SAVE A LEG: Building Integrated Diabetes Foot Services in Western Sydney

Western Sydney Local Health District (WSLHD) and

Western Sydney Primary Health Network (WSPHN)

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HRT 1520 Innovations Workshops and Awards

19-20 November 2015, Sydney
Key problem: Diabetic foot disease is the most common cause of hospital admission in people with diabetes in Australia\(^1\). 25% of people with diabetes will have a minor injury develop into a foot ulcer and 85% of amputations are preceded by ulceration. 85% of diabetic foot complications are preventable!\(^2\)

Western Sydney is a diabetes ‘hot spot’\(^3\) with 50% of people in our LHD at risk of developing diabetes and 15% of people have diabetes.

Aims of Innovation: To increase the screening of patients with diabetes for foot complications and reduce variation of screening practices; to improve patients’ awareness of diabetic foot complications; and to increase the timeliness and appropriateness of referral of complex patients to hospital services.

Baseline data/ Current situation: 79% of patients with diabetes are not being screened for diabetic foot complications in Primary Health Care setting. There are highly inconsistent screening practices across WSLHD and insufficient education on the risk status of diabetic foot complications.

Changes under implementation: A 60 second Minimum Standard Screening Tool\(^4\) has been developed to establish a minimum screening standard and reduce variation in screening. Upskilling Practice Nurses from 11 pilot GP Practices to use the screening tool and to provide education to patients with diabetes on foot complications is currently underway. Creating and adaptation of electronic referral form to improve the referrals of complex patients from primary care to hospital foot services.

Outcomes: Implementation is currently underway

Expected outcomes:
- Increase patients’ awareness and understanding of diabetic foot complications including the need for regular foot screening
- Increase in screening rates of patients with diabetes for foot complications
- Improve skills and better utilise Practice Nurse resources in providing rapid foot checks
- Consistency in providing basic foot checks and foot care
- Early and timely intervention at community level
- PREVENTION of diabetic foot complications
Key Problems

**ISSUE**
If you live in Western Sydney you are 2-3 times more likely to develop diabetes.

**ISSUE**
50% of people in our LHD are at risk of developing diabetes. 15% of people have diabetes.

**ISSUE**
Australia diabetes related amputation rate is second worst in the developed world.

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Diabetic foot disease is the most common cause of hospital admission in people with diabetes in Australia.

Amputation of one limb increases the risk of loss of the second limb and is associated with a 50% five-year mortality.

85% of diabetic foot complications are preventable.

We estimate that of the 960,000 people living in our district over half are at risk for developing diabetes and 15% of people have diabetes.

Diabetes: the silent pandemic and its impact on Australia (2012), Baker IDI Heart and Diabetes Institute.
Aim of this innovation

1. **Increase screening rates** of patients with diabetes from 21% to 50% and reduce the variation of screening practices in 11 pilot General Practices in Western Sydney by December 2015.

2. **Increase patients awareness** of diabetic foot complications from 76% to 95%, to empower the patient to seek active treatment in a timely manner by June 2016.

3. **Increase timeliness and appropriateness of referral** of patients into Hospital Podiatry Services based on the complexity of their condition in accordance with foot screening (risk stratification)
Baseline Data / Current Situation

Only 21% of patients in 11 General Practices sampled had received a foot check in the last 12 months.

Patient Awareness of the need for Diabetes Foot Screening

- 24% Yes
- 76% No

50% of people aware of the need to have a foot check did not have one.

Number of Foot Checks completed in previous 12 months recorded by General Practitioners

- Foot Check 0-6 months
- Foot Check 6-12 months
- Total patients with diabetes

54.9% of referrals are hospital based. These patient have likely not received appropriate intervention at the community level.

Average ulcer duration
- >8/52 prior to referral.
- <4/52 weeks best practice.
Why Are We Doing This Project?
Phillips Story (Type 2 DM ‘99, Charcot’s Foot 2011)

“My brother died early because he didn’t look after his Diabetes….I used to be really slack looking after myself to…then I ended up with foot problems. I have spent so much time in hospital…in and out all the time. I’ve just had foot surgery. My foot effects me everyday. It limits my mobility and where I can go and what I can do…forget ever going to the beach again… I’ve had doctors tell me I’m too obsessed with my diabetes. I check my blood sugars six times a day but I’m worried about losing my leg. I developed my own app for logging my sugars…I don’t want anymore problems with my feet”

“I want a foot check list so I can look after myself. I trust my podiatrist to look after me. My doctor never asks me to take off my shoes.”
Key Changes

Magnitude of change: We are asking GPs and Practice Nurses at 11 pilot sites to provide diabetic foot screening for patients with diabetes in the community

**Solution 1: Development & Implementation Of Two Stage Diabetic Foot Screening Tool**
- Development of a 60 second minimum standard screening tool
- Development of an infographic to educate both patients with diabetes and engaged clinicians on the complexity of diabetic foot disease and easy steps for patient self-management

**Solution 2: Practice Nurses to provide Diabetes Foot screening**
- Education sessions to improve skills and better utilise Practice Nurses resources on diabetes prevention and management and diabetic foot complications
- To perform diabetic foot screening using the 60 second minimum standard screening tool

**Solution 3: Electronic Referral Templates and Pathways**
- Referral form to Hospital foot services has been updated
- Electronic version of the referral will be created to improve the timely and appropriate referral to hospital foot services
Implementation of changes

• Each pilot General Practice provided with a pack containing:

  1. **NEW! 60 second Minimum Standard Screening Tool**
2. Education infographic flyer on diabetes foot facts and care

SAVE A LEG
QUICK FOOT FACTS

- Chances are you or someone you know has diabetes: 3%
- Over the age of 25 years has diabetes or pre-diabetes: 35%

Western Sydney is a diabetes hot spot.

- Damage to the nerves and the blood supply to the feet cause serious problems.
- 418,298 People in 1 in 5
- 25% of people with diabetes will have a minor injury develop into an ulcer.

Controlled foot care programs can reduce the chance of amputation by 85%.

1 in 5 Ulcers will require surgical amputation.

- Turn over to see how you can keep your feet happy and healthy.

SIX SIMPLE STEPS TO KEEP YOU & YOUR LOVED ONES ON YOUR FEET

People with diabetes have to take special care of their feet and have a comprehensive foot exam at least once a year.

Follow these simple steps:

1. Set a 48 second foot check from your doctor at a comprehensive foot exam to your patient at least once a year.
2. Wash your feet in warm water every day. Dry your feet well, especially between the toes.
3. Check your feet every day for cuts, blisters, sores or swelling.
4. Develop a skin care routine for your feet.
5. Turn over to see how you can keep your feet happy and healthy.

Save your legs speak to your health professional for more advice on how to keep your feet healthy.

3. Monofilament

Aesthesio
Professional Care for Diabetes

Aesthesio
Professional Care for Diabetes
Outcomes so far

- Implementation is underway
- **Expected outcomes:**
  - Increase in the number of patients with diabetes requesting a foot check
  - Increase in screening of patients with diabetes for foot complications
  - Increase in the skill level of Practice Nurses to perform basic foot check and provide foot care
  - Consistency in the quality and completeness of basic foot checks and foot care
  - Early identification of and timely intervention to prevent foot complications
Lessons Learnt

• Multidiscipline Team required
• Patient centred solutions are effective
• Strong Executive and Clinical Sponsorship, direction and engagement and alignment with organizational goals was critical for success

2. Diabetes: the silent pandemic and its impact on Australia (2012), Baker IDI Heart and Diabetes Institute


Contact for this Innovation

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• Acknowledgements:
  Executive Sponsors WSLHD and WSPHN, Clinical Leads WSLHD and Community, Redesign Leaders and Consumers

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