meeting report

Hacking for health

At 8.45am, there was a flurry of emails—extension cables were in short supply. Then, messages of reassurance, saying that people were buying them from hardware shops on the Cowley Road. By 9.15am, on schedule, everyone was ready to go. So began the third NHS Hack Day and **Andy South** was there.

Over the weekend of 26 and 27 January, about 150 "geeks who love the NHS", in the words of the event's logo, assembled in a hall the size of two badminton courts at the John Radcliffe Hospital in Oxford.

We were drawn by the prospect of a free lunch, hot drinks, and the opportunity to make contacts, use our skills and build something useful.

Our mission, to quote event organiser Carl Reynolds, a doctor at the Royal Brompton Hospital and co-founder of Open Health Care UK, was to make health IT less bad. The hack day, also known as a hackathon, aimed to achieve this by producing open-source software against the clock, bringing the nimbleness of personal IT into the notoriously leaden-footed corporate sphere. In the UK, the Field Studies Council and Met Office are among those who have also held hack days.

In his welcoming address in Oxford, Muir Gray, former chief knowledge officer of the NHS and director of the Oxford Centre for Healthcare Transformation, encouraged us to act like an ant colony—to self organise, and make progress where top-down approaches have failed. There was no mention of licensing or IP—these will be important later, but this event was about getting ideas off the ground quickly.

Participants came from diverse backgrounds, including the health professions, academia, health-related small businesses and a London bank. Those with ideas for projects gave two-minute presentations—no Powerpoint allowed—and the rest of us were free to offer our services. There were 18 pitches in total, covering subjects including dementia, conflict of interest, the professional development of clinicians, mapping prescription data, and using video conferencing for patient consultations.

I joined a project to develop a simple model of the spread of infections across England, pitched by Chris Martin, a coding-savvy GP from Essex. We were joined by Rob Aldridge, a public health doctor at University College London. After discussing our previous experience, and a brief period of planning—although I'm not sure a project manager would have recognised it as such—we got to it, with Chris working on an infection model, Rob on data sources and me on maps and a user interface, which are my particular interests.

Later we became a quartet when Barry Rowlingson, a statistician and mapping guru from Lancaster University, joined our group.

Teams had until noon on Sunday to submit a project for the final presentations and judging. Following discussion with my team-mates, I put together a submission for my part, which had become a simple web application allowing users to plot their own data onto a map showing the boundaries of the Clinical Commissioning Groups, the GP consortia that, from April, will commission local health services in England.

Along with 17 other teams, we scraped under the deadline and then had three further hours to get the software working and prepare a presentation. It was a bit like the Great British Bake-off, with the judges—including Tom Steinberg, director of @mySociety, the writer, researcher and activist Ben Goldacre, and senior NHS data people—sauntering over to inspect our progress as we stared at laptop screens rather than oven doors.

Following a three-minute presentation by each group and a short judges' conclave, each of the eight judges chose a category winner. The overall first prize of Oxford mugs and a small tin to keep ideas in went to OpenHeart, an application that allows surgeons to record their procedures by dragging and dropping icons on to a digital picture of a heart. This is much quicker than scribbling in pencil, and the data are immediately useable for future analyses and the patient's records. A version for eye surgery, OpenEyes, is already in use at Moorfields Eye Hospital in London.

Other winners—us included—joined a scrum for hack-day t-shirts and programming books. Further NHS Hack Days are planned later this year in London, Cambridge and Edinburgh; I propose to attend one or more.

Thanks to our efforts in Oxford, at least 18 software tools with the potential to improve NHS IT are in development. Geraint Lewis, chief data officer of the NHS in England, who attended the event for the first time, tweeted the following day that his back-of-the-envelope calculation suggested the event generated at least £100,000 of value. Not a bad return on the £3,000 the NHS commissioning board provided towards the catering.

More to say? Email comment@ResearchResearch.com

'It was a bit like the Great British Bake-off.'

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