

Wound Prevention & Models of Community Care



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Prevention is better than a cure!

Are you likely to experience a chronic wound?



- 1 – 20% of hospital inpatients experience a pressure injury
- 1% of adults, 3% of older adults, will experience a leg ulcer
- 40 – 70% of leg /foot ulcers and skin tears will recur after healing
- Australia's population is ageing, with increased rates of diabetes and obesity
- 20 – 50% of aged care residents experience wounds

Wound Prevention

General principles

- Keep moving & maintain a healthy circulation:
 - exercise
 - keep extremities warm
 - avoid smoking
 - change position regularly



Wound Prevention

General principles

➤ Skin care:

- moisturise dry skin twice daily
- avoid prolonged contact with moisture
- avoid soap, try pH balanced, non-perfumed cleansers
- protect skin from trauma, pressure, shear and friction



➤ Hydration and nutrition



Wound Prevention

Specific principles

- **First** Know the cause/s - accurate diagnosis
 - * individual variations
 - * changes over time
 - * multiple causes of chronic wounds
 - * any combination of causes is possible

- Address the cause / risk factors

Preventing venous leg ulcers



- Knowledge of the condition
- Close monitoring for danger signs & regular follow-up
- Vascular interventions
- Ankle and calf exercises / leg elevation
- Compression therapy tailored to condition
- Support



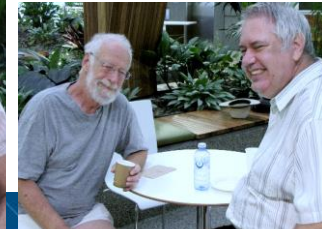
Preventing arterial leg ulcers & diabetic foot ulcers

- Knowledge of condition /s
- Control risk factors (e.g., blood glucose, blood pressure, weight)
- Vascular monitoring and interventions
- Ankle and calf exercises
- Check feet and lower limbs daily, annual specialist foot check
- Protect lower limbs from pressure and trauma



Models of Community Care

- A variety of models of care are available
- Services aim to meet a variety of individual needs for optimal outcomes, including:
 - Knowledge
 - Support
 - Provision of skilled, evidence-based care
 - Long-term chronic disease management





Pathways of Care Study for chronic wound management

- Found patients had an average of 3 (up to 8) different health specialities involved in their wound care
- Specialist wound clinics facilitated access to, and transfer of, research evidence into practice
- Led to improved health outcomes
- Cost effective



Best Foot Forward

- Study of Best Foot Forward Prevention Program
- Included:
 - regular clinical monitoring after healing
 - peer support / social interaction
 - information and practical support, open to family / carers



In comparison to those who did not participate in the program, those in BFF:

- Improved self-care knowledge
- **Significantly less ulcer recurrence**

Champions for Skin Integrity

- Model to facilitate evidence-based prevention & management of wounds
- Based on research on effective ways to encourage uptake of best practice
- Trialled in aged care facilities, primary health care,
 - now acute & transitional care
- Significantly decreased prevalence & severity of wounds



Leg Club model of care

- Consumer led, involvement in treatment
- Social interaction & peer support
- Held in a non-medical environment
- Includes an integrated 'well leg' program

Results of Trial

Compared to home care, those attending Leg Clubs had significantly improved:

- healing rates
- pain
- functional ability



Prevention is better than a cure!



- Keep the circulation moving
- Take care of your skin
- Obtain comprehensive diagnosis of underlying conditions
- Seek information and skills to care for underlying conditions / risk factors
- Monitor closely
- Seek advice from health professionals early if warning signs or wounds appear



References and Publications

- Parker C, Finlayson K, Edwards H. (2017) Predicting the likelihood of delayed venous leg ulcer healing and recurrence. *Ostomy Wound Management* 63(10): 16-33. Q2
- Edwards H, Chang AM, Gibb M, Finlayson K, Parker C, O'Reilly M, McDowell J, Shuter P. (2017) Reduced prevalence and severity of wounds following implementation of the Champions for Skin Integrity model. *Journal of Clinical Nursing*, 26:4276-85.
- Finlayson K, Wu M-L, Edwards H. (2015) Identifying risk factors and protective factors for venous leg ulcer recurrence using a theoretical approach: a longitudinal study. *International Journal of Nursing Studies*, 52 (6): 1042–1051.
- Finlayson K, Edwards H, Courtney M. (2014) Venous leg ulcer recurrence: deciphering long term patient adherence. *Wound Practice and Research*, 22:91–7.
- Edwards H, Finlayson K, Maresco-Pennisi D, Gibb M, Parker C, Graves N. (2014) health services for clients with chronic leg ulcers. *Wound Practice and Research*, 22 (4): 226–233.
- Edwards H, Finlayson K, Courtney M, Graves N, Gibb M, Parker C. (2013) Health service pathways for patients with chronic leg ulcers: identifying effective pathways for facilitation of evidence based wound care. *BMC Health Services Research*, 13: 86.
- Finlayson K, Edwards H, Courtney M. (2011) Relationships between preventive activities, psychosocial factors and recurrence of venous leg ulcers. *Journal of Advanced Nursing*, 67(10): 2180–2190.
- Finlayson K, Edwards H, Courtney M. (2010) The impact of psychosocial factors on adherence to compression therapy to prevent recurrence of venous leg ulcers. *Journal of Clinical Nursing*, 19:1289–97.
- Edwards H, Courtney M, Finlayson K, Shuter P, Lindsay E. (2009) *Journal of Clinical Nursing*, 18: 1541–1549.
- Finlayson K, Parker CN, Miller C, Gibb M, Kapp S, Ogrin R, Anderson J, Coleman K, Smith D, Edwards H. 2018 Predicting the likelihood of venous leg ulcer recurrence: diagnostic accuracy of a newly developed risk assessment tool. *International Wound Journal*, doi:10.1111/iwj.12911: 1-9
- Heinen, M., et al. (2010). 'Lively legs': increased physical activity and fewer wound days in venous leg ulcer patients. *Journal of Clinical Nursing*, 19, 42-42.
- Howard J et al. Recanalisation and ulcer recurrence rates following ultrasound-guided foam sclerotherapy. *Phlebology* 2016, 31:506-13.
- Kheirleiseid, E., Bashar, K., Aherne, T., Babiker, T., Naughton, P., Moneley, D., . . . Leahy, A. (2016). Evidence for varicose vein surgery in venous leg ulceration. *The Surgeon*, 14, 219-233.
- Kolluri, R. (2014). Management of venous ulcers. *Techniques In Vascular and Interventional Radiology*, 17(2), 132-138. doi: 10.1053/j.tvir.2014.02.012
- Nelson, E., & Bell-Syer, S. E. M. (2014). Compression for preventing recurrence of venous ulcers. *Cochrane Database of Systematic Reviews*, CD002303(9).
- AWMA, *Clinical Practice Guidelines for Prevention and Management of Venous Leg Ulcers*, 2011, AWMA: Barton. ACT.
- NICE, National Clinical Guideline Centre, *Lower limb peripheral arterial disease. Diagnosis and management*. 2012: London.
- Hopf H et al. *Guidelines for the prevention of lower extremity arterial ulcers*. *Wound Repair and Regeneration*, 2008. 16:175 -88.
- NHMRC, *Guideline on Prevention, Identification and Management of Foot Complications in Diabetes*. Melbourne, 2011.
- Bolton L et al. AAWC . Venous and Pressure Ulcer Guidelines. *Ost Wound Manag*, 2014, 60:24-66.
- Coleman S, et al. Patient risk factors for pressure ulcer development: systematic review. *Int J Nurs Stud* 2013, 50:974-1003.
- Gould L et al. Wound Healing Society 2015 update on guidelines for pressure ulcers. *Wound Rep Regen*, 2016, 24:145-162.
- Carville et al. *Effectiveness of a twice-daily skin-moisturising regimen for reducing incidence of skin tears*. *Int Wound J* 2014. 11:446-53.
- Wounds Australia. *Standards for wound prevention and management*. 3rd ed. Osborne Park, WA: Cambridge Media 2016. www.woundsaustralia.com.
- National Pressure Ulcer Advisory Panel, European Pressure Ulcer Advisory Panel and Pan Pacific Pressure Injury Alliance. *Prevention and Treatment of Pressure Ulcers: Clinical Practice Guideline*. 2014, Cambridge Media: Osborne Park, Australia
- Federman DG et al. *Wound Healing Society 2014 update on guidelines for arterial ulcers*. *Wound Rep Regen* 2016. 24(1): 127-35.
- WUWHS. Consensus Document. *Wound exudate: effective assessment and management*. Wounds International, 2019. www.woundsinternational.com
- Forster & Pagnamenta. 2015, Dressings and topical agents for arterial leg ulcers. *Cochrane systematic review*, 6: CD001836.
- RNAO *Assessment and Management of Foot Ulcers for People with Diabetes (2nded)*. Toronto, Ontario: RNAO 2013. <http://rnao.ca/sites/rnao-ca/files/AssessmentManagementFootUlcerDiabetes.pdf>
- Lavery, L.A., et al., *WHS guidelines update: Diabetic foot ulcer treatment guidelines*. *Wound Repair and Regeneration*, 2016. 24(1): p. 112-126.
- Scottish Intercollegiate Guidelines Network (SIGN) *Management of diabetes. A national clinical guideline* . Edinburgh, Scotland: SIGN 2014. <http://www.sign.ac.uk/pdf/sign116.pdf>