

WHY INNOVATION ISN'T JUST ABOUT NEW TECHNOLOGY

By Allan Donnelly

As part of our ongoing 'CLINICAL CORNER' series, we invite a podiatrist to share their passions (and frustrations) about a clinical area close to their heart.

This month we ask Allan Donnelly to share why he believes innovation doesn't need to always squarely fall in the development of new technology – and how he recently used Plaster of Paris and a tube of lipstick to change the future of plantar off-loading management.



While innovation abounds in podiatry, I often wonder if it's providing a better health outcome for the patient – over a financial benefit to the podiatrist ...not all that is 'new' is good, and not all that is 'old' should be discarded.



It is not just technology that influences how we deliver podiatry, but it is innovation as well. I'm referring specifically to the management of Diabetic Foot Disease (DFD), given Australia still has a relatively poor record in this area.

The research speaks

Research by Peter Lazzarini et al. reports that DFD, and its complications, result in up to 85 Australians losing a toe, foot or leg each week. Other research by the same authors suggests that up to 90 per cent of these amputations are preventable with the appropriate intervention.

So why can't we improve these statistics? I believe that new technology is not likely to provide the answer when compared to taking on an innovative approach to process, as well as a review of older practices.

Background context

For some context, I started my podiatry career in 1978 when the field of High Risk Foot (HRF) care was yet to become an area of podiatric expertise. Comparing now, where technology and innovation has evolved from in-shoe pressure measurement, gait analysis right through to digital scanning and orthotic fabrication.

While innovation abounds in podiatry, I often wonder if it's providing a better health outcome for the patient – over a financial benefit to the podiatrist. Given this is the space to share honest clinical reflections, I put it to you that not all that is 'new' is good, and not all that is 'old' should be discarded.

In the 1980s I became involved with the Diabetes Centre at Royal Prince Alfred Hospital, which has since gone on to become one of the premier tertiary sites for excellence in HRF innovation and research, under Vanessa Nube and her colleagues. While centres of excellence provide a great service, I believe the growing issue of DFD in Australia fails to be effectively addressed by both state and federal policy makers.

I see how remote, regional and rural Australians continue to miss out on accessible HRF care. This appears to me to be owing to a lack of policy, as well as a lack of knowledge by politicians and the public in the role that podiatrists play in managing DFD. QLD is one state that has made significant efforts to address this issue with the establishment of High Risk Foot services but as a country we lack a cohesive central plan. Diabetic Foot Australia, the Advanced Practising Podiatrists – High Risk Foot Group and the Australian

EDUCATION

Podiatry Association continue to lift the profile of podiatry in DFD and policy advocacy but a Federal approach is needed if Australia is going to deal with this issue effectively.

These days I work as a private practice podiatrist in a large NSW regional town. While we're only 13 kilometres from the Prime Minister's office, we have no publicly-funded podiatry services available at any level. The closest High Risk Foot Service (HRFS) in my Local Health District is more than three hours drive away.

An example of change

After nearly 40 years in practice, it is the treatment of high risk feet that still inspires me the most. Over the past two years I have provided 137 instances of wound care at no cost to the patient, because there is no other choice for patients here, except their GP. Medicare funding is insufficient to provide for this level of care. I also happen to love the work.

Here is the part where I share how old technology can reflect future innovation.

Take plantar 'off-loading' as an example – the recognised component of

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management in both the International and National Diabetic Foot Management guidelines. As podiatrists we know that total contact casting is the gold standard, but it is expensive, time-consuming and requires considerable expertise to apply. An off-loading boot, with felt as deflection, has become the main modality. Yet this approach has several disadvantages. So, I looked at what I'd learnt in my early career, and I thought about resurrecting an older podiatry modality with the modern day off-loading boot in order to replicate all the best characteristics of the total contact cast. Similar to a moulded accommodative orthotic with a twist.

Early positive signs

To date, the results have been very encouraging – enough to win first prize in the Wounds Australia 'Innovation Tank' competition at the National Conference last year.

If we can show 'proof of concept' in a study we are undertaking this year, then this modality could be available to any health practitioner, anywhere in Australia with access to a Plaster of Paris bandage and a tube of lipstick. And why stop at the Australian border?

Bringing it together

This may be just one example, but it illustrates my opening point that not all innovation needs to be found in the development of new technology. Sometimes we should reflect upon – and value – our past practices and the skills that we had to learn in the days when there was no lab or digital scanner.

There are so many issues that need to be addressed if we are ever going to decrease significantly lower limb amputation rates associated with DFD. For a start, policy makers will have to accept that there needs to be dedicated Medicare item numbers for DFD. There also needs to be an opportunity for private practitioners – who have the skills, qualifications, meet the clinical criteria and most importantly, have the desire to provide a recognised HRFS – to be accredited as such, and be eligible for public funding.

Innovation is not just about new technology, it is also about the approach. A truly innovative approach would be for accredited private practices to support the larger HRFS at tertiary institutions. ■



Allan Donnelly (casting for a Ritchie Breco)