

Wearable Simulations

Published date: Jan. 27, 2016

Technology description

World's first osteoarthritis simulation suit launched on World Arthritis Day

Osteoarthritis is the most common form of arthritis and the leading cause of physical disability in the elderly. With an educational grant from Napp Pharmaceuticals, the simulation suit has been developed by researchers at Loughborough University with the support of healthcare professionals and patient case studies from Arthritis Care.

The suit was developed at Loughborough's Ergonomics and Safety Research Institute, one of the world's leading centres for independent vehicle safety and human factors scientific expertise.

Created on the basis of a range of different patient experiences, the suit mimics the characteristics of the condition to give wearers a vivid real life insight into the pain and impaired quality of life associated with osteoarthritis.

"The osteoarthritis suit is a great idea: it can be a struggle to explain how bad the pain can get to friends, family and even doctors," commented Jane Spence, media relations manager for Arthritis Care, who was diagnosed with osteoarthritis two years ago when she was just 45.

"Most days it feels as if I'm wearing a suit of rusty armour, like the Tin Man from the Wizard of Oz, and some days I experience unrelenting, razor-like pain," added Ms Spence.

A large number of people with osteoarthritis suffer treatable pain unnecessarily, leading to a decline in mobility and an even greater impact on their quality of life. The Arthritis Research Campaign set the cost to the UK economy of arthritis and related conditions at £5.5 billion per year, a figure which includes potentially avoidable loss of productivity and incapacity benefit payments.

Dr Garth Logan, President of the Primary Care Rheumatology Society, said: "JOINT is an important step forward for the effective treatment of osteoarthritis-related pain. The confusion surrounding the safety of a number of traditional therapies has now made it vital for GPs to take stock of the current treatment options.

"For those of us involved in developing the programme, JOINT has enabled us to outline a holistic approach for GPs and other healthcare professionals managing osteoarthritis that will have direct and immediate benefit for their patients," added Dr Logan

Advantages

In conjunction with the suit, a new web-based education programme for GPs has also be launched by a committee of leading osteoarthritis specialists. The JOINT Osteoarthritis Education Programme (JOINT)

is available to GPs throughout the UK, providing advanced training on the diagnosis and management of the condition, including both drug-based and lifestyle approaches, to help improve mobility and minimise pain among patients.

The JOINT programme aims to address doctors' concerns over the safety of current osteoarthritis treatments following the withdrawal of the once commonly prescribed cyclooxygenase-2 selective inhibitors (COX-2s). By introducing a clear step-by-step pain management approach, it is hoped that patients suffering from osteoarthritis-related pain will receive appropriate diagnosis and effective treatment.

Institution

[Loughborough University](#)

联系我们



叶先生

电话 : 021-65679356

手机 : 13414935137

邮箱 : yeyingsheng@zf-ym.com