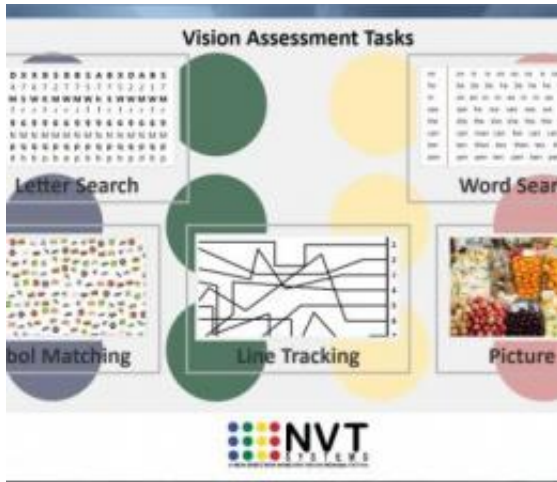


# New vision therapy for stroke victims

24 July 2012



(Medical Xpress) -- Research and development by Flinders University's Medical Device Partnering Program (MDPP) has resulted in a new touch screen therapy and assessment product for Adelaide-based vision rehabilitation company Neuro Vision Technology (NVT) Systems.

The innovative vision therapy tool will be used to evaluate and train people with a vision deficit caused by a brain injury or dysfunction.

Each year about 220,000 Australians suffer from an acquired brain injury caused by strokes, car accidents and trauma. Of those, about 30 to 35 per cent acquire neurological vision impairments as a result of damage to the brain, not the eyes, causing many patients to only see half an image.

The software, developed by MDPP Research Associate Dr Fabian Lim, will be trialled by NVT Systems as a new therapeutic product for their clients.

The [touch screen](#) tool features five visual tasks with varying degrees of difficulty, including a line-tracing exercise and a shopping catalogue task where the object is to match images in the

catalogue with a shopping list.

Dr. Lim said the software would give health care providers a "quantitative measure" for assessing vision deficit, tracking improvements and targeting specific impediments, offering a more effective alternative to traditional pen and paper assessments.

"By repeatedly practicing these exercises patients learn how to scan their surroundings and look for things that might not be in their field of view, and ultimately improve their visual sense," Dr. Lim said.

NVT Systems is now trialling the simulator software with patients from organisations such as Guide Dogs SA.NT.

NVT Systems Manager Training and Research, Mrs Allison Hayes, said the fantastic work by the Medical Device Partnering Program had enabled the company to expand its product range for local and international markets.

"One of the great things about this new tool is that we will be able to measure important parameters that could be used by carers to map improvements in performance and target specific deficits," Mrs. Hayes said.

"The visual skills taught using the touch screen device can be transferred to functional activities of daily living, helping our clients to carry out important everyday activities in the home and community."

Provided by Flinders University

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