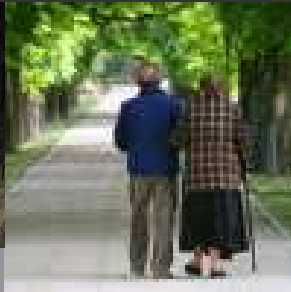




# Reducing venous leg ulcers by fifty per cent in next 10 years: taking the first steps



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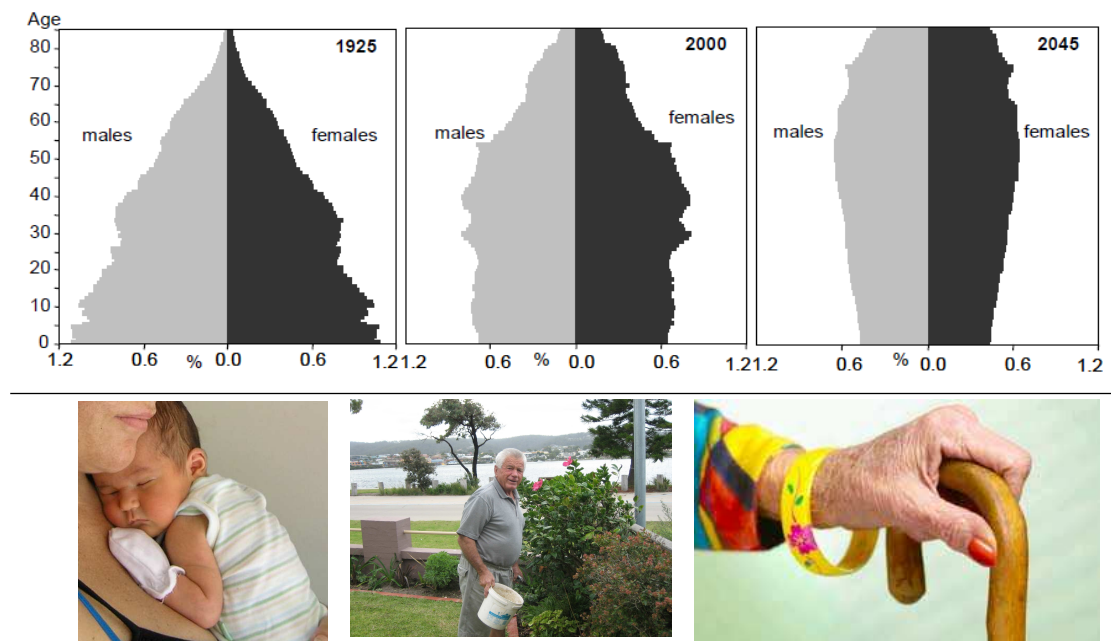
Monash University Venous Leg Ulcer Seminar 16 August 2013

## Epidemiology of VLU

- most common cause of lower limb ulceration
- prevalence 1.65 to 1.74%
- An increased number of younger people affected [diabetes/obesity]
- more common in adults aged 65 and older, a population expected to grow substantially
- Estimated increased life expectancy means more people will be living with VLU by 2025

*Passman MA, Elias S, Gloviczki M, Dalsing M, Gardner JS, Lurie F, et al. Non-medical initiatives to decrease venous ulcers prevalence. J. Vasc. Surg. 2010;52(5 Suppl):29S-36S.*

**Figure 1 From pyramid to coffin**  
Changing age structure of the Australian population, 1925-2045



## Best practice guidelines

- High compression multi-component bandaging
- Measurement of ankle brachial pressure index (ABPI) performed by appropriately trained practitioners
- Compression safely used in patients with  $ABPI \geq 0.8$ 
  - If  $ABPI < 0.8$ , and in patients with diabetes, compression should only be used under specialist advice
- Specialist leg ulcer clinics recommended as optimal service for community treatment of VLUs

SIGN - National clinical guidelines for management of chronic venous leg ulcers. NHS Quality Improvement Scotland, 2010.

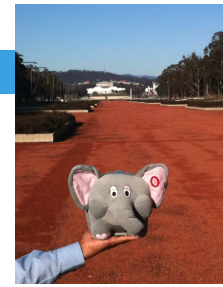
Australia and New Zealand Clinical Practice Guideline for Prevention and Management of Venous Leg Ulcers. Canberra: Cambridge Publishing, 2011.

# Lobby Government

## ▪ What have we learnt ?

**Orchestrated  
campaign**

- AWMA supports Wound Awareness Week in March annually with the theme 'Leg ulcers aren't 4 life'



**Should Endovenous Techniques be First line  
treatment for leg ulcers?  
How would we measure?**

**UK Example: Primary Research (e.g. trial)**

**A randomized clinical trial to compare early versus delayed treatment of superficial venous reflux in patients with chronic venous ulceration.  
Early Venous Reflux Ablation (EVRA) ulcer trial**

**AUSTRALIAN TRIAL NEEDED**

**11/129/197**

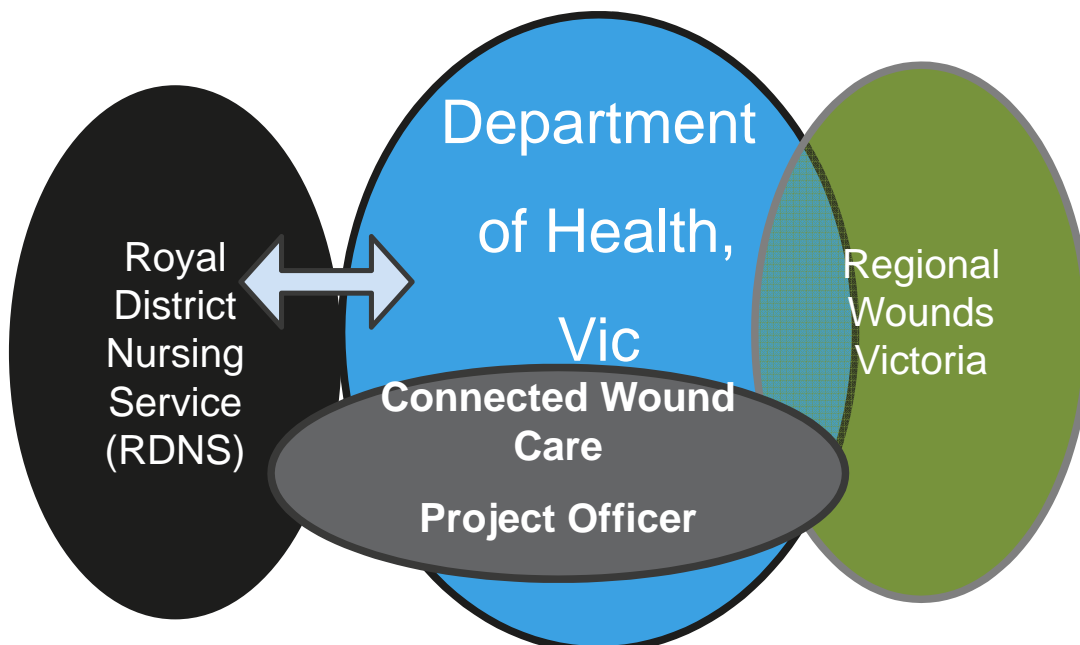
**£1,479,326**

**Professor Alun Davies, Professor of Vascular Surgery & Consultant Surgeon,  
Department of Surgery and Cancer, Faculty of Medicine, Imperial College School  
of Medicine**

- Key questions (KQs) using PICOTS approach
  - » Population, intervention, outcome, timing and setting
- example KQs
- ...for patients with VLU, what are the benefits and harms of
  - » Using dressings with compression vs compression alone
  - » Using antibiotics if no clinical signs of cellulitis
  - » Surgical procedures aimed at underlying venous abnormalities

[www.effectivehealthcare.ahrq.gov](http://www.effectivehealthcare.ahrq.gov)

## Kylie Elder-Communication Pathway with Connected Wound care



# Connected care K Elder

## E- learning package

- Incorporates multiple learning mediums
- Theory associated with venous leg ulcers
- Animations
- Links to health care guides
- Video demonstrations of bandaging systems
- Bandaging Skills checklist
- Quiz and certification



- AWMA Lobby government
- Argument for a VLU register
- VLU definitive diagnosis
- DVT post thrombotic syndrome
- General practice GPs or PNs
- Wound education
- Connected wound care funded by DoH Vic
- Community best practice
- People with VLU part of the decision making process
- Wound CRC VLU risk assessment and recurrence prevention
- Best use of the available evidence to improve practice

## Karen Innes Walker - Summary

- Low confidence levels reported for managing VLUs (as well as other wound types), despite these being seen regularly
- Primary Health Care setting is a high priority for wound management education and training
  - Opportunity to have the greatest impact on wound management
- Assessment, diagnosing, choosing the best treatment option and wound products are highest need areas for education and training
- Preference for face to face methods


Wound Repair and Regeneration. 2010 Mar-Apr;18(2):154-8 Fife et al Texas

- 3 factors determined compliance with performing basic wound care from an evidence-based perspective:  
complexity, cognitive effort, and compensation system
  - only 17% received adequate compression
  - Provision of adequate compression is hindered by inadequate reimbursement policy



Adv Skin Wound Care. 2007 Nov;20(11):591-600. Jones et al

- Retrospective study: 400 records
- Settings: hospitals, wound care centers and clinics, home health agencies, and nursing homes
  - **Significant variations in adherence to evidence-based recommendations across sites of care delivery**

- 
- Despite the impressive progress in the last two decades, CVD remains understudied and is severely underestimated for its effect on public health.
  - Chronic venous disease affects over 20% of the adult population and are more prevalent than coronary artery, carotid artery and peripheral artery diseases combined.
  - Venous ulcer care costs are high and growing each year.
  - Patients are treated by numerous practitioners from a wide variety of disciplines.
  - There is no standardisation of how to determine that an ulcer is of venous origin or how to proceed with definitive treatment once the diagnosis is confirmed.

## Sue Evans - Why a registry?

### Development of clinical-quality registries in Australia: the way forward

Sue M Evans, Ian A Scott, Niall P Johnson, Peter A Cameron and John J McNeil

MJA 2011; 194: 360-363

- At a national level, clinical registry development should be prioritised to target conditions or procedures that are suspected of being associated with large variations in processes or outcomes of care and that impact significantly on health care costs and patient morbidity.

## Collect a defined minimum dataset of high quality data - Sue Evans

- Monitor quality of care
  - Safety of devices/service provision
  - Effectiveness of treatment
  - Appropriateness of treatment
  - Access to treatment
- Benchmarks outcomes
- Identifies deficiencies in treatment/exceptional care

## The first steps

- Better understanding of disease process and natural history
- Promotion of evidence-based guidelines for VLU prevention and treatment
- Education of frontline clinicians about VLU
- Education of public about VLU
- Development of a VLU registry



### *US vascular symposium 6 2010*

- *‘Venous disease is not glamorous, but very common’*
- *‘Lack of interest relegates this to a treat-and-ignore situation’ **clearly at odds with what is best for patients***
- *changing health to improve outcomes requires extensive infrastructure and resources, all costing money and time’*
  - *‘major challenge due to  
» a large health care delivery system*

## UK Health agenda

- UK NHS identified venous leg ulcer research as a priority
  - » UK Department of Health: Quality, Innovation, Productivity and Prevention Program supports research to improve VLU quality of care while saving £20 billion by 2014-15

## Developing a national agenda for action on chronic venous disease in Australia

HOW??

Stephen Yelland- with GP and PN

Wound CRC research

Helen Edwards

Kathy Finlayson

## What is critical?

### Engagement of interested individuals

- Clinicians of all types
- Consumers
- Industry groups
- Researchers
- Policy makers
- Health economists

## Professional awareness program of VLU and chronic vascular disease (CVD)

Education of health professionals about the life long progression of CVD

- » Target physician groups from vascular surgery to primary care
- » Distribute guidelines for management of VLUs

## Public awareness program of VLU and CVD

### Kim Simpson

Education of public about the life long progression of CVD

- » Distribute education aids for management of VLUs
- » Assess education needs of patients and carers

*'Evidence based practice is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individuals'*

Patient involvement in VLU management is imperative if we are to decrease the VLU burden in the next ten years



## Standardise diagnosis of CVD [GS]

- Ultrasound scans: practical and reproducible to identify valvular reflux and obstruction
- Work with wound care centres to diagnose and treat VLU by these standards

## Prevention of post thrombotic syndrome Huyen Tran

- Provide appropriate compression, ambulation, and anticoagulation for acute DVT and prevention of recurrent DVT
- Early thrombus removal in people with ileofemoral DVT
- ?Best compression post DVT

## Treatment of C4 to C6 Claire Campbell

- Compression to control venous/lymphatic swelling
- Correction of
  - superficial axial reflux
  - perforator reflux
  - treatable deep vein obstruction when symptomatic changes occur

## Best practice: healing venous leg ulcers (VLUs) what we know works in compression...



- Compression increases healing rates compared with no compression
- Multi-component compression more effective than single bandage
- Multi-component systems with elastic bandage more effective
- No agreement or clarity on the optimum level of compression

*O'Meara et al. Compression for venous leg ulcers. Cochrane Database of Systematic Reviews. 2012*

*Blattler et al. Compression therapy in venous disease. Phlebology. 2008*

*Partsch et al. Classification of compression bandages: practical aspects. Dermatol Surg. 2008*

## Barriers to high compression

- Clinician knowledge of best practice treatment
- Skill of compression bandage application
- Patient adherence to compression therapy



## Challenges to healing

### Patient factors

- Comorbidities
- Socioeconomic

### Wound factors

- Size, duration
- wound bed condition

### Resource factors

- access to right care at right time
- costs, reimbursement

### Health care related factors

- Clinical skill and knowledge,
- appropriate treatment
- timely referral
- Definitive diagnosis often missing



# Bandage choices



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## Research

Establish a population based clinical registry to determine the baseline of this 10 year initiative with the aim of monitoring the quality of care provided for people diagnosed with VLU

1. Measure VLU incidence and prevalence
2. Identify differences of VLU treatment and the impact on wound healing
3. Monitor quality of care and compliance with best-practice guidelines
4. Determine clinical and cost effectiveness of treatment

# Panel discussion and questions



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## ON A NEW METHOD OF TREATING ULCERS

**PHILIP COWEN:** RESIDENT MEDICAL OFFICER ISLINGTON WORKHOUSE INFIRMARY

‘SUCCESSFUL as many of the various plans of treatment of ulcer are, **still too often they are very tedious in operation, very often the result is not at all commensurate with the care bestowed, and not unfrequently the ulcer will not heal at all.**’

‘Rest in bed, various lotions and ointments, support by strapping and bandages, cold poultices, side incisions, blisters, irritants or caustics, internal remedies, all occasionally succeed (I speak of the worst forms of ulcer, many having existed for years), but **too often the case becomes alike wearying to the surgeon and to the patient.**’

The Lancet Nov **1875**