

Press release: £9m awarded to breakthrough digital health technologies

Innovative digital technology projects to address key challenges in health care have received a £9m funding boost through the government's Digital Health Technology Catalyst it was announced today.

The catalyst, delivered by UK Research and Innovation, aims to accelerate the development of digital health innovation, under the Industrial Strategy Challenge Fund, to ensure the UK remains at the leading-edge of innovative healthcare.

Recipients are using a host of new technologies to address the most pressing healthcare priorities. From the use of machine learning and hand-held devices to improve the targeting of clinical interventions to the use of portable brain imaging technology to help identify patients personalised risk of developing dementia.

Science and Innovation Minister Chris Skidmore said:

From using AI-driven voice technology to assess patient's health before seeing a doctor, to hand-held devices which observe health status and alert clinicians to treat high-risk patients, we are taking steps to ensure people are healthier for longer while saving the NHS money.

These advances in technology, across the UK, demonstrate our modern Industrial Strategy in action by harnessing the power of innovation to help meet the needs of an ageing society, and creating the high skilled jobs of the future.

Ian Campbell, Interim Executive Chair, Innovate UK, for UK Research and Innovation, said:

The UK is a world leader in health innovation and the projects for which we have announced funding today showcase the very best of British knowhow. Using breakthrough technologies such as AI and machine learning and deploying apps and hand-held devices, outcomes for patients can be immeasurably improved. Supporting these innovations is a key element of the government's Industrial Strategy and will create the industries and jobs of tomorrow.

Projects which received funding today include:

- Rugby-based [OpusVL](#), has developed eObs, which allows clinicians to observe patients digitally through hand-held devices. The device can then send an automatic alert to specialists or consultants if patients are identified as 'at risk'. This can shorten length of stay, reduce transfers within hospitals, and reduce ICU referrals. The system also gives ward managers and bed managers a view of the workload across their area of responsibility, so that they can deploy the right people on the right ward, at the right time
- Red Star Consulting Ltd is leading a Glasgow-based project applying machine learning to analyse clinical notes recorded in the electronic health record of diabetes patients. The machine learning models predict, based on patient's clinical notes, the risk of different clinical endpoints such as heart attack or death and present this information to the clinician as a score or alert. Clinicians can use this to tailor consultations, identify high-risk patients, and target specific clinical outcomes
- Kent-based [Mind over Matter MedTech](#) is working with [Wessex Academic Health Science Network](#) to trial novel, low-cost and portable brain imaging technology. This aims to test patients personalised risk for developing dementia in a non-invasive manner, and at least a decade before any clinical symptoms would appear. This could help reduce the chance of a cycle of irreversible neuronal death
- Working with the University of Oxford, [Ufonia](#) will deploy AI-driven voice technology to call patients and have a fully autonomous, natural conversation, to assess their health status against specified criteria. In live clinical use, the technology will assess the health of nearly 1000 patients who have had cataract surgery at a large NHS hospital Trust over 6 months
- Leicester-based [Snoozeal](#), working with the University of Loughborough, Snoozeal Limited has developed a device to treat obstructive sleep apnoea, a condition where the muscles and soft tissues in the throat relax and collapse, blocking the airways for 10 seconds or more during sleep, which can cause long-term health problems. The device contracts muscle at the rear of the tongue through a 20-minute daily toning regime of mild electric pulses. The Snoozeal device aims to be connected to an intelligent platform to collect biosensor data of tongue tone, which will be classified by machine learning and AI-based to deliver personalised treatment regimes

Funded through the Industrial Strategy Challenge Fund, the Digital Health Technology Catalyst (DHTC) is a £35 million fund, being run over 4 years.

The DHTC is an important element of the [government's plans to implement the Accelerated Access Review](#). It aims to address some of the challenges that the

review identified around the development of digital health innovations, and to help grow the digital health sector. DHTC funding is targeted at SMEs to promote a vibrant and varied industry of innovative technologies with the potential to significantly change care pathways and to improve patient outcomes and create NHS efficiencies.