

## Media Release

### Chiefs of Staff, News Directors

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## Video technology trial at LGH aims to help stroke victims recover more easily at home

Stroke survivors, especially those in rural and regional areas, could soon have their recovery optimised through the use of video game technology used as a rehabilitation tool in their own home.

University of Tasmania researchers are working with Launceston General Hospital physiotherapists on a study to determine how much interactive digital technology can increase the amount of activity that stroke survivors undertake and to determine if there are benefits to upper limb function or mobility.

Up to 70 patients at the LGH will be recruited for the study, which will be officially launched today at 11am in Ward 3R at the LGH by the Health Minister Michael Ferguson.

For the first time in the Southern Hemisphere clinicians and researchers will collaborate to test the application of Canadian-based Jintronic Rehabilitation System software and Microsoft Kinect for Windows video game technology for use by people recovering from a stroke.

Healthy Eating, Active Living Technology (HEALTHY) Research Centre director Associate Professor Stuart Smith said that the collaboration between the University's Faculty of Health and clinicians at the LGH is essential to the success of the project.

"Nowhere outside North America has this technology been trialed and we expect that it's only a matter of time before these kinds of health service interventions can be applied to patients who have had a stroke and are returning to their home in rural and regional environments," he said.

"What is particularly exciting is that the system has the capability to do a remote assessment, collect a huge amount of data, measure how well they're doing and adjust not only the exercise regime over time but also the patient's medication requirements."

For the trial there will be five video game units set up in the physiotherapy area of the LGH and another two in the Tasmanian Health Organisation - North public rehabilitation centre, the John L. Grove Centre in Howick St, Launceston.

University of Tasmania lecturer with the School of Health Science and chief investigator on the trial Dr Marie-Louise Bird said that the success of the technology is that people find it so engaging, so they're happy to spend time doing exercises that benefit their recovery.

"Fatigue is a real problem after people have had a stroke, so actually enjoying the physiotherapy and being motivated to undertake what are extremely repetitive tasks is important," she said.

THO-North clinical lead physiotherapist in neurology and rehabilitation John Cannell said that it will be fascinating to see how using the video technology stacks up to traditional therapy, which essentially has two parts: developing strength, balance and dexterity and secondly, putting that movement into real-life situations.

“Already we are noticing that patients are inclined to concentrate more, and while this technology is not a substitute for normal care by a specialist, but it could be a substitute for a significant portion of therapy and if the patient is stronger when they see their specialist, then they will get even more out of that session with the specialist.”

The trial is being funded by the National Stroke Foundation with a \$20,000 seeding grant added to financial and in-kind support from the University and the Department of Health and Human Services.

**Information released by:**

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