 2026 Clinical Perspective

Obesity is a chronic, relapsing disease associated with significant metabolic and multisystem complications. Laparoscopic weight loss surgery remains the most effective long-term treatment for morbid obesity and obesity-related conditions such as type 2 diabetes, with risk profiles comparable to laparoscopic cholecystectomy and return to work typically within days to one week.

Over three decades of evidence, including randomised controlled trials, real-world studies and long-term outcome data, support the safety, efficacy and durability of bariatric surgery, demonstrating clear superiority over non-surgical approaches for sustained weight loss and metabolic improvement.

Obesity the disease

Obesity is now one of the most significant drivers of preventable metabolic disease worldwide. In Australia, approximately 30% of adults meet criteria for Class I obesity (BMI >30 kg/m²), with projections suggesting prevalence will approach 50% by 2035.

We know that obesity leads to dysfunction in almost all body systems, however if we treat it early and effectively, we can put it into remission and improve many of these conditions.

Current treatment options include:

- Dietary and lifestyle interventions
- Medication
- Endoscopic therapies
- Laparoscopic metabolic and bariatric surgery

Over the past 16 years in which I have practiced as an Upper GI and Obesity surgeon, the indications and options for treatment have changed. Laparoscopic surgery is a safe procedure, and the indications have broadened.

When patients reach Class I obesity (BMI >30 kg/m²), they need to consider treatment such as weight loss medications or laparoscopic surgery. They must also follow dietary advice from their GP and dietician, and lifestyle advice including exercising and possible engagement of an exercise physiologist or physiotherapist. Psychological input may also be useful for management of eating behaviours.

Once patients have reached Class I obesity, it is difficult for them to lose weight through dieting and exercise due to metabolic adaptation where their body actively fights weight loss.

Cost effectiveness

Cost-effectiveness analyses presented at IFSO 2025 demonstrate a substantial economic advantage of metabolic and bariatric surgery compared with long-term medication.

When measured as cost per quality-adjusted life year (QALY), surgery ranges from US$10,000–25,000 per QALY, which is considered 5-10 times below the affordability threshold.

In contrast, GLP-1 receptor agonists have been estimated to nearly reach US$1,000,000 per QALY when used as lifelong therapy.

Summary

Obesity and its related comorbidities require early, active and appropriate treatment. For appropriately selected patients, laparoscopic metabolic surgery remains the most effective and durable intervention, delivering superior weight loss, metabolic improvement and long-term cost-effectiveness.

“June” represents a typical patient seen by the Sydney Weight Loss and Reflux Clinic

June is a 37-year-old female, BMI 40 (height 165cm and weight 110kg), and Type 2 diabetic who suffers from reflux, PCOS, infertility, sleep apnoea, fatty liver disease, and knee and hip pain.

After trying various diets and exercise for 20 years, her weight has fluctuated, and her problems worsened.

After being assessed by her GP, she was placed on a trial of GLP-1 and achieved about 5% total weight loss and reduced her BMI to 38 and weight to 104kg. This is in line with the average weight loss from medications, based on real-world published trials.

June had some reduction in her comorbidities, but no resolution, and experienced some side effects including nausea and worsened reflux due to decreased gastric emptying.

She was correctly advised to take the medication lifelong. If she ceased the medication, she would regain most of her weight and the reduction in comorbidities would reverse within nine months.

After ceasing medication due to cost and side effects, she regained all the weight. Additionally, she regained fat only, and the muscle she lost when losing weight was not regained post cessation. Multiple studies have demonstrated significant lean muscle loss associated with GLP-1–based therapies, with reductions of up to 30% of total muscle lost in some cohorts.

She consulted Sydney Weight Loss and Reflux Clinic, as she wanted a long term, cost-effective and more efficacious solution to her problems. She was assessed by our team, surgeon and dietician and had three consultations to ensure she understood the process before going ahead with surgery.

June was admitted on the day of surgery and underwent laparoscopic surgery for less than one hour.

When awake, she started drinking and mobilising immediately and took Panadol for pain and an occasional endone. She was also placed on a PPI and antiemetic.

June was discharged the next day and was back to office work in a few days. She was required to progress her diet and avoid heavy lifting for a month.

Over the next few weeks, she had resolution of diabetes and sleep apnoea. She was able to cease her diabetic medications and her CPAP. Her arthritis pain also reduced, and mobility increased.

After 12 months her weight was 77kg and BMI 28. She was able to fall pregnant at 12 months post-operation.

June sustained her weight loss at a follow-up five years after her operation.

Medication vs Surgery

MEDICATION:

Pros:

- Less invasive than surgery
- 5% total weight loss
- Cheaper initially (in first two years)

Cons:

- Side effects and intolerance
- Lower average total weight loss (5% compared to 30%)
- Poor adherence and relapse rates (Around 50% of patients cease medication by 12 months and will regain weight within nine months)
- More expensive long term

SURGERY:

Pros:

- More effective than medication (30% total weight loss - six times more effective than medication)
- More durable weight loss
- Higher rates of resolution of comorbidities
- Generally, a one-off treatment (rather than lifelong medication)
- Cheaper long term

Cons:

- Surgical risk
- Lifelong multivitamins for bypass patients
- Some uncommon but lifetime risks (e.g. internal hernia for gastric bypass)

Who qualifies for Laparoscopic weight loss surgery?

What are the criteria for approval for surgery?

- BMI >35 kg/m2, regardless of presence or absence of comorbidities and should be considered for individuals with metabolic disease
- BMI 30-34.9 kg/m2 who do not achieve substantial or durable weight loss or comorbidity improvement using nonsurgical methods.
- BMI thresholds adjusted in the South and East Asian population such that BMI >27.5 kg/m2 qualifies that group
- Bariatric surgery is recommended for patients with type 2 diabetes and BMI>30 kg/m2.

What are some conditions it can improve or resolve?

- PCOS
- Sleep apnoea
- Diabetes
- Degenerative joint disease
- Back pain
- Intracranial hypertension
- Dyslipidaemia
- Fatty liver disease
- Ischemic heart disease
- Atrial fibrillation
- Urinary incontinence
- Hypertension
- Obesity related renal disease
- Reduced risk of some cancers

What follow up is required post-surgery?

- Dietician reviews in the first year for guidance and monitoring
- Nutritional bloods yearly: checking vitamins and minerals
- Any symptoms need review by the surgeon e.g. dysphagia, reflux, vomiting - as there are management strategies for these

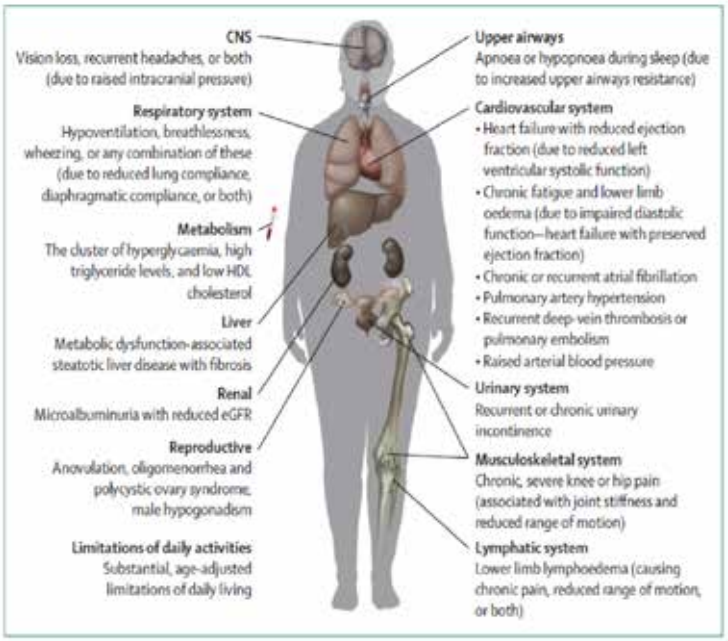
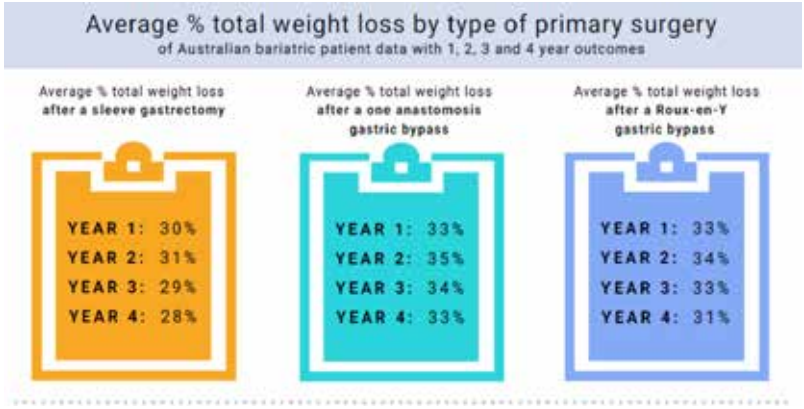


Figure 6: Diagnostic criteria for clinical obesity in adults
eGFR=estimated glomerular filtration rate.



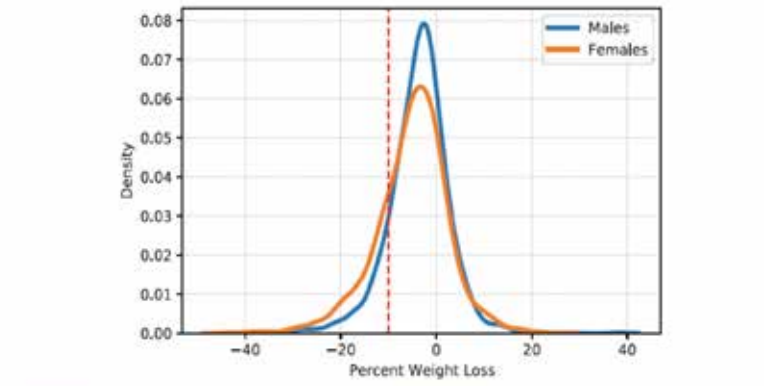


FIGURE 3 Density plots for percent weight loss for the 3555 total trackable individuals on semaglutide, stratified by male and female patients. The threshold of 10% weight loss is shown by the vertical red line. Female individuals had a greater proportion of the population losing a higher percent of weight than male individuals.

These real-world findings suggest smaller reductions in weight of around 5% compared to early clinical trials with around 10% reductions over the same dosage and exposure time. This highlights the challenges of realistically achieving significant weight loss in the real world compared to the clinical trial setting.

Dr Dhanabalan (Dhan) Thiruchelvam

MBBS (Syd) PG Dip Ed (Edin) FRACS

Dr Dhan Thiruchelvam is a specialist Upper Gastrointestinal and Bariatric Surgeon with over 16 years of consultant experience. He graduated with MBBS from Sydney University in 1998 and completed his FRACS in General Surgery through the Royal Australasian College of Surgeons (RACS), with advanced training at major tertiary centres in Sydney. Dr Thiruchelvam undertook three post-fellowship Upper GI training programs through the highly competitive Upper GI and ANZGOSA training scheme in Melbourne and the UK, followed by international fellowships in the USA and Japan, focusing on minimally invasive and revisional bariatric surgery, and complex Upper GI conditions.

After building a thriving practice in Newcastle, Dr Thiruchelvam has expanded his services in Sydney. His sub-specialty interests include laparoscopic bariatric surgery, revisional obesity surgery, anti-reflux procedures, and complex oesophagogastric disorders. He has performed thousands of bariatric and Upper GP operations, including challenging reoperative cases.

Dr Thiruchelvam is a member of ANZGOSA, ANZMOSS, and the International Federation for the Surgery of Obesity (IFSO). Currently, he is the Director of Sydney Weight Loss and Reflux Clinic and Newcastle Weight Loss Surgery.

CONTACT INFORMATION

San Clinic Tulloch
Suite 213, 185 Fox Valley Road
WAHROONGA
(02) 8613 5106
(02) 8613 5107

AN ARTICLE BY **Dr Ketan Bhatt**

Dementia Care at the San

Dementia prevalence is steeply on the rise. In Australia, dementia is the leading cause of death amongst women and second leading cause of death overall. It is therefore imperative that optimal dementia care is achieved at all hospital institutions servicing patients experiencing dementia.

The Northern Sydney local health district serves up to 1 million Australian residents. As a private acute-care hospital operating within this district, Sydney Adventist Hospital provides elective and emergency care to patients in this region and beyond, inclusive of numerous patients with dementia. Advancing age is an independent risk factor for the development of dementia. Ten per-cent of people over the age of 65 and 30% of those over 85 have dementia. The mean age of admissions via the Sydney Adventist Hospital emergency department is 72.

Inpatients with dementia often experience problematic psychological symptoms and behaviours. This can be due to delirium, an unfamiliar environment and disrupted routine. Delirium is an acute confusional state resulting from a wide spectrum of medical illnesses and is considered a medical emergency. Patients can experience hallucinations, paranoid ideation, agitation, aggression and low mood. This can result in problematic resistance to medical and nursing care. Patients with dementia often experience higher rates of adverse outcomes, including prolonged lengths of stay, pressure injuries, falls, chemical sedation and higher admission costs. The importance of mitigating such outcomes is the cornerstone of this current project.

Aims:

A new dementia care space named the “Rosella Activity Room” has been developed at Sydney Adventist Hospital. This has been achieved through the support of donors, the San Foundation, Sydney Adventist Hospital administration and Clifford 7 Burnside ward. The purpose of this study is to provide personalised therapy to inpatients with dementia and assess whether this improves patient outcomes. The interventions include multi-modal diversional therapy and the Rosella Activity room, an environment conducive to dementia care. By comparing past and prospective data, the aim is to determine whether the institution of a new model of patient-centred dementia care can impact length of stay, admission costs, use of chemical restraint and incidence of in-hospital falls.

Methods:

The intended methodology is a quality project or “before and after study”. A retrospective audit of 100 de-identified patient encounters has been reviewed digitally and via paper records at Sydney Adventist Hospital. Data inclusive of demographics, use of chemical sedation therapy, falls, lengths of stay and hospitalisation costs have been collected.

The prospective element of this study is in progress. Following ethics approval, there is an opt-out process, with provision of information pamphlets to patients/next of kin. A structured programme is facilitated by the nursing staff, including a dementia clinical nurse consultant. The programme includes music, animal and physical therapy, in addition to patients having regular access to the Rosella Activity Room.

Inclusion criteria: Medical inpatients with dementia, admitted via the Sydney Adventist Hospital “Emergency Care” department.

Exclusion criteria: Patients with palliative care input during their hospital journey and non-medical inpatients, e.g. surgical inpatients.

Results:

One hundred patients were identified as meeting the above criteria for the retrospective component of this study. These admissions ranged from 2022 – 2024. The average age of patients was 85. Females comprised 52% of cases. Thirty resided in residential care prior to their admission, while 70 were from home. In terms of the causes of dementia, 33 were unknown, 30 were Alzheimer’s disease, 22 were vascular dementia, four were dementia with Lewy Bodies, four were Parkinson’s dementia, three were mixed origin and three were frontotemporal dementia.

In terms of outcomes, a total of 46 received chemical restraint, however 15 of these patients were already on such treatments prior to admission. Falls occurred in 21% of cases. The average length of stay was 15 days. The average cost of stay was $12,835. This cost does not include pathology, radiology or specialist reviews and interventions.

Conclusion:

This audit of dementia inpatients confirms known demographics about this cohort. It demonstrates a high average length of stay, falls frequency, chemical restraint use and admission cost. This study serves as an important foundation and precursor to the ongoing prospective study to determine whether a new model of dementia care can improve these outcomes.

Rosella Activity Room – Patient experience:

Scottish-born Ian is an 84-year-old father of two and grandfather of four and lives with a diagnosis of dementia in Sydney. He also has a range of other health concerns, including diabetes which have required treatment and care at the San in recent years.

It's a challenging stage of life for Ian and his wife of almost 60-years, Jacqueline. But a recent experience at the Hospital really lifted their spirits - spending time in the Rosella Activity Room. It's a space designed to feel a bit like a living room, filled with very familiar household items and activities, like a laundry station where washing can be hung and folded; a nursery complete with babies ready to be changed and dressed; a workshop station for tinkering; a crafting table; and one of the biggest hits with patients - a keyboard for music sessions.

It's all designed to engage with patient memories of everyday routines, offering comfort through the familiar, and interaction with other people. Jacqueline says Ian is generally very quiet and sleeps a lot of his time in hospital, not doing much more than the occasional stroll around the ward - and ending up in the wrong room asleep. So, she was amazed to see him respond enthusiastically in the Rosella Activity Room, when they held sing-along around the piano.

Cognitive Nurse Marleta Fong had earlier found out Ian was Scottish and sourced some Scottish CDs for him to listen to, which he loved. He was mesmerised by the music played by volunteer pianist David Short too, singing along to songs he'd not heard in many years. Jacqueline said she felt very emotional seeing him enjoying himself so much. She was also very appreciative of the "sense of joy and community" in the Activity room, where nurses and caregivers all joined in, to enhance the experience of togetherness. She was amazed to hear the nurses had even taken time to learn the lyrics of I Still Call Australia Home - for a grand finale.

"Marleta put on a CD and Ian was singing all the songs! And then we went to the Activity Room and he sang in there too. In fact, we were all singing!" Jacqueline recalled.

"I could not believe it because I've been to the San many times before and everybody was singing – even the carers who were there with their husbands or wives. I have never seen anything like it – and it went on for a good hour."

"I have never known that in a hospital. Hospitals are usually sad, quiet places. But the joy that came out of that room, oh my!"

The Rosella Activity Room also has some classic board games and puzzles for those who are interested, and Jacqueline had another surprise, when she learned Ian had been playing Connect-Four one afternoon. She doesn't think he's ever played it before, lining up the coloured discs in a row against an opponent. It all added up to a hospital experience she won't forget, even if Ian sadly does. The thoughtfulness of the planned activities had tapped into his memory bank and the result was utter joy.

Dr Ketan Bhatt

BMed FRACP(Physio) Grad Dip. (Surgical Anatomy)

Dr Ketan Bhatt is a geriatric medicine physician with an interest in perioperative geriatric medicine, hip fracture care, delirium and syncope in the elderly.

He practices acute geriatrics and general medicine at Sydney Adventist Hospital and Hornsby Ku-ring-gai Hospital. He is a clinical lecturer at the University of Sydney and is passionate about teaching.

CONTACT INFORMATION

Parkway San Clinic
Suite 106, Level 1,
172 Fox Valley Road
WAHROONGA
(02) 9063 1426
(02) 9487 1444

San Cancer support services

Caring for you on every level

The San provides a wide range of support services for anyone affected by a cancer diagnosis, regardless of where treatment has been provided. Many of our services are free and all are provided in a warm, friendly, and informal environment where anyone is welcome.

Counselling

Free counselling is available to anyone impacted by cancer, including San patients and their carers and loved ones. The centre has both male and female counsellors, and our counselling services are available 5 days a week.

Reflexology

San Cancer patients have access to reflexology appointments. Not only is this relaxing, but it can help with pain, treatment side effects, anxiety, sleep and general wellbeing.

Wig library

A variety of wigs and headwear is available to borrow throughout your cancer treatment. There are no charges – we just ask that you return the wig to us when it is no longer required.

Patient transport

This service is provided free of charge for those who need assistance getting to and from regular radiotherapy treatments at the San.

Resources library

The Cancer Support Centre has a wide range of resources covering cancer-related topics. You're welcome to pop in, browse and borrow 5 days a week.

Programs

- Yoga
- Yarn Group
- Acupuncture
- Mindfulness Meditation
- Men's Exercise Group
- Free Hairdressing
- Support Groups

CONTACT INFORMATION

Cancer Support Centre (located within Jacaranda Lodge)
Phone: 02 9480 9061
Email: cancersupport@sah.org.au

Scan the QR code for more information including days, times and booking details