

Oni's story

STRIKING THE RIGHT NOTE ON THE ROAD TO RECOVERY

Oni has an acquired brain injury and is undergoing rehabilitation to help her walk again. She is progressing towards her goal with the help of technology that combines cognitive and physical exercise.

Oni (not her real name), 54, is a patient at Peartree House Neurological Rehabilitation Centre in Southampton. She suffered a haemorrhage following a brain aneurysm, which left her unable to walk.

Since moving to Peartree House, Oni's rehabilitation programme has been focussed on helping her to walk again and move into supported living.

During weekly physiotherapy sessions, she works with MIRA (Medical Interactive Recovery Assistant); a software platform that includes a device that uses motion tracking sensors to gamify physical therapy.

Through a variety of games, it sets her challenges that require cognitive and physical input.

Oni has used several of them but has a firm favourite – a piano game designed to support sit to stand exercises. This works

MIRA HAS SO FAR BEEN USED BY MORE THAN 3,500 PEOPLE, INCLUDING IN FALLS PREVENTION AND ACTIVE AGEING PROGRAMMES FOR OLDER PEOPLE

by sitting in a chair in front of a screen and moving from sitting to standing, in order to hit notes on the piano, as directed on screen.

"The piano game plays music which I have to listen to and move up and down in my chair," she explains. "When the music is lower notes I have to lower myself, when it is higher notes, I lift myself."

Oni's physiotherapist, James Horsburgh, is confident MIRA is helping her to progress.

"If we did a standard full body sit to stand session you might get 10 to 15 functional stands, depending on fatigue. In the piano game, Oni has produced 70 repetitions, which is phenomenal. The first time she did this, I remember counting and thinking 'that's not right', but it was!"

He believes technology like this could be used in a variety of care and rehabilitation settings.

Even though the exercise is contextualised within the game, Oni can relate the movements to situations outside of her therapy sessions.

"If I'm unsure about moving, but I've done it on MIRA, that's my go to – I know I've done it already."

She is now regularly using a frame to walk short distances in therapy sessions and is preparing to move into supported living.

"I would have got here without technology, but this gives me extra help and I can feel myself getting stronger."

