

RAPID GP Newsletter

RAPID (Reducing Amputations In People with Diabetes) is a life sciences project focused on the Highland Diabetes Institute where a collaborative partnership has been formed between a national health provider, academic institution and a commercial company:

- University of the Highlands and Islands (UHI)
- NHS Highland (NHS)
- Tactical Wireless Ltd (TWL)

The aim of RAPID is to establish a new care pathway system that complements and enhances existing early prevention strategies for the successful identification and treatment of foot ulcers in diabetic NHS patients.

UHI and NHS bring their combined diabetes expertise to the project including patient care, teaching, and scientific and clinical research.

As a Professor of Clinical Diabetes at UHI's Department of Diabetes and Cardiovascular Science, Sandra MacRury has a joint role and also works as a consultant endocrinologist and diabetologist at Raigmore Hospital in Inverness.

RAPID is a natural progression of an ongoing commitment by the Inverness based NHS Highland diabetes clinic which Professor MacRury heads up to reduce amputations in people with diabetes who live in the remote Highlands of Scotland. Professor MacRury's team includes diabetes clinicians, specialist podiatrists, orthotists along with access to vascular and orthopaedic specialists. The team liaise with clinical staff in communities on the best patient treatment for those with diabetes-related foot problems. An aim of RAPID is to further promote collaborative working between community and specialist teams.

The involvement of the Rural Health and Wellbeing team from UHI (part of Prof MacRury's remit) is essential to ensure robust process and user academic evaluation of RAPID and informs the approach to each stage of the project.

RAPID uses award winning ground breaking technology by Tactical Wireless Ltd, based in Forres, Moray. The technology transmits data in real time from remote locations characterised by poor digital and/or telecommunications connectivity.

Proof of concept (POC) testing of the RAPID project was successfully completed in April 2015 and informed the imminent optimisation and testing stages. Following this POC between May and August 2015 the protocol for the pilot study was developed and the initial project requirements established including a generic diabetic-foot email service and project literature. Confidence is high the service will be rolled out across the Highland region in due course to all people living with diabetes suffering from foot ulcers. The principles of RAPID also offer significant potential to be used in other remote medi-care applications.

The stimulus behind the project is against the following backdrop:

- There are over 16,000 people living with diabetes in Highland.
- The incidence of diabetes is higher in more remote, Highland areas.
- Diabetes foot disease is a major cause of morbidity and mortality.
- People with diabetes have high incidences of foot ulceration leading to a 40 per cent amputation rate in affected cases – these are the leading causes of diabetes related hospital admissions.
- Currently, people with diabetes account for around 15 per cent of hospital inpatients and these have high average lengths of stay – the most common cause for admission is diabetic foot disease (20 per cent).
- Current diabetes costs the UK about 10 per cent of the annual healthcare budget and this is predicted to rise to 17 per cent by 2035.
- In Scotland it is estimated over £60million is spent on foot ulcers and amputations every year[1].
- It is thought that up to 80 per cent of amputations are preventable.