

UNIVERSITY OF  
BIRMINGHAM

# U a stroke of genius B

A set of psychological tests to assess the abilities of individuals following a stroke. A useful tool to predict recovery and measure outcome at follow-up.

# A new set of tests to assess the cognitive abilities of stroke patients.

## What is it?

A set of psychological screening tests to assess patients' cognitive abilities after a stroke, helping to predict recovery and measure outcome at follow-up appointments.

## How does it help?

- Predicts and measures recovery in stroke patients
- Allows for targeted therapy by identifying a patient's problems
- Assesses the effectiveness of treatments.

## Background

There are currently no routine cognitive screens that allow healthcare professionals to assess the cognitive ability of acute stroke patients. The 'Mini Mental State Examination' is sometimes used, but provides only rudimentary data.

Now the Birmingham University Cognitive Screen (BUCS) can be administered at the patient's bedside, giving a broad set of measures covering several areas of cognition (language, memory, attention, action and numbers). The tests are designed to be accessible to people who have lost their power of speech, and who show spatial neglect.

BUCS enables doctors and other health professionals to target therapy at a patient's problems, taking into account the overall profile of their cognitive abilities. It has been standardised in 100 controls and 350 acute stroke patients across six centres in the West Midlands. It has also been validated against other standardised tests for each cognitive sub-domain. Data is currently being collected to determine whether BUCS changes the outcome in patients.

Meanwhile, there is interest in taking the screen nationwide – and the potential to incorporate it into standard assessments given to stroke patients by the NHS. BUCS also has the potential to benefit other patients with other brain disorders, including Alzheimer's disease.

## Why the University of Birmingham?

- School of Psychology is one of the largest and most active psychology departments in Britain
- Department currently holds more than £8m of research grants and contracts
- Four research centres within the School, including the Behavioural Brain Sciences Centre

## Who's behind it?

Glyn Humphreys is Professor of Cognitive Psychology and Head of the School of Psychology at the University of Birmingham. He is widely published, with specialism in neuropsychological deficits. Dr Wai-Ling Bickerton is a research fellow at the University of Birmingham. Alongside Professor Glyn Humphreys, she won the University of Birmingham's Big Idea competition (2009) to commercialise BUCS.

## What's next?

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