

RNSH SERT INSTITUTE ANNUAL REPORT JAN 2023 - JUN 2024



Northern Sydney Local Health District



SURGICAL EDUCATION RESEARCH & TRAINING INSTITUTE

SURGICAL EDUCATION, RESEARCH & TRAINING (SERT) INSTITUTE ROYAL NORTH SHORE HOSPITAL

Northern Sydney Local Health District Royal North Shore Hospital Reserve Road St Leonards NSW 2065

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Published October 2024







ACKNOWLEDGEMENT OF COUNTRY

We would like to acknowledge the Traditional Custodians of the Northern Sydney Local Health District region, the Dharug and Guringai peoples.

Their spirit can be found across the land and we honour the memory of their ancestors and Elders, past and present.

As we endeavour to serve the health needs within the community, we recognise the importance of the land and the waterways, as an integral part of people's health and wellbeing

SPECIAL THANKS

The Surgical Education Research and Training Institute would like to thank all those who contributed to the completion of this report, including those who provided guidance, technical assistance, and access to resources. Your collective efforts were essential to the successful development of this work.



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FOREWORD

The Surgical Education and Research Training (SERT) Institute proudly presents the Royal North Shore Annual Report 2023-2024. It provides an overview of surgical achievements that have been shared, facilitated or supported by the SERT Institute and Data Analysis Surgical Outcomes (DASO) Unit over the past 18 months. It also incorporates achievements against the SERT Institute Operational plan key priority areas.

Our focus has been to increase engagement of surgeons above and beyond the excellent clinical care they provide to patients. This has been achieved by strengthening collaboration and building strategic foundations to support clinical training and surgical research, especially through the development of robust clinical auditing systems.

Since 2017, when the SERT Institute was established, we have strengthened and expanded our workforce to provide dedicated support to surgeons and surgical departments. Our team has transitioned from temporary employment contracts to permanent appointments. In 2023, we conducted a GAP analysis of data managers and data management services across surgical departments to identify their requirements and proactively campaigned for additional resources.

The DASO Unit has continued to develop bespoke databases and dashboards to support the integration and use of new technologies. This has further allowed data extractions and semi-automated data uploads into national registries and improved efficiency and data accuracy, eliminating errors, and reducing manual data entry by surgical teams afterhours. Many departments have benefited from this development, particularly those currently without a dedicated data management resource, for example: Hand Surgery, Breast Surgery, Colorectal Surgery, Orthopaedic Surgery and Vascular Surgery and Clinical Trials. By the end of 2024, we expect to recruit a dedicated resource to each of these departments.

Throughout 2022-2024, we have also focused on building and strengthening surgical leadership skills. In 2022, we collaborated with Western Sydney Local Health District (WSLHD) Research Education Network (REN) to co-design a new consultant and junior medical leadership program. This is an eight month course and together with Northern Sydney Local Health District (NSLHD) People and Culture, we sponsored ten fully funded places for NSLHD surgeons.

In 2023, following feedback from our surgeon engagement survey, we launched a senior consultant leadership series. This exciting series focuses on bringing surgeons together to discuss the expectations, challenges and skills required to foster a positive and supportive surgical culture at Royal North Shore Hospital (RNSH). The series is facilitated by an external consultant and designed by surgeons through consultation, collaboration, and feedback to ensure needs and expectations are met.

Please note that this report is only a snapshot of the many developments, advances and achievements across RNSH surgical services in 2023-2024. It should be acknowledged that the outcomes highlighted in the report involved extensive communication, collaboration and engagement with many surgeons and it is not possible to mention them all in this report.

FOREWORD CONTINUED

RNSH is a busy tertiary public hospital with an average of 70,000 surgical admissions annually. There are 14 sub-specialty surgical departments and a total of 100 consultant surgeons. The hospital also provides a Level 1 Major Trauma Service as well as state-wide specialty services for Burns and Spinal care.

In 2023, RNSH surgeons collectively performed 17,352 procedures (10,830 emergency and 6,522 elective procedures), published 207 research papers and provided countless education and mentoring session to surgical trainees and medical students.

RNSH surgical data from January to June 2024 demonstrates similar activity levels to date but with a predicted increase in numbers by the end of the year.

We also take this opportunity to recognise the contribution and legacy of previous surgeons at RNSH. In this report, we highlight Clinical Associate Professor John Vandervord, a Plastic Reconstructive and Maxillofacial Surgeon who recently retired after a 40 year career at RNSH. He made major contributions to the clinical care of countless patients, and held numerous administrative positions, most notably as the Director of the NSW Severe Burn Service. He was also the Clinical Head of the Division of Surgery and Anaesthesia for more than 10 years. In recognition of these contributions, in 2023 the RNSH Burns Unit was renamed the John Vandervord Burns Unit in his honour.

Finally, we note that in 2024, we lost an inspirational surgical leader, Professor Tom Reeve AC CBE, only one month short of reaching his 100th birthday. Following a remarkable career as a clinician and researcher, he went on to become the President of the Royal Australasian College of Surgeons (RACS) and then subsequently continued to remain involved in RNSH activities and events, often providing wise council and mentoring many up until he was in his late 90's. He is sadly missed and fondly remembered by all who knew him.

We hope you enjoy this report and we welcome any comments or feedback to help shape future reports.

Please email the SERT Institute directly via email:<u>nslhd-rnsh-sertinstitute@health.nsw.gov.au</u>



Prof Tom Hugh Director, SERT Institute



Ellie McCann Manager, SERT Institute

2023 ACTIVITY





EXECUTIVE SUMMARY

The Royal North Shore Hospital (RNSH) Surgical Education Research and Training (SERT) Institute was established in 2017 under the Division of Surgery and Anaesthesia (DoSA), with the support of the Northern Sydney Local Health District (NSLHD) Chief Executive. This is a clinician initiative established to promote, assist and encourage the engagement of surgeons in academic and surgical quality improvement activities. The initiative was undertaken to overcome barriers developed in recent years that impact on the capacity of surgeons to be involved in research, clinical audit processes, clinical leadership, teaching, mentoring, clinical governance roles and other non-clinical activities within the hospital.

In 2020, the Data Analysis & Surgical Outcomes (DASO) Unit at RNSH was integrated into the SERT Institute governance structure to strengthen and leverage the impact and influence of the surgical data and audit activities undertaken across surgery.

The SERT Institute has continued to grow, establishing a solid leadership team including a medical director, a senior manager, three medical academic leads, and a DASO Unit Manager. Together these staff are responsible for overall planning and stakeholder engagement, developing long and short-term goals, achieving and reporting on outcomes.

In December 2023, the Operational Plan 2023-2027 was endorsed, superseding the SERT Institute Strategy 2019-2023 document. The new plan provides a single frame of reference to guide the work of the SERT Institute over the next five years with six priority focus areas and a range of objectives designed to respond to the key issues identified during the consultation process. The priority areas are aligned to the NSLHD's commitment to patient-centred care, and within the context of surgery, clinical audit, quality improvement, academia and training. Progress and evaluation of these objectives are monitored through the NSLHD Chief Executive and the SERT Institute Advisory Committee, established in April 2024.

Over the past 18 months, the SERT Institute has facilitated and supported a significant number of activities across surgery at RNSH, supporting and integrating new technologies and progressing against all strategic priority areas. This report provides an overview of achievements in each priority area identified in the operational plan with assurance that our goals, objectives and outcomes are measurable, relevant and valuable in supporting surgical activity, quality improvement, training and research.

A summary of achievements against each SERT Institute priority area is provided below. However, for more detail on priority areas, please progress to the relevant sub-sections of this document.

Priority Area 1 - Operations & Business: Establishing an expert advisory committee was a major goal in 2024 to provide leadership, strategic guidance, oversight of activities and initiatives, encourage broad stakeholder engagement, promote and to recognise surgical research and educational achievements. The committee was assembled in April 2024 and will convene three times per year, with subsequent meetings scheduled in July and November 2024.

EXECUTIVE SUMMARY CONTINUED

Priority Area 2 - Promotion & Engagement: Over the past six months, the SERT Institute website was redesigned and transitioned to a new platform. It will continue to evolve throughout 2024 as consultation with each sub-specialty progresses to promote their service model, achievements, research and education activities. It will showcase advances in surgery, publications and educational resources.

Regarding surgeon engagement in non-clinical activities, the SERT Institute Academic Leads have been proactively exploring the barriers that influence consultant participation. All RNSH surgeons were invited to take part in a locally designed survey by the SERT Institute, detailing their involvement in academic research, clinical audit, clinical leadership, teaching, mentoring and clinical governance at RNSH.

Over 61% of surgeons responded, identifying barriers and enablers to increase engagement in key areas, further guiding the development of specific SERT Institute strategies. The SERT Institute will conduct this survey annually and work towards closing the gaps between surgeon and organisational expectations.

Priority Area 3 - Research: In 2021, the first RNSH Surgical Research Activity Report 2018-2020 was published, a compilation of three years research across all surgical sub-specialties. Following positive feedback, the next iteration published covered 2021-2022, and included all RNSH Division of Surgery & Anaesthesia services (Intensive Care Unit, Trauma, Anaesthesia, Pain & Allergy services). This report has dramatically raised the profile of many surgical departments both internally and externally, in addition to generating discussions and identifying cross collaboration opportunities. The positive response from surgeons and non-surgeons alike has encouraged us to commit to producing an updated research report every two years.

Priority Area 4 - Education & Training: In 2018, the SERT Institute appointed an Academic Lead to support the implementation of the Master of Surgery program on the Northern Campus in collaboration with the University of Sydney. Since that time, program enrolments have steadily increased by over 100 students each year and elective subject offerings have increased from 6 to 20. An outstanding achievement and testament to the hard work and commitment of A/Prof Anthony Glover (Academic Lead).

This priority area also incorporates leadership development. In 2022, the SERT Institute collaborated with the Western Sydney Local Health District (WSLHD) to develop an early career medical leadership program. Following this, and due to demand from local surgeons, a local senior consultant leadership program was developed and rolled out in September 2023. This series focuses on bringing surgeons together to discuss the expectations, challenges and skills required to foster a positive and supportive surgical culture at RNSH. This initiative is being designed by surgeons for surgeons through consultation, collaboration, and feedback to ensure needs and expectations are met. Over the past 12 months, five leadership sessions have been conducted, all after hours and well attended by senior consultants from a broad range of departments. The sessions are interactive, externally facilitated and have explored leadership styles, models and behaviour, conflict management and ways to develop a positive culture.

EXECUTIVE SUMMARY CONTINUED

Priority Area 5 - Innovation & Quality Improvement: In May 2023, the SERT Institute hosted the second Ray Hollings Surgical Excellence Award and RNSH Gastroenterology Department's Harry Cumberland Travelling Scholarship. These awards have been enabled through the generous donation of both past surgeons and their families. In 2023, three recipients received the Ray Hollings Surgical Excellence Award, aimed at supporting high impact surgical innovation and quality improvement initiatives. The award has enabled the following initiatives:

- Clinical Professor Mark Sywak for a clinical trial study on "Radio-Frequency Ablation for the management of benign thyroid nodular disease" at Royal North Shore Hospital and the first in New South Wales (NSW).
- Dr Amanda Chung for a Urology randomised control trial titled "Improving surgical patient comprehension, understanding and communication" a study between John Hunter and Royal North Shore Hospital.
- Dr Leo Pang for a project on "Pioneering a head and neck cancer screening program" at Royal North Shore Hospital. The first ever to be conducted in Australia and internationally.

The SERT Institute provides individualised support to recipients to achieve outcomes within the expected time frames. More detail on each award can be found on pages 24 to 28.

Priority Area 6: Data & Audit: The RNSH DASO Unit has continued to develop and support high quality bespoke databases across RNSH surgical departments to improve data collection, clinical audit, Morbidity & Mortality (M&M) meetings and data analysis to support research. New databases allow semi-automated data uploads, improving data accuracy and eliminating errors by reducing manual data entry by surgical staff. The availability and introduction of Power BI has greatly enhanced reporting capabilities and facilitated integration with new data collection systems. The DASO Unit has also supported several surgical departments without data management capability, in addition to 'out of scope' requests received through the DASO portal.

In 2023, over 60 'out of scope' requests were received and more than 30 requests from January to June 2024. The DASO Unit has also provided support for the RNSH Surgical Outcomes Committee, creating local analysis reports, multi-reporting dashboard, and a surgical consultation survey on hospital acquired complications. More recently, these initiatives have been shared with the WSLHD surgical services.

SERT INSTITUTE OPERATIONAL PLAN 2023-2027

STRATEGIC PRIORITIES

The Royal North Shore Hospital (RNSH) Surgical Education Research and Training (SERT) Institute was established in 2017 under the Division of Surgery and Anaesthesia (DoSA), with the support of the Northern Sydney Local Health District (NSLHD) Chief Executive. It is a clinician initiative established to promote, assist and encourage the engagement of surgeons in academic and surgical quality improvement activities. This initiative was identified to overcome barriers developed in recent years that impact on the capacity of surgeons to be involved in research, clinical auditing, clinical leadership, teaching, mentoring, clinical governance roles and other non-clinical processes within the hospital.

In 2020, the Data Analysis & Surgical Outcomes (DASO) Unit at RNSH was integrated into the SERT Institute governance structure to strengthen and leverage the impact and influence of the surgical data and audit activity undertaken throughout the hospital.

The Operational Plan 2023-2027 supersedes the SERT Institute Strategy 2019-2023 document and provides a single frame of reference to guide the work of the SERT Institute over the next five years.

The Operational Plan has six key focus areas and a range of future objectives designed to respond to the key issues which were identified during the planning process. It also ensures initiatives being delivered and coordinated by the SERT Institute and the DASO Unit are in line with the needs of the North Shore campus, the Northern Sydney Local Health District's commitment to patient-centred care, and within the context of surgery, clinical audit, quality improvement, academia and training.

The Operational Plan translates the overarching key focus areas and objectives into planned and measurable actions and activities for the first two-year period to 2025.

Progress and achievement of the plan objectives are monitored and evaluated through the SERT Institute Advisory and Operational Committee meetings and are aligned to the following District documents:

- NSLHD Strategic Plan 2022-2027
- NSLHD Clinical Governance Framework 2022-2025
- NSLHD Research Strategy 2019-2024
- NSLHD Digital Strategy 2021-2026
- NSLHD Precinct Plan 2022

Our Vision: To be recognised as a leading centre for academic surgery and highly engaged surgeons, delivering the best possible outcomes for patients through an embedded culture where surgeons at all levels dynamically engage in education, training, innovation, and research.

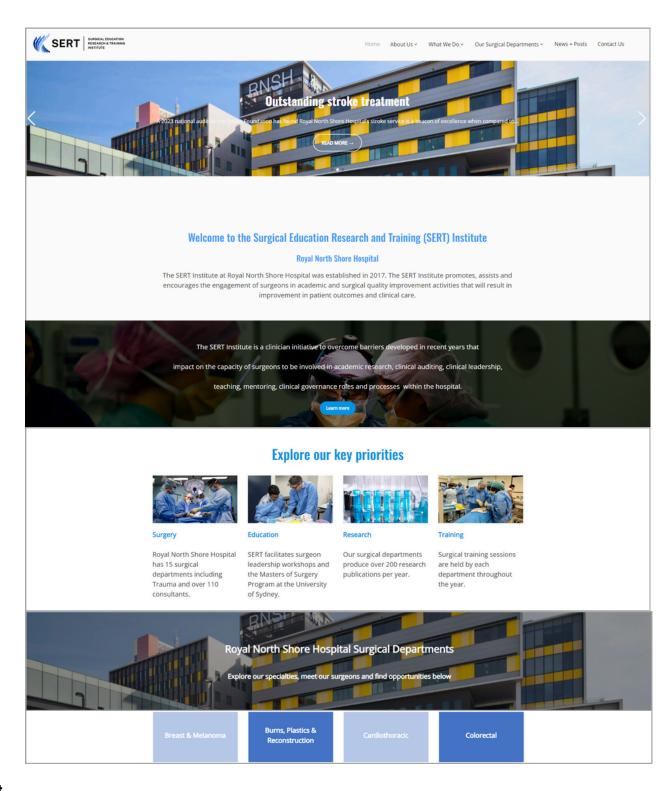
Our Purpose: To support academic surgery, quality improvement and innovation at Royal North Shore Hospital across all surgical departments by strengthening surgical leadership and collaboration.

Data & Audit	Develop and improve surgical reporting processes through embracing new technology capabilities and	trends. Consistent implementation of governance and security measures across surgery data systems and processes.	Improve engagement and utilisation of available technologies and systems.	Improve clinician knowledge and understanding of clinical audits and processes Maintain a high standard of data quality for reporting accuracy and research
Innovation & Quality Improvement	ldentify and promote surgical innovation opportunities.	Support new and existing innovation and quality improvement programs across RNSH.	Promote the utilisation of project management tools to plan, develop, implement and evaluation projects.	Strengthen connections and alignment with stakeholders for project sustainability and scalability.
Education & Training	Deliver and coordinate quality postgraduate surgical education and training.	Adopt a clear and transparent framework to determine surgical training pathways across the Northern Campus.	Facilitate the growth of clinical leadership	
Research	Strengthen the capacity of surgical departments to undertake research.	Foster and promote a collaborative research culture across surgery. Enhance internal and external collaborations and	partnerships Recognise and promote surgical research achievements and	researchers through a variety of multimedia channels.
Promotion & Engagement	Raise the profile and presence of the SERT Institute across RNSH. Pursue opportunities to	showcase surgical achievements and improved outcomes. Strengthen and grow key partnerships,	collaborations, and networks that advance the SERT Institute vision. Increase surgeon	engagement in non-clinical activities Promote surgical activity and achievements
Operations & Business	Ensure the direction and future growth of the SERT Institute is aligned to the needs of the District in the	context of academic surgery, clinical governance, business acumen and workforce planning. Secure infrastructure and resources to support future	growth. Establish a high performing team with shared vision and	common goals. Strengthen workforce capacity and skills through training and education.

THE SERT INSTITUTE WEBSITE: NEW LOOK

In 2023, the SERT Institute website underwent a significant update. With a focus on enhancing user engagement and regularly showcasing the accomplishments of surgeons at RNSH, the website now offers a more streamlined experience. Viewers can easily navigate through the site to learn about the services and expertise available from the surgeons. Additionally, the website provides insight into how the SERT Institute supports the surgical team and aligning with the strategic priorities of the NSLHD. The website will continue to evolve throughout 2024.

To visit the SERT Institute website, follow this link: <u>https://northernsydneysurgery.org.au/</u>



THE SERT INSTITUTE ADVISORY COMMITTEE

From 2017, the SERT Institute has evolved and grown in strength and productivity, prioritising stakeholder engagement, building relationships, and identifying opportunities for collaborations on strategic initiatives and priorities.

A goal for 2024 was to establish the SERT Institute Advisory Committee. The purpose of the advisory committee is to provide guidance and advice on various aspects of the SERT Institute's strategic priorities, including promotion and engagement, research, education and training, innovation and quality improvement. The advisory committee represents a diverse array of professionals renowned for their expertise in leadership, surgery, medical research, and educational domains. This diverse composition ensures a multifaceted perspective to assist future planning.

The first committee meeting was convened in April 2024 with the NSLHD Chief Executive serving as the executive sponsor. The advisory committee will convene three times annually in April, July and November.

THE SERT INSTITUTE: RESEARCH ACTIVITY REPORT SECOND EDITION

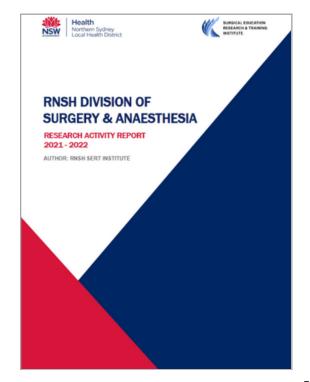
The SERT Institute published the second edition of the RNSH Research Activity Report in 2023. Following the success of the inaugural edition covering surgical publications from 2018-2020, the latest report provides a comprehensive overview of research initiatives, projects, and publications across the RNSH DoSA departments from 2021 to 2022.

The report aims to raise the profile of surgical departments and showcase the significant research undertaken at RNSH. It offers an indepth analysis of trends, developments, and achievements during the reporting period.

Analysis of the past five years of data shows a consistent upward trajectory in research activity, with research publications more than doubling from 2018 to 2022.

The SERT Institute established this report to allow monitoring of output across surgical and critical care services at RNSH, and more importantly to facilitate connections for cross collaborations. With its detailed insights and analysis, the Research Activity Report is a valuable resource for RNSH and further demonstrates the commitment of the SERT Institute in recognising and promoting surgical and academic excellence.

This report will continue to be produced biannually.



SURGEONS ENGAGEMENT SURVEY

TARGET AUDIENCE: SURGICAL CONSULTANTS

Surgeon engagement in non-clinical activities at RNSH has not been captured or well documented in the past.

In 2023, to gain an understanding of the surgeon engagement level at RNSH, the SERT Institute Academic Leads developed and conducted a surgeons engagement survey. Surgeons were invited to participate in this survey and outline their involvement in academic research, clinical audit, clinical leadership, teaching, mentoring and clinical governance at RNSH.

Key themes explored in this survey included workforce, academic support, research, quality improvement and professional development. Results from the survey identified barriers and enablers to increase engagement in non-clinical activities and helped guide the SERT Institute strategic priorities.

Responses from the survey were shared with the NSLHD Executives, Surgical Heads of Department and presented at relevant committees and forums.

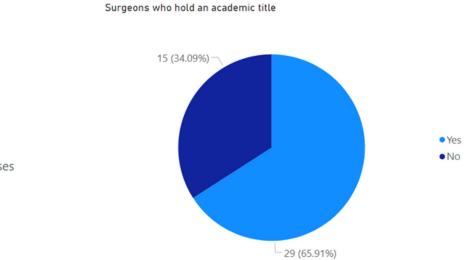
Key findings from the survey were as follows:

- 66% of surgeons responded that there was value in having an academic title.
- Some of the major barriers in obtaining an academic title related to work commitments and being unaware of the pathway and process.
- Surgeons find it rewarding to teach students and trainees. It also promotes professional and academic skill development.
- Resources required to support research include the identification of funding opportunities, statistical analysis, research assistants, data managers and ethics guidance and monitoring.
- Most surgeons rated the clinical audit activities of their department as good (equivalent to a 3 rating on a 1-5 scale, with 5 being excellent).
- 50% of surgeons think a mentoring program should be introduced at RNSH, with 73% of surgeons electing to be mentors.

Ongoing survey and feedback

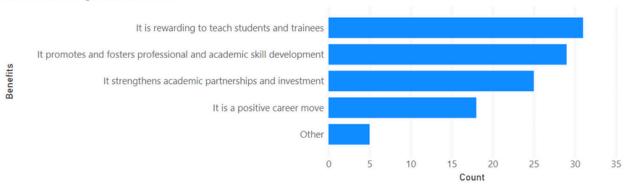
The SERT Institute will conduct the survey annually to capture changes in views and needs.

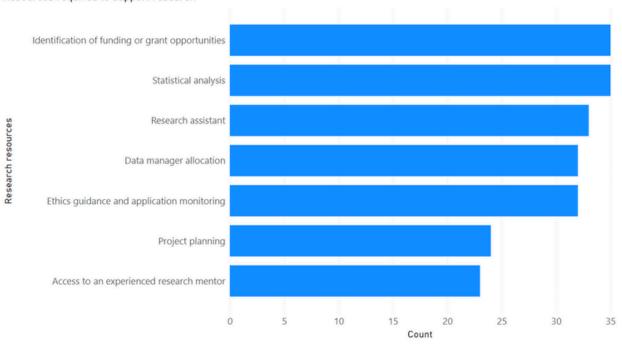
SURGEONS ENGAGEMENT SURVEY - A SNAPSHOT



6 I Number of responses

Benefits of having an academic title





Resources required to support research

INSPIRING SURGICAL LEADERSHIP: SENIOR CONSULTANT SERIES

The SERT Institute Priority Area 4 focuses on strengthening medical education, training, and leadership.

In 2023, the SERT Institute team introduced the RNSH Leadership Series, a program developed with surgeons input and feedback.

The aim of the series is to bring surgeons together as a collective to discuss the expectations, challenges and skills required to foster a positive and supportive surgical culture across the DoSA.

The initiative has been led by the SERT Institute leadership team and is being designed by surgeons for surgeons through consultation, collaboration, and feedback to ensure it is sustainable and that it meets the collective needs and expectations of surgeons.

This initiative is an extension of the new consultant leadership program Fostering Leadership Across Systems in Health (FLASH), designed and developed in collaboration with the Western Sydney Local Health District (WSLHD) Research Education Network and the RNSH SERT Institute in 2021.

The SERT Institute has committed to a minimum of four leadership development session per year with the first two sessions held in 2023. Four more sessions have been scheduled in 2024, including a possible surgical future planning symposium at the end of the year.



RNSH Surgeon Priorities



Figure 1

The SERT Institute team acknowledges the expertise of Dr Renee Lim, Director, Medical Program Development at the Pam McLean Centre for skillfully facilitating each session through a blend of interactive workshops and presentations. Participants gained valuable insights into leadership styles, models and behaviours that impact on fostering a culture of excellence, supporting teams and strategic decision-making. All five session conducted in 2023 -2024 have been well attended and progressed at a pace driven by the participants. A significant outcome from the series has been the development of the RNSH Surgeons five key priorities for building and maintaining a positive culture (Figure 1).

This exciting initiative is supported and sponsored by the NSLHD Chief Executive and Chairman of the NSLHD Board.

MEET THE TEAM: SERT INSTITUTE STAFF UPDATE

The DASO Unit was integrated into the governance of the SERT Institute in 2020, aligning with the Institute's broader mission to enhance surgical practices and patient care. This integration strengthened the SERT Institute and DASO Unit's capability to assist surgeons with clinical audits, quality improvement initiatives and research which improves patient outcomes and clinical care.

Throughout 2023, the team experienced significant change and growth with the addition of four new data managers and the transition of one existing staff member into a data manager role.

Currently, the DASO Unit includes six dedicated data manager positions serving multiple surgical departments: Acute Surgical Unit, Cardiothoracic, Endocrine, Hands, Neurosurgery (including Interventional Neuroradiology), Pancreas, and Vascular Surgery. Available resources are allocated to support committees, initiatives and departments without a dedicated data manager. In 2024, two new data manager positions will be added to support Breast and Orthopaedic Surgery.

The DASO Unit data managers possess diverse skills tailored to meet the department-specific needs, fostering a collaborative and high-performing team environment. They are proficient in a range of technologies including Excel, REDCap, R, STATA, and Python.

This is a unique and bespoke service that is not available in any other teaching hospital in Australia or New Zealand.

Angela Cho (DASO Unit Manager)

Angela joined the team in 2022 as the DASO Unit Manager and oversees a team of data managers who support clinical audit and research activities across multiple surgical departments. Angela's professional background spans both basic and clinical research. She was awarded a PhD from the University of Sydney (USYD) in 2021, focusing on gliomas (brain tumours). Prior to her current position, Angela gained extensive clinical research experience as a clinical trial coordinator at the Melanoma Institute Australia, where she managed various Phase I-III clinical trials.



During her time as the DASO Unit Manager, Angela has redesigned the SERT Institute website, implemented new data processes and provided continuous support for departments during transitions to ensure uninterrupted regular audits and Mortality and Morbidity (M&M) meetings.

Angela has strategically aligned the DASO Unit's direction with the NSLHD's goals. This alignment involves adopting technologies used by the Performance Unit, education and utilisation of hospital coded data and the transition of the NSW Health's data source from Health Information Exchange (HIE) to Enterprise Data Warehouse for Analysis, Reporting and Decision support (EDWARD).

Angela also actively supports several initiatives such as the Surgical Outcomes Committee and the Perioperative Medicine Service, providing dedicated support to Orthopaedic and Colorectal Surgery and performs numerous ad-hoc data requests from surgeons and executives.

In 2023, Angela participated in the THRIVE leadership program, further enhancing her leadership skills. In 2024, she established the RNSH Data Network, a collaborative platform bringing together data professionals to share knowledge and foster innovation.

MEET OUR NEW TEAM MEMBERS

2023 and 2024 was busy with staff changes and movement. We welcomed four new data managers into our team, with one existing staff member transitioning from the SERT Institute to a new role as data manager.

Alvaro Garcia (Interventional Neuroradiology Data Manager)

Alvaro joined the DASO Unit in 2023, bringing extensive expertise in research and data analytics. He completed a PhD from USYD's School of Medicine in biophysics 2014, holds a Bachelor of Science (Hons) with majors in Pharmacology and Genetics and recently completed a Graduate Diploma of Applied Finance from Macquarie University.

Alvaro has a wealth of experience in research and data management, including multiple data manager roles within NSW Health. Prior to his current position, Alvaro held positions such as a Chancellor's Research Fellowship at SOLS, University of Technology Sydney, and a Postdoctoral Researcher role at the School of Chemistry, USYD.

Catherine Parr (Breast and Vascular Data Manager)

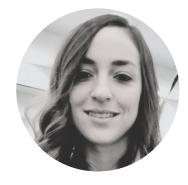
Catherine joined the DASO Unit in a part-time role in 2023, supporting the vascular and breast surgery teams in data-driven decision making, practice audit, and research activities. Prior to joining the DASO Unit, Catherine worked in a variety of research and education support roles at the USYD. Unfortunately, Catherine was only with the team for 12 months, before returning to USYD to take up a fulltime role.

Danielle Weinberg (Trauma Service Data Manager)

Danielle (DD) joined the SERT Institute in 2023, bringing her background in science and public health and over a decade of clinical research and quality improvement experience into her role.

Prior to joining the team, DD managed the start-up and engagement of clinical trial opportunities at the Children's Hospital at Westmead. Prior to moving to Sydney, she worked as a Clinical Trials Project Manager at the Children's Hospital of Philadelphia and the Hospital of the University of Pennsylvania, collaborating on developing quality improvement interventions, national registries, and clinical trials.

In her current capacity, DD manages the Trauma Service REDCap registry and assists the clinical team through data analysis and support. She is dedicated to implementing new data strategies in data acquisition and analytics processes to improve Trauma Service quality and care.







Debbie Knagge (Vascular Clinical Trials Research Nurse)

Debbie is a registered nurse with over 40 years' experience and has extensive specialised training in Renal Medicine. Debbie joined the RNSH Vascular Clinical Trials Team as a Research Nurse in March 2024 after working casually on several projects with the team in the past 2 years.

In June 2024, Debbie was awarded a scholarship through the North Foundation and Macquarie University partnership to pursue a Graduate Certificate of Clinical Trials Operations which will further advance her skills and knowledge in clinical trials research.

Nadine Chidiac (ASU and DASO Unit Data Manager)

Nadine initially joined the SERT Institute in a project management role in 2021 and transitioned to the DASO Unit in 2023, bringing a wealth of knowledge in various fields, including data management, IT, web design, and graphic design. She has a Bachelor of Design Computing and has collaborated with numerous start-ups and small businesses. Her freelance career involved effective web solutions, content creation, and providing graphic design expertise.

Having been an employee at RNSH for over 5 years, Nadine is passionate about implementing data-driven solutions to drive positive change in the healthcare system. With her unique skill set and exceptional problem-solving abilities, she is excelling in her new role.

Michelle Giles (Neurosurgery Data Manager)

Michelle joined the DASO Unit in 2023 as the Data Manager for the Neurosurgery department. She has an extensive career as a registered nurse and postgraduate qualifications in Critical Care Nursing, underpinning a deep understanding of patient care and clinical operations within the neurosurgical setting. Within the neurosurgery specialty, Michelle has held various positions including Clinical Nurse Specialist, Research Officer, Quality Coordinator and Clinical Nurse Educator.

Prior to joining the DASO Unit, she was the data manager for the Interventional Neurosurgery's Clinical Pilot Study for Endovascular Clot Retrieval and stroke management. Michelle works closely with the neurosurgical team on quality improvement, clinical audit, mortality and morbidity management and high level reporting.







DASO UNIT PROJECTS: HIGHLIGHTS

Over the past year, the DASO Unit has maintained a commitment to data analysis and report generation, effectively managing a substantial demand and workload. In additional to routine tasks, the DASO Unit received a total of 68 data requests through the Central Request Form, representing a diverse range of stakeholders, including RNSH executives, surgeons, and both external and internal partners.

Moreover, the DASO Unit had a crucial role in supporting the Peri-Operative Medicine Service by aiding in the identification of operations associated with hospital acquired complications - a key area of focus for the service's ongoing efforts.

Continuing support for several departments, the DASO Unit assisted in the creation and upkeep of databases and processes which are integral in clinical audits, morbidity and mortality meetings, and ongoing research initiatives.

Notable achievements:

- Expansion of the Hands and Peripheral Nerve Surgery Department's database and initiation of data collection for Patient and Clinician Reported Outcome Measures, aimed at driving quality improvement initiatives and enhancing research projects.
- The Spine and Orthopaedic Trauma Epidemiological Database (SORTED) continued to thrive with excellent data collection compliance from the Orthopaedic junior doctors.
- Successful implementation of a new database for the Colorectal Surgery Department, facilitating regular mortality and morbidity meetings.
- Both the SORTED and Colorectal Surgery databases leverage automated data processes for efficient extraction and upload of data from SurgiNet, ensuring streamlined operations and improved data accuracy.
- The introduction of automated processes in the Vascular Surgery Department to provide mortality and morbidity summaries and audits for their national registry.

For any surgical data enquiries or requests, please submit a request via the following link and allow up to 3 business days for a response: <u>https://redcap.link/daso-central-request-form</u>

DASO Data Request Form	
Please fill in the form below, thank you!	
Request submission date	23-08-2024 🛣 Today DMV
Are you completing this form on behalf of someone else?	⊖ No ⊖ Yes
Your Deta	ils
Name	
Department	φ
Pesition	Consultant Fellow Resident Resident Soutient Soutent Nurse Other resid
Contact number	
Email address	Note: Data will preferably be sent to a NSW Health email address
Initial meeting to discuss?	Yes No meeting required Already had meeting reset

Request details		
Purpose of request / how will the data be used?	Audit / quality improvement / quality assurance Research / publication Quartisticm / business case / brief Gunet application Conference / presentation Other	
Brief description of the driver and requirements for this request. Please include the background of why data is required and the benefits / value add of having this information.		
How can we help?	Data extract (i.e. provision of raw data only) Statistics support Data analysis / visualization (e.g. generation of summary stratistics and groups Manuscript / report writing General Gata assistance or advice	
Are you requesting data from a different department to yours?	O No O Yes nese	
Urgency of request	 Low (7 weeks plus) Medium (4-5 weeks) High (2-3 weeks) 	
Do you have data (inc. sample / mocked up data) available for review or discussion (if applicable)?	O No O Yes nece	
Submit		

THE HANDS DEPARTMENT: ENHANCED SURGICAL DATABASE

In August 2023, the Hand and Peripheral Nerve Surgery Department launched a new "Enhanced Surgical Database for Hands".

Previously, the department collected only operative and basic patient demographic in a defunct database. They recognised the need to collect additional data points and images to assist with quality assurance, audits, tracking patient recovery, and conducting research analyses.

The collection of Patient-Reported Outcome Measures (PROMs) and Clinician-Reported Outcome Measures (CROMs) has been an important part of the standard of care in the RNSH Post-operative Hand Clinic, even before the rollout of the new database. PROMs are questionnaires that allow patients to report on their health, daily functioning, and quality of life. They are administered post-operatively on multiple occasions during the recovery period, spanning up to 24 months. CROMs captures clinically measurable changes in a patient's health and daily functioning.

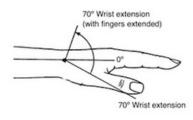
Originally, PROMs and CROMs were recorded on paper forms and stored in physical files, limiting the department's capacity to conduct large-scale audits efficiently. The new Enhanced Surgical Database for Hands has been developed to collect the necessary operative data including PROMs and CROMs. This increased capacity has not only contributed to enhancing patient care and outcomes by tracking and recording the recovery progress, it is adding to improving data and audit activities, and creating a comprehensive registry for research purposes. The database underwent multiple trial phases before a rollout in August 2023.

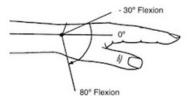
Throughout 2024, the database expanded to include the collection of PROMs and CROMs for patients undergoing targeted muscle reinnervation (TMR). This expansion includes an alternative set of demographics for amputees undergoing TMR, a Locomotor Capabilities Index survey, a DN4 questionnaire, and medication tracking. Additionally, a function to determine the AO Classification score of a fracture was added to aid research.

Future developments in planning include; medical device tracking, the addition of a PROMs pathway for patients undergoing lower-limb surgery, and a consultant-facing dashboard to visually track patient progress. The database also incorporates screening tools, questionnaires and exercise programs to support consistency in management.



50%





Mostly open

Mostly closed

Closed

CREATING A COLLABORATIVE NETWORK FOR DATA EXPERTS

In January 2024, the DASO Unit launched the inaugural RNSH Data Network. This new initiative aims to brings together individuals and teams from across the hospital working with data, to foster a collaborative environment aimed at enhancing knowledge sharing, problem solving and providing mutual support. The network includes members from the Performance and Analytics Unit, Intensive Care Unit, Emergency Department, Medical Oncology, Bone Marrow Transplant, Radiation Oncology, Medical Imaging, and Renal Department.

The first network session held in March 2024 focused on introductions and engagement with ice breaker activities to help participants connect and get to know each other and the various roles and specialty services they support. The next session expanded the network by including the Health Information Service teams, who are responsible for auditing and coding admissions across the NSLHD. This session focused on strengthening teamwork across different stages of the data process and featured more interactive activities.



Both sessions were embraced with enthusiasm, with over 20 data professionals participating in each. The strong turnout and positive feedback from the first two sessions has highlighted the growing interest and need to support a collaborative data work at RNSH. The DASO Unit is committed to hosting a minimum of three data networking sessions annually.



THE MASTER OF SURGERY PROGRAM

In April 2023, the Surgical Skills SURG5031 workshop convened at the Sydney Clinical Skills and Simulation Centre in the Kolling Building (https://www.scssc.edu.au/) with over 30 students attending as part of the Master of Surgery, marking another year of achievements in surgical education on the Northern Campus. The skills workshop was facilitated by a large number of consultant surgeons from RNSH and the Discipline of Surgery. The program had high enrolment numbers, with over 100 new student enrolments and over 300 current students, collectively completing over 850 surgery subjects across the six degrees offered in the program.

Among recent developments was the expansion of elective subject choices, growing from 6 to 20 options. Additionally, the program enhanced accessibility to anatomy subjects across the six degrees, enriching the curriculum and offering students a broader educational experience.

A noteworthy milestone for the program was the development of new teaching content, highlighted by the creation of short courses with the Sydney Medical School Short Course Unit, which are scheduled for 2024. This innovative addition aims to enhance the educational offerings of the program, ensuring students are equipped with the latest knowledge and skills in surgical practice.

Led by Associate Professor Anthony Glover (SERT Institute Academic Lead) the faculty also received recognition for their teaching efforts, earning the USYD FMH Makers and Shapers Award in the team category for the SURG5100: Surgical Professionalism and Leadership course. Through this course, faculty members have shown dedication in guiding future surgical professionals, teaching essential skills in professionalism and leadership crucial for success in the field. This award highlights the faculty's commitment to excellence in surgical education and their significant contribution to shaping future healthcare leaders.

To celebrate and encourage academic excellence, 'The Pierre Chapuis Prize' was established for highest marked dissertation in the Master of Surgery. This initiative seeks to recognise and reward the student with the highest-marked dissertation for research units each semester, fostering a culture of academic achievement and innovation within the program.



CELEBRATING SURGICAL EXCELLENCE: 2023 SURGICAL AWARDS NIGHT

In May 2023, the SERT Institute and the Department of Gastroenterology at RNSH jointly hosted the second Surgical Awards Night. With over 80 attendees, the event was a recognition of excellence, celebrating two surgeons who had significant careers and contributions to surgery at RNSH, Dr Ray Hollings and Dr Harry Cumberland.

The Dr Ray Hollings Surgical Excellence Award and Dr Harry Cumberland Travelling Scholarship were established through generous philanthropic donations from these surgeons post career. These prestigious awards support and encourage engagement in surgical research and quality improvement initiatives with the goal of improving patient care and outcomes at RNSH.

The presence of Dr Ray Hollings and his family on the night was a highlight of the evening celebrations. Addressing the audience, Dr Hollings proudly talked about his 60-year career at RNSH from his time as a surgical registrar through to a consultant, and his connection with Dr Cumberland. Also present on the night were past distinguished surgeons who had a major impact on surgery at RNSH, Professor Tom Reeve and Dr John Vandervord.

Mr Trevor Danos, NSLHD Board Chairman addressed the gathering and highlighted the exceptional quality of applications received and emphasised their role in elevating the standard of surgical care provided throughout NSLHD and the importance of ongoing innovation and excellence in healthcare.

The 2023 award recipients were:

Dr Harry Cumberland Travelling Scholarship:

- **Recipient:** Dr Alex Papachristos was awarded \$5,000 for his study on "A novel cytoimmunotherapy for advanced medullary thyroid cancer," supervised by Prof Stan Sidhu.
- **Runner-up:** Dr Calvin Park, was recognised for his study on "Rome IV physiology criteria for a functional defecation disorder," supervised by Dr Alison Malcolm.

Dr Ray Hollings Surgical Excellence Award Recipients:

- Clinical Professor Mark Sywak was awarded \$10,000 for a clinical trial study on "Radio-Frequency Ablation for the management of benign thyroid nodular disease" at RNSH.
- Dr Amanda Chung was awarded \$5,000 for a randomised control trial titled "Improving surgical patient comprehension and communication" between John Hunter Hospital and RNSH.
- Dr Leo Pang was awarded \$5,000 for a project on "Pioneering a head and neck cancer screening program" at RNSH.

The Surgical Awards Night will be an ongoing event in celebration of surgical excellence. The Dr Harry Cumberland Travelling Scholarship supports junior clinician-researchers at RNSH with a \$5,000 grant for support presenting their research at a conference. The Dr Ray Hollings Surgical Excellence Award, with an annual value of up to \$10,000, encourages and supports consultant surgeons at RNSH in initiating research or quality improvement projects that promote innovation, enhance service delivery and improve patient care. Congratulations to all recipients.

For those interested in submitting entries for the 2025 awards, please check the SERT Institute website or contact the SERT Institute via email: <u>nslhd-rnsh-sertinstitute@health.nsw.gov.au</u>



Award recipients: Clin. Prof M Sywak, Dr L Pang, Dr A Chung and Dr A Papachristos



Dr Ray Hollings and Family



Dr A Rehak, Clin. Prof M Sywak, Dr L Pang, Prof T Hugh, Dr A Chung, Prof I Norton, Dr M Wong and Dr A Papachristos



Dr Ray Hollings and wife with Dr John Vandervord



Prof Tom Reeve and Prof Tom Hugh

CLINICAL PROFESSOR MARK SYWAK: GROUND-BREAKING CLINICAL TRIAL: RADIO-FREQUENCY ABLATION FOR BENIGN THYROID NODULE DISEASE

Clinical Professor Mark Sywak is one of the most experienced Endocrine surgeons in Sydney and Australia specialising in minimally invasive surgery for thyroid, parathyroid and adrenal surgery. His academic research is recognised internationally, and he is regularly invited as a guest speaker at major endocrine meetings and events worldwide.



In May 2024, Clin. Prof Mark Sywak and Dr Hazel Serrao-Brown (Endocrine Surgery Fellow), performed the inaugural Radio-Frequency

Ablation (RFA) procedure on a patient at RNSH, achieving a significant milestone in the advancement and treatment of benign thyroid nodule disease. This project is supported by the Dr Ray Hollings Surgical Excellence Award.

A clinical trial will be conducted at RNSH and aims to recruit 10 patients with symptomatic benign thyroid nodules. These patients will be offered RFA treatment as an alternative to conventional thyroidectomy. Assessments conducted at three and six-month intervals post-procedure will measure RFA safety and effectiveness in managing symptomatic thyroid nodules, as well as assessing overall patient outcomes and satisfaction.

It is well documented that RFA offers substantial advantages over traditional thyroid surgery due to the minimally invasive approach. According to Clin. Prof Sywak, "It has the potential to preserve normal thyroid tissue, eliminating the need for lifelong medication and frequent blood tests. As a day only procedure, it could result in significant reductions in hospital stays compared to conventional surgery".

This is a very exciting step forward for RNSH as the trial has the potential to improve patient outcomes both short and long term, improve service delivery and efficiency and reduce cost of care with the possibility of shorter hospital length of stay and less reliance on long term medication for patients.





DR AMANDA CHUNG: IMPROVING PATIENT UNDERSTANDING AND EXPEREINCE

Dr Amanda Chung is a urological surgeon with extensive qualifications, including a medical degree from the University of New South Wales and a Master of Surgery from the USYD. She became a Fellow of the Royal Australasian College of Surgeons in 2016 and completed a Fellowship in Genitourinary Reconstructive Surgery at Eastern Virginia Medical School in 2017.



Beyond her clinical practice, Dr Chung is actively engaged in academic and research activities and is pursuing a PhD at the USYD, focusing on detrusor ultrastructural studies in geriatric lower urinary tract dysfunction. She holds academic roles as a Clinical Senior Lecturer at Macquarie University and serves as a tutor and examiner for medical students at the Northern Clinical School, Sydney Medical School, and the USYD.

Dr Chung has made significant contributions to her field, with over 50 peer-reviewed publications and nearly 100 presentations at local and international conferences. This project is supported by the Dr Ray Hollings Surgical Excellence Award and will be a collaboration with colleagues at the John Hunter Hospital.

In a move to enhance patient experience in urology care, a new study led by a team at John Hunter Hospital seeks to evaluate and improve the patient's understanding of the care they received.

With the support of the Dr Ray Hollings Surgical Excellence Award, the study expanded to include a secondary site within the Urology Department at RNSH, led by Dr Amanda Chung.

At the core of this study is a commitment to improving the patients overall experience and satisfaction.

By providing patients with comprehensive insights into their healthcare journey through a detailed information card, the project aims to increase the patients understanding of their diagnosis and treatment and increase confidence in decision making discussion. Recruitment for this study is currently underway. It is anticipated that as the study progresses, it will positively impact patient outcomes and satisfaction levels and contribute to improvements in healthcare delivery within the urology field.

Koney Uleter Sphinder UROLOGY Hunter New England Health	Questions to ask my doctor:
NSW Health	Patient information card
My doctor: My diagnosis:	
Planned tests & procedures:	
My follow up:	
Contact: Phone-Research services: (02) 4921 3000	

DR LEO PANG: ON A MISSION TO MAKE A DIFFERENCE

Dr Leo Pang is an ear, nose and throat (ENT) surgeon at RNSH with a subspecialty interest in Head and Neck Cancer Surgery. He is experienced in managing all types of head and neck conditions and cancers, including larynx, sinus and nasal cancers, salivary gland and thyroid cancers, and skin cancers.



With no Australian or international screening program for early detection of head and neck cancer, Dr Pang has set a goal for change by establishing a free screening clinic at RNSH.

Thanks to the Dr Ray Hollings Surgical Excellence Awards, Dr Pang meticulously planned and held the first free Australian Head and Neck Cancer Screening Clinic in May 2024 at RNSH.

Over 60 local people attended the one-day clinic which offered free screening to detect early cancers and raise awareness about cancer and the importance of early detection. Of the 60 patients who were examined by Dr Pang and his colleagues, 94.4% of patients were identified as low risk and 5.6% as intermediate risk for head and neck cancer.

"Head and neck cancers rank seventh in Australia and early detection is key in the fight against cancer. Together with my colleagues at RNSH, we are pioneering a screening program that could pave the way for future screening programs, allowing for early detection of head and neck cancer", Dr Pang said.

Patients who attended the clinic received a short questionnaire to identify risk factors and a clinical examination. They were informed about the results and risk stratified into low, intermediate, or high risk for head and neck cancer, with appropriate investigations and follow up appointments arranged on the same day before leaving the clinic.

With the support of the SERT Institute at RNSH, the program and results will be analysed and incorporated in future hospital service delivery planning. Dr Pang is committed to increasing community awareness about head and neck cancer and conducting free screening clinics. He will continue working on improving the program, reaching out to local general practitioners, and advertising in the community. He is already planning the next free screening clinic to be held later in the year.





RISING SURGEONS AT ROYAL NORTH SHORE HOSPITAL

DR KAI BROWN (UPPER GASTROINTESTINAL SURGEON)



Dr Kai Brown joined the Upper Gastrointestinal Department at RNSH in 2023. He is an Australian-trained surgeon with expertise in hepatobiliary, pancreatic and general surgery, as well an accredited da Vinci robotic surgeon. He is also a Senior Lecturer in Surgery at the USYD Northern Clinical School.

Dr Brown graduated from the University of New South Wales with a degree in Medicine and a first-class honours degree in Medical Science. He completed general surgery training and obtained a Fellowship with the Royal Australasian College of Surgeons in 2019.

Concurrently during clinical training, he pursued a PhD at the USYD, focusing on colorectal liver metastases, and presented his research nationally and internationally. His contributions to the field extend far beyond clinical work and is an author or co-author on 17 research publications. Dr Brown is also the SERT Institute Academic Lead for Robotic Surgery and the National Surgical Quality Improvement Program (NSQIP).

DR REBECCA SETON (HEAD OF ACUTE SURGICAL UNIT)

Dr Rebecca Seton graduated from the University of New South Wales with a degree in Medicine. She completed surgical training within the Northern Sydney Network and post-fellowship colorectal training at RNSH.

Dr Seton completed further colorectal training in the United Kingdom, including the Colchester Laparoscopic Fellowship. She worked as a locum consultant colorectal surgeon at Colchester, specialising in laparoscopic surgery for both benign and malignant disease.



She also worked at St Mark's Hospital in London (a globally recognised specialist gastrointestinal hospital), gaining extensive experience in the surgical and multidisciplinary management of complex coloproctology.

In 2019, Dr Seton joined the Colorectal Department at RNSH and in 2022, she was appointed as the Head of Department for the ASU. She is a Clinical Lecturer at the USYD Northern Clinical School and an accredited da Vinci robotic surgeon.

PROFESSOR MARGARET SCHNITZLER RECOGNISED FOR LEADERSHIP

Professor Margaret Schnitzler is a colorectal surgeon who is Head of the Northern Clinical School, Academic Director (Medicine/Dentistry) for the Northern Precinct and Academic Lead for Surgery at the Northern Clinical School. She chairs the Sydney Medical School Professionalism committee, is one of the co-directors of the MD program for the Specialty of Surgery and is a member of the Sydney Medical School Sustainability Leadership group.



Prof Schnitzler works with senior executives and leaders to support and promote women in medical leadership and is leading the NSLHD Advancing Women in Medical Leadership group for which she was awarded the Royal Australian and New Zealand College of Surgeons NSW State Committee 2023 Women in Leadership Medal.

Prof Schnitzler started her surgical career in 1987 as the second female registrar at RNSH. She also became the first female general surgeon appointed in NSLHD and Australia's first female colorectal surgeon.



Faculties and schools_

The University of Sydney Northern Clinical School

Education and research in Sydney's northern hospitals

HONORING THE CAREER OF CLINICAL ASSOCIATE PROFESSOR JOHN VANDERVORD

Clinical Associate Professor John Vandervord retired in June 2020 after almost 40 years of service as a Plastic Reconstructive and Maxillofacial Surgeon at RNSH. He completed a Bachelor of Medicine and Bachelor of Surgery at the USYD in 1965 and obtained a Fellowship of the Royal Australasian College of Surgeons in 1972.



Clin. A/Prof Vandervord has held numerous leadership roles, including Head of the Department of Burns, Plastic Reconstructive, and Maxillofacial Surgery at RNSH and Director of the Severe Burn Service for NSW. He was also the Clinical Head of the RNSH Division of Surgery and Anaesthesia for more than 10 years and was committed to training the next generation of surgeons. His contributions extend beyond the operating room, as evidenced by his pioneering work in establishing a Microtia clinic at the Children's Hospital at Westmead (CHW). His impact has been global, with visiting surgeon appointments overseas, he provided critical care for ear reconstruction in countries such as Sri Lanka.

Clin. A/Prof Vandervord has left a mark on the field of plastic and reconstructive surgery, at RNSH and the CHW. Recognised for his expertise in ear reconstruction, he trained in Paris under Dr Francoise Firmin, mastering the techniques and classification systems that enabled him to deliver life-changing operations to patients with microtia and other congenital ear deformities both in Australia and internationally. He has also dedicated to helping patients regain not only the appearance of their ears but their confidence and self-image, recognising the profound impact that aesthetic restoration can have on quality of life.

Clin. A/Prof Vandervord's legacy is built not only on his technical skill and innovation but also on his compassionate approach to patient care and to his advocacy for surgery at RNSH. He has been a mentor and friend to many over the years and his retirement marked the end of an era for RNSH. Although his contributions to the field of reconstructive surgery will continue to benefit patients and inspire future surgeons for years to come. In 2023, in recognition of his significant contributions, the RNSH Burns Unit was renamed the "John Vandervord Burns Unit" in his honour.







PROFESSOR TOM REEVE AC CBE

EMERITUS PROFESSOR OF SURGERY AT THE UNIVERSITY OF SYDNEY (1924-2024)

LEGACY OF EXCELLENCE: HONOURING PROFESSOR TOM REEVE AC CBE

Professor Tom Reeve AC CBE graduated from the USYD in 1947 and went on to have a long history in surgical oncology practice, surgical research and cancer policy in Australia.

After working in Sydney and Queensland, Prof Reeve trained in General and Thoracic Surgery at Albany Medical College, New York. In 1961, he was appointed as a Senior Lecturer in the Department of Surgery, the USYD and became a Fellow of the Royal Australasian College of Surgeons in 1967. He was appointed as Professor and Chair of Surgery at RNSH in 1973. He was Chairman of the Department of Surgery at the USYD from 1982-1988. He chaired the Northern Sydney Health Area from 1988-1996. Based at RNSH, he established and strengthened the Endocrine Surgical Unit which is recognised nationally and internationally to this day. In 1957, he developed a database in Thyroid and Parathyroid Surgery which is still active today and from which multiple clinical and laboratory research studies have been produced.

On retirement, Prof Reeve became the President of the Royal Australasian College of Surgeons and held a significant role in Best Practice and Quality activities within the college. His appointment as Executive Officer by the Australian Cancer Society (now Cancer Council Australia) saw his involvement in the development of Best Practice Guidelines in Cancer. He was also a member of the Board of Management of the National Breast and Ovarian Cancer Centre.

An expert in his field, Prof Reeve was awarded Commander of the Order of the British Empire - for services to Medicine in 1973 and a Companion to the Order of Australia in 1994 "For service to medicine and to academic and clinical surgery, particularly in the field of endocrinology".

Prof Reeve was a remarkable and inspiring surgical leader. He was actively involved in RNSH events and provided wise council and mentoring to many up until he was in his late 90's.

Prof Reeve was only one month short of reaching 100 years of age when he passed away in 2024. He is sadly missed and fondly remember by all who knew him.

ADVANCING CARE TRHOUGH RESEARCH AND CLINICAL TRIALS: VASCULAR SURGERY

The Vascular Surgery Department at RNSH is dedicated to providing comprehensive care for patients with a range of vascular conditions. The team is led by Dr Vikram Puttaswamy and is supported by five consultants, an international fellow, six registrars (including two dedicated to research), one senior clinical trials coordinator, two research nurses, with data management support through the SERT Institute. Annually, the department performs approximately 1,600 operations, from open surgical to endovascular procedures as well as over 50 renal transplants.

In 2018, they established a dedicated Clinical Trials Unit, focusing on conducting industrysupported randomised control trials and pioneering first-in-man trials. This initiative aims to advance treatments for vascular disorders and renal transplants through research. It is a small, highly committed team striving for excellence and quality patient outcomes.

Currently, the unit is actively engaged in the following clinical trials:

First-in-Man Trials:

- LIFE-BTK: Evaluate the everolimus eluting Esprit BTK System for treating leg artery narrowing.
- BRight Drug-Coated Balloon (DCB): Assesses the safety and effectiveness of DCB in treating lower limb artery narrowing in peripheral artery disease.
- SWING: Assess the Sundance drug-coated balloon for infra-popliteal artery lesions.

Randomised Controlled Trials:

• IMPART: Compares the Prevena Incision Management System with standard dressings for reducing surgical site complications after renal transplant.

VASCULAR SURGERY CLINICAL TRIAL UNIT NEWS

- In May 2024, RNSH celebrated International Clinical Trials Day with a seminar showcasing NSLHD's research and highlighting the significant progress to date on all studies. Senior clinical trials coordinator, Linda Pallot and research nurses, Clare Mundell and Debbie Knagge represented the Vascular Surgery Clinical Trials Unit alongside the surgical team.
- In June 2024, Linda Pallot and Debbie Knagge were awarded full scholarships through the North Foundation and Macquarie University partnership to pursue a Graduate Certificate of Clinical Trials Operations. This was the first time the scholarship was awarded.



NEW STATE OF THE ART INTERVENTIONAL NEURORADIOLOGY PROCEDURE ROOMS

Stroke is a leading cause of mortality in Australia, often leaving survivors with life-long disabilities. For the past seven years, RNSH has spearheaded advancements in stroke treatment, leveraging cutting-edge technology to improve patient outcomes.

At the forefront of this progress is Interventional Neuroradiology (INR), an interdisciplinary field merging radiology, neurosurgery, and neurology. INR employs minimally invasive techniques to diagnose and treat vascular disorders, primarily of the brain, offering precise and targeted interventions.

One breakthrough in stroke care is Endovascular Clot Retrieval (ECR), where a catheter navigates through blood vessels to extract clots in the brain, often restoring independence to stroke survivors. This minimally invasive approach not only speeds up patient recovery but also reduces procedural risks and costs. However, the increasing demand for these procedures has often led to treatment delays outside regular working hours (8am-5pm).

To meet the rising service demand, RNSH opened two purpose-built INR procedure rooms within the operating theatres in January 2023 and transitioned to a 24/7 stroke service. While both rooms cater to patient care, the initial focus was on fitting one with biplane imaging technology. The expansion of INR procedure rooms ensures stroke patients receive time-critical treatment. These advanced facilities not only improve patient accessibility but also streamlines workflow, facilitating seamless transfers between departments and enhancing overall operational efficiency. Discussions are underway to plan the fit-out of the second room.

In 2023, the INR team performed 944 procedures, a 13% increase in total procedures compared to 2022 (839). The most common INR procedure were diagnostic angiograms (36%), for investigating new conditions or surveillance of known pre-existing conditions. ECRs accounted for 27% of interventions, followed by vasospasm treatments at 14%.

Moreover, the availability of 24/7 stroke treatment resulted in a notable increase in stroke patient presentations. In 2022, 140 stroke patients were treated, while in 2023, after the implementation of 24/7 service, this number nearly doubled, to 263 stroke patients receiving care.

The majority (43.7%) of stroke patients treated either presented directly to RNSH or were local referrals from within NSLHD. Patients from the WSLHD comprised 27.9% of treated patients at RNSH, with an additional 15.4% originating from the Nepean-Blue Mountains Local Health District. Furthermore, 11.8% of patients were transferred to RNSH for stroke treatment from surrounding private hospitals.

The introduction of the 24/7 stroke service marks a pivotal advancement in stroke care accessibility and efficiency at RNSH. This initiative closes the gap between patient demand and treatment availability, allowing patients to receive timely intervention, which is vital for stroke treatment and management where every moment counts towards best outcomes or survival.



Royal North Shore Hospital: New Interventional Neuroradiology procedure rooms



Large screens and monitors allowing for multi-viewing

ROYAL NORTH SHORE HOSPITAL TRAUMA SERVICE

"Dedicated to serving as a centre of excellence in trauma care and ensuring every patient receives the best chance at recovery"

The New South Wales (NSW) Trauma System is based on a network of hospitals that provide various levels of trauma management capability across metropolitan, regional and rural settings. Trauma services coordinate and ensure the highest level of care for trauma patients admitted to hospitals across NSW.

RNSH is one of the top three busiest trauma centres in NSW, with the highest Injury Severity Score (ISS) and Injury complexity ratings compared to other trauma centres across the state.

RNSH is a designated Level 1 Major Trauma Service (MTS), it has an expert level of trauma doctors and nurses to provide clinical care to severely injured patients, provide clinical continuity and leadership with respect to governance and quality improvement, ensuring the highest possible quality of care is maintained throughout the patient journey to recovery.

The hospital is home to a Major Burns Unit for adults in NSW and accepts all major burns and spinal cord injuries across the state with a no-refusal policy for major trauma patients from the Northern Sydney and Central Coast Local Health Districts.

The hospital trauma service operates as a consultant-led admitting service functioning 7-days a week, with strong links with the Acute Surgical Unit. A consultant-led multidisciplinary ward round occurs daily with junior medical officers, trauma case managers and trauma nurse manager.

In 2022, the RNSH Trauma service became an admitting service and in November 2023, underwent the RACS Trauma Care Verification Review process for Level 1 Trauma Service accreditation.

RNSH was congratulated for the progress it has made in the delivery of trauma care since the previous Trauma Care Verification review in 2016. The reviewers were impressed with the commitment to trauma shown not only by the Trauma Director and Trauma Service staff, but also staff from the other trauma related disciplines and hospital administration. Their official report documented their achievements which are an amazing testament to the whole team and to the trauma service leadership.

One of the major changes highlighted by the reviewers was the transition to a consultant-led, primary admitting service operating 7 days a week.

Other notable and commendable areas included:

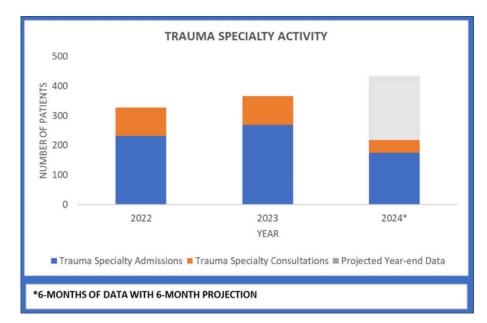
- Excellent leadership from the Trauma Director and Deputy Trauma Director
- High level of engagement with surgeons in trauma care
- Excellent trauma model of care and rapport between specialties
- · Dedicated trauma wards with high acuity and activity
- Newly introduced in-school P.A.R.T.Y. plus program for youths.

When asked for comment, Dr Geoff Healy, RNSH Trauma Service Director, could not be any prouder of his hard working team. "Since transitioning to a primary admitting service, the Trauma Service has experienced substantial growth, and these achievements underscores our commitment to delivering high-quality care to our community." He said and further adding "We have established ourselves as a high performing inpatient admitting service, with presence in ED, ICU and the wards, as well as operating theatres during code crimson cases".

The RNSH Trauma Service is a busy service, experiencing increasing numbers of inpatients throughout the years. Feedback from the patients and their families coming through the service is that they are very happy with their care and appreciate the coordinated nature of their care in hospital.

Over the next 5 years, the service will focus on developing new models of care, quality improvement activities and strengthening research, with plans to participate in emerging research and recruitment of patients in several multi-centre Random Control Trials (RCTs).

The below graph shows the steady increase in trauma patient presentation at RNSH from 2022 - 2024.









THE ROYAL NORTH SHORE ANNUAL SHOULDER SYMPOSIUM

In March 2024, Orthopaedic surgeons and other medical professionals gathered for the 13th Royal North Shore Shoulder Symposium at the Kolling Institute. The event was hosted by orthopaedic surgeons Dr Ben Cass and Dr Allan Young and featured keynote speakers Dr Paul Sethi and Dr Thomas Duquin from the United States.

The symposium aimed to facilitate collaboration and share insights on the latest trends, innovations, and best practices in arthroplasty and reconstruction techniques. Attendees had the opportunity to explore cutting-edge research shaping the future of shoulder care globally.

Dr Sethi, known for his leadership in sports medicine and research, brought his expertise as the President of the ONS Foundation for Clinical Research and Education. Dr Duquin, Director of Medical Student Education for the Department of Orthopaedics, with a specialisation in shoulder and elbow surgery, contributed valuable insights and a dedication to medical education.

The sessions at the symposium covered a broad range of topics, including reverse shoulder replacement, technological advancements, cuff repairs, and managing shoulder instability. Discussions also addressed the legal aspects of shoulder surgery and effective strategies for handling complications and pain. Alongside these academic sessions, interactive workshops and Q&A sessions facilitated networking, collaboration, and professional discussions among the participants.





GLOSSARY

Abbreviation	Definition
AC	Order of Australia
ASU	Acute Surgical Unit
CBE	Commander of the British Empire
CROMS	Clinician-Reported Outcome Measures
DASO	Data Analysis and Surgical Outcomes Unit
DCB	BRight Drug-Coated Balloon
DoSA	Division of Surgery and Anaesthesia
ECR	Endovascular Clot Retrieval
ED	Emergency Department
EDWARD	Enterprise Data Warehouse for Analysis, Reporting and Decision
ENT	Ear, Nose and Throat
FLASH	Fostering Leadership Across Systems in Health
FMH	Faculty of Medicine and Health
FTE	Full Time Equivalent
HIE	Health Information Exchange
ICU	Intensive Care Unit
IMPART	Incision Management After Renal Transplant
INR	Interventional Neuroradiology
ISS	Injury Severity Score
ІТ	Information Technology
MD	Doctor of Medicine
M&M	Morbidity and Mortality
MTS	Major Trauma Service
NBMLHD	Nepean Blue Mountains Local Health District
NSLHD	Northern Sydney Local Health District
NSW	New South Wales
ONS	Orthopaedic and Neurosurgical Specialists
P.A.R.T.Y.	Prevent Alcohol and Risk-Related Trauma in Youth

GLOSSARY

Abbreviation	Definition
PhD	Doctor of Philosophy
PROMS	Patient-Reported Outcome Measures
RACS	Royal Australasian College of Surgeons
RCT	Random Control Trial
REDCap	Research Electronic Data Capture An online data collection platform to manage online surveys and databases
RFA	Radio-Frequency Ablation
RNSH	Royal North Shore Hospital
SERT Institute	Surgical Education Research and Training Institute
SORTED	Spine and Orthopaedic Trauma Epidemiological Database
TMR	Targeted Muscle Reinnervation
USyd	University of Sydney
WSLHD	Western Sydney Local Health District

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