SATURDAY 17 AUGUST

8:30am - 10:00am  CRITICAL ISSUES FOR ANZSVN MEMBERS - WORKFORCE AND WORKPLACE
City Room 1/2
Chairs: Frank Guerriero (Adelaide) and Cyra Hodgson (Adelaide)

8:30am  Opening Address
Frank Guerriero (Adelaide)

8:35am  Vascular Nursing Societies - the South Australian Model
Davina Speck (Adelaide)

8:45am  The development of nurse practitioner role in Vascular
Rebecca Aburn (Dunedin)

9:00am  Capability sets
Scott King (Adelaide)

9:30am  Streamlining the Vascular Ward Round - a 'time-out' structure
Timothy Beresford (Christchurch)

9:45am  Essential Steps of Medication Administration Practices: A best practice implementation project
Tanghua Chen (Sydney)

10:00am - 10:30am  MORNING TEA - SATURDAY
Hall N/O

10:30am - 12:30pm  VASCULAR WOUND MANAGEMENT
City Room 1/2
Chairs: Frances Horner (Nelson) and Claudia Smith (Brisbane)

Proudly supported by KCI Medical

10:30am  The progress in the pathophysiology of wound management since yester year
Jan Rice (Melbourne)

10:45am  The use of topical timolol in healing chronic leg ulcers
Omar Aziz (Sydney)

11:00am  Skin substitutes
Stuart Harper (Adelaide)

11:15am  Presentations to the Vascular clinic: Pyoderma Gangrenosum
Rebecca Aburn (Dunedin)

11:30am  Veraflow Cleanse Choice
Quoc Tran (Sydney)

11:45am  An audit of the efficacy of the PrevenaT topical negative pressure device in vascular surgical groin wounds
Hayley Rieman (Adelaide)

12noon  Methoxyflurane (PenthroxR) Reducing Patient Pain and Theatre Time
Karen Nixey (Hamilton) and Helen Sutton (Hamilton)
12:15pm Updates from EWMA
   Tabatha Rando (Clovelly Park)

12:30pm - 1:30pm LUNCH - SATURDAY
   Hall N/O

12:30pm - 1:30pm LUNCHTIME SYMPOSIUM: GREAT AORTIC ENDOGRAFTING QUESTIONS: WHAT DOES THE DATA REVEAL (TICKETED EVENT)
   Hall M
   Proudly supported by W. L. Gore

1:30pm - 3:00pm LOWER LIMB OEDEMA DISORDERS
   City Room 1/2
   Chairs: Vanessa Heidenreich (Adelaide) and Davina Mungall (Adelaide)

1:30pm Pathophysiology of lymphoedema and lipoedema
   Vani Prasad

1:30pm Microanastomotic surgery for lymphoedema
   Vani Prasad

1:30pm Assessment and management of non-vascular factors contributing to leg swelling
   Jan Rice

1:30pm Venous Leg Ulcers - A need for Practice Change?
   Katherine Marston (Adelaide)

3:00pm - 3:30pm AFTERNOON TEA - SATURDAY
   Hall N/O

3:30pm - 5:30pm CHALLENGE THE PANEL
   City Room 1/2
   Chairs: Katherine Marston (Adelaide) and Theresa O'Keefe (Brisbane)

3:30pm The prevalence of undernutrition in vascular surgery inpatients and the impact on clinical outcomes.
   NU008 Jolene Thomas (Adelaide)

3:45pm Cellutome
   NU009 Toby Richards (Perth)

4:00pm Pravena
   Ian Barry (Perth)

4:15pm CelluTome for non-operative closure of fasciotomies
   NU005 Angie Arnold (Adelaide)

4:30pm Panel: Tabatha Rando, Toby Richards and Sue Monaro
   Katherine Marston (Adelaide), Angie Arnold (Adelaide) and

5:30pm - 6:30pm WELCOME RECEPTION (TICKETED EVENT)
   Hall N/O

The inaugural Shark Tank, supported by the ANZSVS, will be held during the welcome reception. This is a special session introduced this year to showcase innovation in vascular surgery. Evaluated by four experts (the Sharks) and presented in front of a live audience of voters, cash prizes will be awarded to the winning proposal(s).
SUNDAY 18 AUGUST

9:00am - 10:00am  THE ANZSVN ANNUAL GENERAL MEETING
City Room 1/2
Chairs: Frank Guerriero (Adelaide) and Theresa O'Keefe (Brisbane)

10:00am - 10:30am  MORNING TEA - SUNDAY
Hall N/O

10:30am - 12:30pm  STRATEGIES FOR IMPROVING OUTCOMES IN VASCULAR PATIENTS
City Room 1/2
Chairs: Janice Caine (Melbourne) and Tanghua Chen (Sydney)

Proudly supported by Wolfmed

10:30am  The role of non-invasive vascular assessment
Kate Perkins (Adelaide)

11:00am  Nurse led claudication clinics
Paul Blair (Belfast, Ireland)

11:15am  Cohort Study Examining the Association Between Blood Pressure and Cardiovascular Events in Patients with Peripheral Artery Disease
NU010 Diana Thomas Manapurathe (Townsville)

11:30am  Supervised Exercise Therapy for Patients with Symptomatic Peripheral Artery Disease
NU011 M. Eileen Walsh (Toledo, USA)

11:45am  Overview and implications of Hospital-acquired complications for vascular surgery
NU012 Susan Monaro (Sydney)

12noon  Combined Carotid and Coronary Surgeries: A Case Study
NU013 M. Eileen Walsh (Toledo, USA)

12:15pm  Development of a remote surveillance program for vascular patients - The role of a dedicated vascular surveillance nurse
NU014 Marianne Lupson (Adelaide)

12:30pm - 1:30pm  LUNCH - SUNDAY
Hall N/O

12:30pm - 1:30pm  LUNCHTIME SYMPOSIUM: THE FREEDOM TO DO MORE WITH A NEXT GENERATION CONFORMABLE AND LOW-PROFILE THORACIC ENDOGRAFT (TICKETED EVENT)
Hall M

Proudly supported by Medtronic

1:30pm - 3:00pm  THE DIABETIC FOOT
City Room 1/2
Chairs: Theresa O’Keefe (Brisbane) and Hayley Rieman (Adelaide)

Proudly supported by B Braun

1:30pm  Latest diabetic foot guidelines
Robert Fitridge (Adelaide)

1:45pm  The use of antibiotics and importance of timing
Santhosh Daniel (Adelaide)
2:00pm
NU015
Minor amputation pathway: focus on the whole, not just the hole in the foot
Frances Horner (Nelson)

2:15pm
NU016
Managing diabetes related foot wound: A case discussion
Tanghua Chen (Sydney)

2:30pm
Major limb amputation - a collaborative approach to patient management
Siang Naik (Adelaide)

2:45pm
Award presentations

3:00pm - 3:30pm
AFTERNOON TEA - SUNDAY
Hall N/O

3:30pm - 5:30pm
THE DESERT FOOT AND COMPLEX TIBIAL DISEASE
(Combined with: Vascular)
Hall M
Chairs: Miguel Montero-Baker (Houston, USA) and Catherine Thoo (Hobart)

3:30pm
Are there differences in outcomes between diabetic and non-diabetic patients in CLTI?
Robert Fitridge (Adelaide)

3:38pm
WfII staging versus direct revascularisation as a predictor of wound healing
Miguel Montero-Baker (Houston, USA)

3:46pm
Angiosome based revascularisation strategies in the modern vascular era
Conor Marron (Adelaide)

3:54pm
Contemporary Assessment of Perfusion - are conventional methods outdated?
Pecky De Silva (Sydney)

4:02pm
How do we know when we have enough perfusion?
Miguel Montero-Baker (Houston, USA)

4:10pm
Questions

4:18pm
Atherectomy in the tibials can reduce amputation rates in CLTI patients
Vik Puttaswamy (Sydney)

4:26pm
Reconstruction of the pedal arch - respect it or lose it
Tim Wagner (Melbourne)

4:34pm
Deep Venous Arterialisation - who, when and how?
Miguel Montero-Baker (Houston, USA)

4:42pm
Endovascular Case Quotas - are these sufficient for training in complex endovascular procedures
Tim Wagner (Melbourne)

4:50pm
Questions

4:58pm
Gene therapy in PVD
Joseph Dawson (Adelaide)

5:06pm
Are DCBs relevant in the tibial space?
Phillip Puckridge (Adelaide)

5:14pm
The Paclitaxel Controversy - the Final Word?
Vik Puttaswamy (Sydney)

5:22pm
Discussion
7:30pm - 10:30pm
CONFERENCE DINNER (TICKETED EVENT)
Venue: Adelaide Oval
NU001
THE DEVELOPMENT OF NURSE PRACTITIONER ROLE IN VASCULAR

REBECCA ABURN

Southern District Health Board, Dunedin, New Zealand

Background
The review of the current vascular service has encouraged a new approach to the delivery of care for chronic vascular patients. After examining how services can be provided across a large geographical district for patients who require specialist vascular assessment/treatment and specific healthcare needs. A possible solution is to create a nurse practitioner role. Nurse practitioners practice both independently and in collaboration within many health care teams. They work to promote health, prevent disease, diagnose, assess and manage complex health needs, including through differential diagnosis, ordering, conducting, interpreting diagnostic and laboratory tests then administering therapies for the management of actual and potential health needs. Working with family’s patients and communities across a wide range of clinical settings. Nurse Practitioners can be a solution to an increasing service need but their role is not fully understood and therefore difficult to establish.

Aim
The multidisciplinary team worked together and created a nurse practitioner position that crosses over the primary/tertiary continuum. Aiming to improve services for increasing number of patients who have chronic vascular disease and provide a district vascular service.

Setting up the role: This paper will discuss the role and scope of practice of the NP within the vascular team. Outline the skills and knowledge required to become a NP.

Conclusion
Patient load is increasing and becoming more complex there is the opportunity to improve the delivery of services across the continuum of care through the development of Nurse practitioner roles throughout tertiary and secondary services. This can be achieved through teamwork, good communication, perseverance and believe in the improved outcomes for patients.

NU002
STREAMLINING THE VASCULAR WARD ROUND – A ‘TIME-OUT’ STRUCTURE

KATHERINE BEST

Christchurch Public Hospital, Christchurch, New Zealand

Surgical ward round quality can impact patient outcomes as well as patient and staff satisfaction (Pucher, Aggarwal & Darzi, 2014). The vascular ward round currently serves as a platform to gather & share information and make decisions. The aim was to improve workflow, hand hygiene and communication without increasing administrative time.

A time-out model, loosely based off the WHO Surgical Safety Checklist was developed. The resultant time-out ward model consisted of a ‘time-in’ at the start of the ward round, ‘pause’ at each patient bedside, and a final ‘time-out’.

Time-in: Prioritising the order to see patients
- Early identification of wound reviews
- Stating a team goal for the day

Pause: An opportunity for addressing nursing and house-officer concerns
- Dictation of a plan
- Patient clarification
- Performing of hand hygiene

Time-out: Re-group, ensuring all patients have been reviewed, any final concerns addressed.

Methodology
A pre-implementation and post-implementation audit was conducted. The same standard measures were taken over both three-week audit periods. A single observer new to the vascular department acted as the auditor. This was to ensure intra-observer reliability, clinical accuracy and to minimise bias. Subjective data was collected from team members pre and post introduction through an online questionnaire utilising a Likert scale.

Results
- Significant improvement across a broad variety of subjective and objective measures
- No increase in time per consultation
- Deficits in addressing pain, evacuation, mobility status

Conclusion
The structure is currently in use in daily practice. This will continue based on the encouraging results of audits. In particular, the improvements in hand hygiene and staff satisfaction provide a strong argument for its continued utilisation.

References
NU003

ESSENTIAL STEPS OF MEDICATION ADMINISTRATION PRACTICES: A BEST PRACTICE IMPLEMENTATION PROJECT

TANGHUA CHEN, KYLIE WRIGHT, AMANDA CHAPMAN, KELLI FLOWERS, WAFA TRAD, JENNIFER CALDWELL, GIA VIGH, MELISSA BONSER, NICOLETTE GIANNOUTSOS, LOUISE SMITH AND SOUNG LEE

Liverpool Hospital, NSW

Medicines are the most common treatment used in health care and are associated with a higher incidence of errors and adverse events than other healthcare interventions. Australian studies report 5-18% of medicines are administered in error. Nurses are primarily involved in the administration of medications to patients and this duty is an important aspect of professional practice, one key strategy used by nurses to prevent errors during medication administration is the “Five Rights” of medication administration.

Project aims:
- To improve the local practice of nursing medication administration
- To ensure nursing staff have been educated regarding best practice and the policy of medication safety
- To ensure an evidence-based practice approach underpins the implementation project

Methods:
The project will use Joanna Briggs Institute (JBI) Practice Application of Clinical Evidence System and Getting Research into Practice audit tool for promoting change in healthcare practice. The project has three phases of activities with linked objectives:
Conducted a baseline audit measuring eight best practice recommendations, followed by the implementation of target strategies and follow up audits.

Results:
The baseline audit results demonstrate 100% compliance of 5 best practice criteria and compliance for other three best practice criteria was 92% and above.
The follow-up audit results demonstrate compliance was sustained at 100% for 5 of the best practice criteria mentioned above, and the remaining criteria all improved.

Discussion:
The findings showed audit may be used to promote best practice and that focused strategies initiated at the ward level can have a meaningful impact on clinical practice.
This project is transferable to other clinical units.
However, the compliance of medication administration best practice is high may be due to the fact that staff ‘being observed’.

NU004

THE USE OF TOPICAL TIMOLOL IN HEALING CHRONIC LEG ULCERS

KALPA PERERA AND GILLIAN GALE

Westmead Hospital, NSW

Chronic ulcers are a common, and often difficult to treat problem, especially in older patients. Topical timolol, a non-selective beta-blocker, has been shown to have some efficacy in improving healing rates of persistent ulcers. We report our experience of using this novel, off-label treatment, in an outpatient setting. Five patients with longstanding ulcers were treated with 0.5% timolol maleate solution in addition to appropriate wound care. With regular follow-up in a specialist wound clinic, all patients have achieved reduction in ulcer size to date. Topical timolol is a simple, inexpensive option to help heal persistent wounds.

NU005

CELLUTOME FOR NON-OPERATIVE CLOSURE OF FASCIO TOMIES

ANGIE ARNOLD AND FRANK GUERRIERO

Dept. of Vascular and Endovascular Surgery, Flinders Medical Centre, South Australia

Aim
CelluTome is an innovative epidermal harvesting device that can be used for the treatment of chronic, clean wounds when there is a need for epidermis and operative intervention is not suitable. CelluTome harvests multiple Microdomes using a combination of
warmth and negative pressure which minimises the trauma created at the donor site resulting in faster healing time. Additionally, the process does not require anaesthesia and can be carried out in the ward or clinic setting.

CelluTome was successfully used to close bilateral fasciotomies wounds in a patient not suitable for operative intervention from a medical perspective.

Methods/Results
A 72 yo gentleman underwent open explant of an infected aorto-bifemoral bypass with subsequent bilateral lower limb ischemia requiring bilateral axillo-unifemoral grafts and bilateral lower limb fasciotomies. He had a prolonged ICU admission with multiple medical complications and as such was not suitable for further operative intervention.

Chronic open wounds in this setting posed a significant risk of graft infection. As such closure was pertinent. Innovative treatment options were sought and CelluTome was chosen. Harvest and grafting were performed in a ward-based setting without the need for anaesthesia. Weekly wound review was performed with closure achieved in less than 10 weeks.

Conclusion
CelluTome is a novel treatment option for patients with chronic clean wounds in need of epidermal grafting who are not suitable for operative treatment.

NU006
AN AUDIT OF THE EFFICACY OF THE PREVENA™ TOPICAL NEGATIVE PRESSURE DEVICE IN VASCULAR SURGICAL GROIN WOUNDS

HAYLEY RIEMAN, MELANIE TOOMEY AND CHRISTOPHER I. DELANEY
Flinders Medical Centre, South Australia

Introduction
Groin incisions are a necessary component of lower limb arterial surgery. Due to the nature of the anatomy, a groin incision is susceptible to post-operative complication (infection, dehiscence and seroma). Evidence suggests that topical negative pressure (TNP) may reduce incidence of post-operative complications in surgical incisions. Prevena™ is a TNP device that can be applied to surgical groin incisions. The device is placed at the time of skin closure and generally worn for a total of 7 days. We have recently audited the incidence of post-operative wound complications to determine if the use of Prevena™ has impacted on this.

Methodology
This is a retrospective case-controlled study of patients presenting to the Flinders Medical Centre Department of Vascular Surgery between 1/07/18- 31/03/19, for treatment of Peripheral Arterial Disease resulting in a groin incision. Procedures of interest included anatomic or extra-anatomic bypass surgery, common femoral endarterectomy, and femoral embolectomy. Medical records and operative notes were used to identify if Prevena™ was applied post groin closure. Compliance with the device and the 30-day incidence of wound complication was recorded. Statistical analysis was undertaken to determine whether Prevena reduces the rate of post-operative wound complications

Results
A total of 84 patients were included in this study. 48 (57%) patients had Prevena applied. 9 (18%) patients in the Prevena group experienced wound complications and 6 (16%) in the non Prevena group (P=0.71). Of the 48 patients who underwent a femoral endarterectomy, 28 (58%) received a Prevena with 2 (4.1%) diagnosed wound complications. Of The 20 (42%) patients undergoing femoral endarterectomy that did not receive Prevena 7 (35%) suffered wound complication (P=0.01).

Conclusion
The application of a TNP dressing, such as Prevena, may be an effective method to reduce the risk of groin wound complication in patients undergoing femoral endarterectomy.

NU007
METHOXYFLURANE (PENTHROX®) REDUCING PATIENT PAIN AND THEATRE TIME

KAREN NIXEY AND HELEN SUTTON
Waikato Hospital, Hamilton, New Zealand

Introduction
There is a complex relationship between pain, stress, wound healing and general anaesthesia (GA). For patients who present with peripheral vascular disease and wound infections necessitating frequent debridement’s the need to have their wound debridement in theatre is both costly to the health system and psychologically stressful for the patient.
At Waikato Hospital the decision, driven by nursing staff, was made to utilise methoxyflurane (penthrox) on the ward for painful wound debridement and dressing changes.

Method
Patients with wound dressings too painful to be done utilising oral analgesia alone were offered the use of penthrox on the ward providing there were no contraindications. This is carried out in the treatment room on the ward by suitably trained nurses utilising the drug guideline for the use of penthrox. Nurses received two hours training and then are signed off after a practical demonstration.

Results
Complex painful wound dressings are carried out on the ward routinely utilising penthrox when necessary. Patients who utilise it report they are pain free and prefer not to go to theatre.

For the patient especially, the diabetic patient there is no need to be nil by mouth for extended periods, the time involved in completing the dressing is less and the use of penthrox is less stressful for them than going to theatre.

Conclusions
The use of penthrox, administered by nursing staff on the ward, is a safe effective technique for wound debridement and dressing changes in a ward setting. It has led to cost savings in the areas of theatre time, reduced need for medical staff and anaesthetist time. There is also a need to acknowledge the opportunity cost to another patient when a patient returns to theatre and then the Post Anaesthetic Care Unit post wound debridement and dressing change.

NU008
THE PREVALENCE OF UNDERNUTRITION IN VASCULAR SURGERY INPATIENTS AND THE IMPACT ON CLINICAL OUTCOMES.

JOLENE THOMAS, CHRISTOPHER DELANEY AND MICHELLE MILLER

Flinders University, South Australia

Background: Undernutrition has a significant impact on clinical outcomes in vascular surgery patients. This study aimed to investigate the nutritional status of vascular surgery inpatients and the impact of nutritional deficits on discharge outcomes and 12-months post discharge.

Methods: Participants were assessed by a dietitian on admission and classified as well-nourished or undernourished if they displayed a micronutrient deficiency (vitamins C, D, A, B12, folate, and the trace elements zinc, iron and selenium via serum/plasma), were underweight, displayed muscle and/or fat depletion, and/or reported symptoms that were impacting on their nutritional intake (eg poor appetite). Discharge outcome data were collected from the medical records. Twelve-month follow-up data were collected via telephone or questionnaire. Chi-square, Mann-Whitney U test, Generalised Linear Modelling and logistic regression analyses were used to explore associations between nutritional status and outcomes.

Results: 322 inpatients participated with 75.5% being classified as undernourished. Micronutrient deficiencies were most common, particularly vitamin C deficiency (57.2%), and suboptimal vitamin D (55.6%), iron (45.9%), vitamin B12 (43%) and zinc (43.9%). At discharge 69 (21.5%) participants had at least one complication, 57 (18%) were discharged to an institution and 2 (0.6%) had died. Median (IQR) length of stay was 8 (5,12) days. Undernourished participants had a longer LOS (p=0.012), were more likely to be discharged to an institution (p=0.002) and encounter complications (p=0.005). At 12-months, undernutrition was associated with a shorter time to first hospital admission (p<0.0001).

Conclusions: Undernutrition, particularly micronutrient deficits, is prevalent in vascular surgery inpatients which negatively impacts on clinical outcomes. Timely identification of nutritional issues is crucial to maximise nutritional health and improve clinical outcomes.

NU009
CELLUTOME

TOBY RICHARDS AND MUHOLAN KANAPATHY

University of Western Australia, WA

Current wound management through the use of a split-thickness skin graft often requires hospital admission, a period of immobility, attentive donor site wound care and pain management.

CelluTome is a novel epidermal graft-harvesting device (CelluTome) that allows pain-free epidermal skin grafting in the outpatient clinic setting.

We describe a prospective series of 35 patients. All patients underwent Cellutome in outpatients and allowed to return home after the procedure. No local or general anaesthesia was required.

Dressing changes were performed weekly and two thirds (22) of patients had complete wound healing by 6 weeks.

Importantly, the average time for donor site healing was 5.49 ± 1.48 days. The mean pain score during graft harvest was 1.42 ± 0.95, and the donor site Vancouver Scar Scale was 0 for all cases at 6 weeks.
Cellutome offers autologous skin harvesting in the outpatient setting with minimal or no pain and a scar free donor site, equally benefiting both the acute and chronic wounds.

NU010
COHORT STUDY EXAMINING THE ASSOCIATION BETWEEN BLOOD PRESSURE AND CARDIOVASCULAR EVENTS IN PATIENTS WITH PERIPHERAL ARTERY DISEASE

DIANA THOMAS MANAPURATHE, JOSEPH MOXON, SMRITI KRISHNA, SOPHIE ROWbothAM, FRANK QUIGLEY, JASON JENKS, MICHAEL BOURKE, BERNARD BOURKE, RHONDDA JONES AND JONATHAN GOLLEDGE

James Cook University, QLD

Background
Hypertension is an important risk factor for cardiovascular events in patients with peripheral artery disease; however, optimal blood pressure targets for these patients are poorly defined. This study investigated the association between systolic blood pressure (SBP) and cardiovascular events in a prospectively recruited patient cohort with peripheral artery disease.

Methods and Results
A total of 2773 patients were included and were grouped according to SBP at recruitment (≤120 mm Hg, n=604; 121–140 mm Hg, n=1065; and >140 mm Hg, n=1104). Adjusted Cox proportional hazards analyses suggested that patients with SBP ≤120 mm Hg were at greater risk of having a major cardiovascular event (myocardial infarction, stroke, or cardiovascular death) than patients with SBP of 121–140 mm Hg (adjusted hazard ratio, 1.36; 95% CI, 1.08–1.72; P=0.009). Patients with SBP >140 mm Hg had an adjusted hazard ratio of 1.23 (95% CI, 1.00–1.51; P=0.051) of major cardiovascular events compared with patients with SBP of 121–140 mm Hg. These findings were similar in sensitivity analyses only including patients receiving antihypertensive medications or focused on patients with a minimum of 3 months of follow-up.

Conclusions
This cohort study suggests that patients with peripheral artery disease and SBP ≤120 mm Hg are at increased risk of major cardiovascular events. The findings suggest caution in intensive SBP lowering in this patient group.

(J Am Heart Assoc. 2019;8:e010748. DOI: 10.1161/JAHA.118.010748.)

NU011
SUPERVISED EXERCISE THERAPY FOR PATIENTS WITH SYMPTOMATIC PERIPHERAL ARTERY DISEASE

M. EILEEN WALSH

College of Nursing, University of Toledo, Ohio, United States of America

Purpose
Approximately 202 million people worldwide have lower extremity peripheral artery disease (PAD). PAD significantly impacts morbidity, mortality, and quality of life. Supervised exercise therapy (SET) improves physical function, quality of life, pain-free walking distance, and reduces cardiovascular risk. The Exercise & Sports Science Australia position statement and 2016 American Heart Association/American College of Cardiology evidence-based guidelines recommend exercise. Few dedicated vascular exercise programs exist and many health care clinicians lack knowledge of SET. The purpose of this presentation is to review current recommendations, discuss components of SET, and describe 2019 American Heart Association Science Advisory guidelines. These will be discussed in detail and be useful to non-U.S. clinicians.

Methodology
SET for patients with symptomatic PAD requires a physician visit and direct physician supervision. A physician or advanced practice practitioner must be immediately and physically available. SET can take place in an outpatient setting or physician office. SET consists of 30–60 minute sessions of therapeutic exercise training supervised by qualified personnel with up to 36 sessions delivered over 12 weeks. A Science Advisory panel of professional organization representatives with expertise in exercise and PAD was convened to develop a practical guide to assist in implementing SET. Guidelines for referral, assessment of patient limitations, recommendations for exercise testing, and adverse event reporting were defined.

Results
Algorithms for training with use of treadmill walking as the primary modality as well as non-treadmill walking were developed. Initial intensity and exercise progression was specified.

Conclusion
SET is an important intervention in the management of patients with PAD. Health care clinicians should promote exercise in accordance with the evidence-based guidelines and be informed of the practical guide to assist in implementing SET.
NU012
OVERVIEW AND IMPLICATIONS OF HOSPITAL-ACQUIRED COMPlications FOR VASCULAR SURGERY

JANA PINKOVA AND SUSAN MONARO

Sydney Local Health District, NSW

Purpose
In 2018 the Australian Commission on Safety and Quality in Health Care launched a Hospital-Acquired Complications (HAC) Information Kit. This initiative sought to support clinicians to reduce the occurrence and impact of eighteen HACs. HACs impact on the quality of life of patients and families and increase costs for health care services. Given that patients admitted to hospital for vascular interventions are frequently complex and frail, fourteen HACs have significant relevance to vascular surgery. This paper provides an overview of HACs relevant to vascular surgery and the implications for funding.

Methodology
A variety of vascular surgical case studies will demonstrate the HAC framework and how this impact on case-mix derived funding and penalties for health care services.

Findings
Despite comprehensive risk screening, not all complications occurring in vascular patients are avoidable. Some HAC’s may have greater implications for case-mix derived funding compared to others. Clinical staff should be aware of how HACs affect funding and be cognisant of important activities and documentation requirements in the patient record.

Conclusion
Interventions to reduce the incidence and severity of HACs in complex and frail patients admitted under vascular surgery will not only improve patient outcomes and experience but reduce hospital costs. Serial risk assessment and early identification of complications may reduce the impact of HACs. However, patients and families need to be aware of the high risks associated with vascular disease and that HACs may occur, especially after in non-elective and emergency procedures.

NU013
COMBINED CAROTID AND CORONARY SURGERIES: A CASE STUDY

M. EILEEN WALSH AND COLLEEN TAYLOR

College or Nursing, University of Toledo, Toledo, Ohio, United States of America

Purpose
More than 200,000 coronary artery bypasses and over 100,000 carotid endarterectomies are performed annually in the United States. Protocols for these operative procedures exist yet the surgical management of concomitant coronary artery and carotid artery disease is still controversial. Few combined coronary and carotid procedures have been reported in the literature. The primary perioperative complications associated with these operative procedures include stroke, myocardial infarction, and death. Some studies documented an increased incidence of these complications with combined surgeries. Other studies demonstrated no difference in the rates of these complications when the operations were performed sequentially. The purpose of this presentation is to discuss the medical history, surgical management, and outcomes using a case study format and to discuss literature related to staged and combined coronary and carotid surgeries.

Methodology
A 60-year-old male seen by his primary care physician for hypertension and diabetes had a carotid bruit on physical exam. He was referred to a vascular surgeon. A carotid duplex ultrasound revealed >70 % narrowing of his right carotid artery. An elective carotid endarterectomy was scheduled. The preoperative workup included clearance by a cardiologist. However the patient failed the cardiac treadmill test and had a cardiac catheterization that showed significant disease in the left main, proximal left anterior descending and right coronary arteries.

Results
Patient underwent combined surgeries on the same day as one continuous operation. The carotid endarterectomy was followed by four coronary bypass grafts. The patient did not experience any postoperative complications and participated in cardiac rehabilitation.

Conclusion
Combined coronary and carotid surgeries as sequential procedures on the same day provide a safe therapeutic option for a specific subset of patients.
NU014
DEVELOPMENT OF A REMOTE SURVEILLANCE PROGRAM FOR VASCULAR PATIENTS - THE ROLE OF A DEDICATED VASCULAR SURVEILLANCE NURSE

MARIANNE LUPSON

RAH, SA

Research worldwide shows that compliance with long term vascular surveillance remains poor. Many patients are lost to follow up. Observations of long term follow up suggest that whilst compliance is initially good it declines significantly the longer the time from initial surgical intervention.

The introduction of a dedicated vascular surveillance nurse, managing patients via a centralised database has demonstrated improved compliance with follow up. The role saves multiple outpatient appointments and provides effective utilisation of limited outpatient resources.

Both pre and post-operative patients are suitable for remote surveillance and the program includes aneurysms, endovascular aortic repair, arterial bypasses, and peripheral stents and post carotid surgery.

The program provides patients with a pathway tailored to their geographical location and individual needs. Patients have a central point of contact to discuss any issues and their general practitioner is advised of results. Abnormal scans identified within the requested criteria for surveillance are flagged to consultant for review in a timely and urgent manner reducing the potential risk of complications and improving intervention rates.

All patients involved in the program receive prompt clinical assessment or intervention for any surveillance detected issues.

Technological advances have led to a definitive shift towards repairing abdominal aortic aneurysms using endovascular techniques, creating a large sub-population that will require lifelong surveillance follow up.

This group alone places a considerable demand on outpatient resources as patients in the absence of a dedicated programme need to be seen in the outpatient department increasing demand in OPD and reducing appointment availability for acute patient review.

The nurse-led remote surveillance program provides both a coordinated and comprehensive service to both patients and medical staff.

NU015
MINOR AMPUTATION PATHWAY: FOCUS ON THE WHOLE, NOT JUST THE HOLE IN THE FOOT

FRANCES HORNER

Nelson Hospital, Nelson, New Zealand

Background
Wound healing following minor amputation is lengthy and challenging for patients. Often morbidity continues leading to early mortality.

Presented are two examples of our streamlined post minor amputation pathway, focusing on wound care, maintaining foot perfusion, offloading pressure from the wound, optimising long-term condition management and patient well-being.

Case studies
A 50-year old male with diabetes with neuropathy, retinopathy and nephropathy presented with left foot infection with necrosis following stepping into glass. He required amputation of the 4-5 toes. Fast wound healing within 4 months was achieved using antiseptic for wound cleansing, negative pressure wound therapy with a large and then small portable device, offloading using a scooter and removable below-knee boot. Self-care support included education and problem-solving. He achieved his goal of returning to work within a short time frame. His longstanding hyperglycaemia improved greatly.

A 77-year old male with diabetes presented with an infected foot ulcer between the 1-2 metatarsal head plantar with neuropathy and poor foot perfusion. He required endarterectomy, angioplasty and femoral-popliteal bypass, amputation of the 1-2 toes, antibiotic treatment for osteomyelitis and offloading using multiple modalities including a total contact cast. His diabetes management improved with elimination of hypoglycaemia which led to even blood glucose levels. His eyesight threatening maculopathy stabilised. He achieved good improvements but also struggled to follow through with taking care of himself at times.

Conclusion
These cases highlight the benefits of a pathway focusing on wound healing, chronic disease management and patient self-care. People are likely receptive to change. It is an opportunity not to be missed that can have a long-lasting positive effect, is cost saving through shorter wound healing time, fewer admissions to hospital with infection and delaying progression of diabetes-related complications.
MANAGING DIABETES RELATED FOOT WOUND: A CASE DISCUSSION

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Diabetes is the most common risk factor for non-traumatic lower limb amputation. Approximately 20% of hospital admissions relate to diabetic patients presenting with foot problems. Diabetic foot ulcers are responsible for more days of hospital stay than any other complication.

This case study demonstrated few management methods to manage the complex diabetic foot wound and highlighted challenges and the complexity…