Evaluation of the Best Foot Forward health service model for prevention of leg ulcer recurrence

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Background

- Chronic leg ulcers affect 1 – 3% of older adults
- Peripheral venous and/or arterial disease causes >80% of leg ulcers
- Slow and costly to heal
- Average duration 6 – 12 months
- Prolonged ill-health and loss of independence
Background

- 50% - 70% of leg ulcers recur after healing
- Highest risk is in the first three months
- Without intervention, 50% will recur in first year
How do we prevent recurrence?

- What is the evidence on preventive strategies?
- Who manages chronic peripheral venous and arterial disease?
- What CDM models of care are in place?
- Are they effective?
Risk factors for recurrence

- Past DVT
- Multiple previous ulcers
- Longer ulcer duration

- Inadequate compression
- Lower physical activity scores
- Social support / living alone
- Male gender
- Low Self-Efficacy

- Haemosiderosis
- Erythema / venous eczema
- Reduced ankle ROM
Evidence on Strategies for Prevention

**Compression therapy**
- Some compression is better than none (II)
- High level compression better than moderate level (II)
- Adherence is an issue

**Surgery /sclerotherapy**
- Surgery + compression for superficial insufficiency (II)
- Sclerotherapy (IV)
- Eligibility and access are issues
Evidence on Strategies for Prevention

Low level evidence or EO

• Calf muscle exercise

• Leg elevation

• Regular follow-up care
Evidence that patients with chronic conditions who receive self-management support, evidence-base treatments, & regular follow-up have better outcomes

Aims:
- increase self-care knowledge & skills for managing peripheral vascular disease
- improve adherence to preventive strategies
- prevent leg ulcer recurrence
Methods

- Longitudinal study with service evaluation framework

- Sample:
  - All clients at a community wound clinic with a leg or foot ulcer
  - between Oct 2012 – Dec 2013

- Data:
  - Socio-demographic factors, medical history, health, lower limb assessment,
  - Client knowledge, self-management and satisfaction with the service
Model of care - Best Foot Forward Program

- Multi-faceted approach, led by clients
- Regular clinical check-ups (every 3 months)
  - assessment of peripheral vascular disease management
  - early detection and intervention
- Provision of optimal care & resources (compression, footwear)
- Philanthropic support
Model of care - Best Foot Forward Program

- Peer support /social activity
- Information and practical help - client involvement, ownership
  - From dieticians, vascular surgeons, exercise physiologists, NPs, podiatrists, OTs, pharmacologists, research scientists
  - Information sessions open to all clients, family, friends and carers
Best Foot Forward - Results

- 93 healed within the recruitment time, 39 patients agreed to participate in BFF
- Comparing non-attendees to attendees:
  - primary caregivers were significantly more likely to attend
  - women significantly more likely to attend
- Those in BFF reported improved self-care knowledge
- Improved adherence to treatments: 76% - 91%
Best Foot Forward - Results

- Mean time to ulcer recurrence (Kaplan-Meier survival analysis)
  - BFF program: 63 weeks (95% CI 59–67)
  - Control group: 19 weeks (95% CI 9–28) \( p < 0.001 \)

- Controlling for confounders in a Cox regression model:
  - BFF program \( p < 0.001 \) &
  - Ulcer aetiology \( p = 0.006 \)
    - influenced time to recurrence
Conclusions

• The evaluation demonstrates positive results

• Need for a larger, more rigorous study

• Consider incorporating long-term CDM models of care post-healing
References

AWMA, ANZ Clinical Practice Guidelines for Prevention and Management of Venous Leg Ulcers, 2011, ACT:AWMA


