



The research commercialisation office of the University of Oxford, previously called **Isis Innovation**, has been renamed **Oxford University Innovation**

All documents and other materials will be updated accordingly.
In the meantime the remaining content of this Isis Innovation document is still valid.

URLs beginning www.isis-innovation.com/... are automatically redirected to our new domain, www.innovation.ox.ac.uk/...

Phone numbers and email addresses for individual members of staff are unchanged

Email : enquiries@innovation.ox.ac.uk

Monitoring mood and health via your phone: True Colours

True Colours helps patients to self-manage and report on mental health disorders, surgery and other conditions. It integrates patient reported outcome measures with data from smartphone sensors.

Easy to use, healthcare self-monitoring

This easy-to-use technology enables people to monitor their health by texting or emailing answers to health-related questions. Answers are recorded and can be viewed online by participants and members of their care team. This record can be annotated with items such as changes in medication, changes in environmental stresses, and behavioural changes.

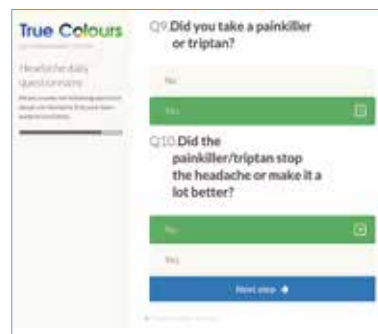
By monitoring their symptoms patients can learn how to make small changes to their lifestyle that can have a big impact on wellbeing.



NHS and beyond

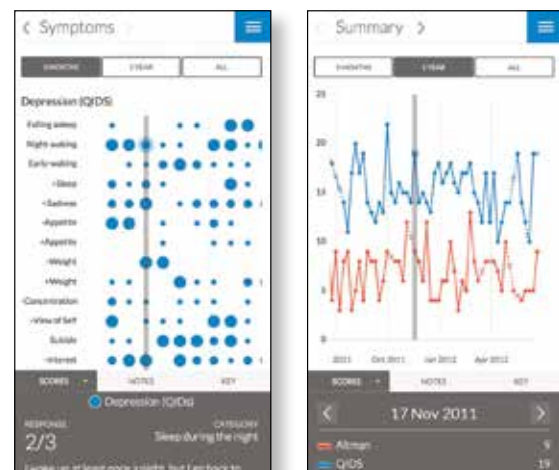
After 9 years of use – during which the True Colours system has collected over 300,000 patient responses – the system is now being used in NHS Trusts around the country. It helps doctors and patients monitor mood disorders, migraine, ulcerative colitis and surgery outcomes.

Lead developer Dr Chris Hinds says: "Smartphones are widespread, networked, powerful and laden with sensors. Finding biosignatures across multiple sensor streams is consequently more challenging than ever before. These challenges motivated us to consider more open models of collaboration where data scientists and the data providers are decoupled, allowing international competition to accelerate analytic progress.



The kind of research we want to do requires us to engage more participants for longer than ever before. Tracking the course of a disease like dementia will require global cohorts engaging in

research for a decade or more. To achieve this we're setting up a federated model, where teams from around the world will contribute research interventions into a single app for comparative testing within a global cohort.



The opportunities afforded by digital health are therefore changing how we view our participants. They are no longer our subjects, to be coaxed toward protocol compliance, but rather our co-investigators, who need to be informed and engaged."



Dr Chris Hinds

Lead Software Developer,
Oxford Institute for Digital Health
chris.hinds@psych.ox.ac.uk

