

# SBRI Healthcare

## Case Study



**Company:** Advanced Digital Innovation (UK) Ltd (ADI)

**Competition Entered:** Mental Health

**Innovation:** Pathways through Chronic Pain – an App-based CBT agent for supported self-management of chronic pain

**Total award:** £885,970.00 awarded across Phase 1 & Phase2 development stages

**Savings to the NHS:** Estimated at £20 million per annum

**Product availability:** End Q1 2 2015

### Overview

Advanced Digital Institute (ADI) has built a reputation within the UK as a leader in the field of technology-enabled health and care services. The company has been awarded SBRI Healthcare funding to develop a suite of self-help digital products to support people with chronic pain. The technology will enable both patient and practitioner to have a balanced step-wise process to self-assess, self-manage, and self-monitor changes in pain.



Pathways through Chronic Pain is being developed as a cost-effective Cognitive Behavioural Therapy (CBT)-based pain management programme without the need for direct involvement by a therapist or clinician. Working closely with clinical experts in the field of persistent pain, ADI is investigating the role a mobile phone app, and other pain management tools, might have for those suffering with persistent pain and the associated anxiety and depression.

The results from a proof of concept project have been very positive and have informed the design of the full proposition for a commercial service, which is now in development. In addition to progressing the digital services, further development will ensure full integration in the Pain Pathway with the support of clinicians and other healthcare professionals 'on-line'.

An estimated 5.3 million people suffer from chronic pain in England which has a major impact on sufferers' lives, with 24% reporting a diagnosis of depression and 26% reporting an impact on employment.

### Patient perspective

A feasibility app, co-produced with users and clinicians, included a range of features such as tension alerts, relaxation resources, medication tracking and the use of games to support engagement, goal-setting and adherence. Feedback from users was very positive and concluded the Pain Management Plan worked extremely well as a chronic pain management app.



#### **Patient feedback:**

*"One of things I really loved about it was that I got quite poorly for a few days and I started struggling with my activity goals, and kept recording 'I struggled, I struggled'. After a couple of times the app flashed up and said 'are you sure this goal isn't too high for you - do you want to adjust your goal'. I thought this is brilliant and so I changed it and started meeting it again and that was so much better than keeping failing."*

#### **Clinician feedback:**

*"As a pain specialist physiotherapist familiar with the pain plan I think this app is excellent. I have set goals and goal alerts and look forward to being reminded about them. It is easy to use so far."*

#### **Economic impact**

SBRI funding is allowing the creation of four full time roles this year, with additional recruitment planned for 2016/17. Full commercial availability of the Pathways through Chronic Pain App is expected end Q1 2015, with exported sales planned for 2016/17.

The app will bring savings to the NHS as a result of reduced medication costs, specialist services and GP attendances. Based on forecasted sales, the estimated minimum savings to the NHS from the areas deploying the product are in the region £20M per year by 2017.

*"Without SBRI funding it would have taken much longer to develop the proof of concept service and evaluation, and it is then difficult to see how we would have progressed to development of the commercial service without this investment."*

**David Harson, Programme Manager**

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