

Support from the Oxford AHSN helps digital innovators develop and roll out automated telemedicine

Overview

Ufonia, an innovative Oxford-based digital health company, has built Dora – an autonomous telemedicine assistant – for use in routine clinical conversations. As an alternative to hospital visits where clinically appropriate, it increases clinical capacity, reduces provider costs, improves patient convenience and eases demand on healthcare staff. Dora is accessible and easy to use – patients simply receive a regular telephone call, they do not need new devices, apps or training and they avoid travelling to an appointment. It is suitable for everyone regardless of their access to or knowledge of technology.

Dora is focused on operational bottlenecks, particularly high volume, low complexity care that makes up the bulk of the current backlog in clinical activity. It is a like-for-like replacement for a follow-up call from a doctor or nurse, providing a reliable, consistent check. By digitally capturing conversations with patients, detailed data can be made available to review outcomes following surgery. Calls can be scheduled for multiple times to track progress and intercept problems.

The initial focus has been on the most common operation in the NHS – cataract surgery (400,000 procedures every year in the UK) – particularly post-operative calls to patients. The Oxford AHSN has provided extensive support including as a partner in successful funding applications to Innovate UK and the NHSX/NIHR AI Award. Dora is being rolled out to further NHS sites.

Initial funding support

A Harwell HealthTec Cluster Proof of Concept Award (£20,000) allowed Ufonia to develop and test a pilot version of Dora supported by an additional £25,000 from the Science and Technology Facilities Council (STFC). The project focused on assessing outcomes following knee surgery using the Oxford Knee Score. The Oxford AHSN provided support as part of an Innovate UK Digital Health Technology Catalyst feasibility grant (£75,000) to develop the value proposition and identify their beachhead market from a range of potential options, focusing on ophthalmology in Buckinghamshire Healthcare NHS Trust (BHT). Ufonia then collaborated with My Clinical Outcomes, Oxford University Innovation (OUI), STFC, BHT and Oxford AHSN to bid successfully for Digital Health Technology Catalyst funding (£665K) to support the launch and discovery phase focusing on follow-up post cataract surgery. The Oxford AHSN supported Ufonia's successful application for funding from the NHS AI in Health and Care Awards in 2020.

How has the Oxford AHSN been involved?

The Oxford AHSN has been involved in the project since its early stages in 2018 and has worked closely with Ufonia to explore their potential customer base, value proposition, articulate their business model and identify the clinical challenge that they are looking to solve. In support of the



launch and discovery phase, the Oxford AHSN performed a study to explore Dora's utility in clinical practice and the potential barriers to adoption. Clinical stakeholders were interviewed about how the technology would integrate into the care pathway. The results were discussed with clinicians and commissioners to gain insights into how the potential barriers could be overcome. A health economics model was developed comparing the cost of the Ufonia platform with the current standard care (nurse-led telephone calls) at Buckinghamshire Healthcare NHS Trust (BHT). The structured qualitative and quantitative analysis provided robust conclusions which have been an invaluable evidence-based reference document helping Ufonia gain further interest and investment.

The Oxford AHSN also explored patients' experiences of the existing pathway and their views on the use of this novel autonomous telemedicine system. Findings from this exercise highlighted the importance of including AI at the right stage of the pathway and the potential advantages and disadvantages as seen by patients. The findings are being incorporated into future iterations. Ufonia has grown from 2.5 full time equivalent (FTE) employees to 8 FTE and three part-time employees over the past year, both safeguarding and creating jobs within the Oxford area. Ufonia underwent an Angel investment last year and is currently raising a further seed round. Ufonia has also leveraged the partnership with the Oxford AHSN to secure interactions with other potential stakeholders such as investors, grant bodies and national bodies such as NHSX.

What people said

"Oxford AHSN has helped to anchor us into the ecosystem of healthcare and research. Their supporting work has aided us in ensuring we are addressing the relevant needs. This credible information is able to be shared with and gives confidence to our potential partners whether they are individual hospitals, integrated care systems or central NHS teams."

Nick de Pennington, CEO and Founder, Ufonia

"We have worked closely with Ufonia every step of the way, helping them develop a product which meets NHS needs and has the potential to enhances the experience of thousands of patients."

Julie Hart, Director of Strategic and Industry Partnerships, Oxford AHSN

What next?

Dora is being rolled out to further NHS sites. Funded by a Phase 2 NIHR AI in Health and Care Award, Ufonia will develop evidence supporting the safe deployment of Dora to deliver routine clinical follow-up calls at two large NHS hospital trusts - Imperial College and King's College London.

The Oxford AHSN is also working with patients, the public, clinicians and Ufonia regarding use of Dora in triage of head and neck cancer to make sure this is informed by their views and experience. This will include focus groups and roundtable discussions. It follows Ufonia's success in securing additional funding of almost £100,000 through the SBRI Healthcare Greener NHS award in January 2022.

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