

Oxford AHSN case study

Date: Q3 2020/21

Programme / theme: Strategic and Industry Partnerships

Title: Oxford AHSN helps four companies leverage more than £5 million from the AI in Health and Care Award

Overview Summary

The Artificial Intelligence (AI) in [Health and Care Award](#) is run by the Accelerated Access Collaborative (AAC) in partnership with NHSX and the National Institute for Health Research (NIHR). It will make £140 million available over three years to accelerate the testing and evaluation of the most promising AI technologies which meet the strategic aims set out in the NHS Long Term Plan. The Award will support technologies across the spectrum of development - from initial feasibility to evaluation within the NHS. The initial focused has been in four key areas: screening, diagnosis, decision support and improving system efficiency. The Award forms a key part of the AAC's ambition to establish a globally leading testing infrastructure for innovation in the UK. Calls for applications for the Award will run at least twice a year through an open competition to identify appropriate AI technologies for support into the NHS. The Oxford AHSN supported four companies (Ultromics, Ufonia, Caristo, BreatheOx) in their applications for Round 1 of the Phase 2 and 3 awards and itself leveraged in the region of £200,000 as a co-applicant. The AHSN also supported Brainomix and Ultromics in their Phase 4 award applications.



How is the AHSN involved?

Many companies have established relationships with the NHS, while others need help in finding clinical partners to evaluate their technologies. AHSNs play a pivotal role in linking companies to NHS organisations. Companies also need help in scoping their applications in the context of a new funding mechanism.

The Oxford AHSN provides expertise in public and patient involvement, health economics and conducting qualitative feasibility studies to understand key NHS stakeholder views.

32 projects were selected for a Phase 1 to 3 AI Award and the Oxford AHSN is supporting four of these companies. Phase 4 is intended to identify medium stage AI technologies that have market

authorisation but insufficient evidence to merit large-scale commissioning or deployment. The projects that Oxford AHSN are supporting have leveraged over £5million in funding.

A Phase 2 AI Award is intended to develop and evaluate prototypes and generate early clinical safety and efficacy data. The Oxford AHSN will work with Albus Health / BreatheOx, Caristo Diagnostics and Ufonia to produce an adoption strategy by carrying out pathway mapping, stakeholder analysis, health economics and, with the National Institute for Health Research to understand the evidence framework for these AI technologies.

A Phase 3 AI Award is intended to support first real-world testing in health and social care settings to develop further evidence of efficacy and preliminary proof of effectiveness, including evidence for routes to implementation to enable more rapid adoption. The Oxford AHSN will work with Ultromics to create a clear roadmap to future NHS integration and also to deliver health economics evidence.

Phase 4 AI Awards are intended to facilitate initial systems adoption of AI technologies with market authorisation into the NHS and evaluate the AI technology within clinical or operational pathways to determine efficacy or accuracy, and clinical and economic impact. Adoption sites will cover the entire AHSN Network.

Impacts and outcomes of the AHSN involvement to date

Phase 2 Albus Health / BreatheOx Limited

A small table-top device that can automatically monitor a range of symptoms, helping to predict preventable asthma attacks in children. This project will test the system within existing NHS infrastructure to generate real world evidence of clinical benefit and economic value.

Phase 2 - ACRE-CT / Caristo Diagnostics Limited

The FatHealth technology is using standard CT scans combined with AI techniques to detect fat tissue inflammation, which can indicate a higher risk of developing diabetes or dying from heart disease. The project will analyse 20,000 CT scans to train the AI algorithm and help develop accurate risk predictions.

Phase 2 - Autonomous telemedicine / Ufonia Limited

This study will evaluate Ufonia's natural-language AI assistant and assess how acceptable the system is for patients and clinicians.

Phase 3 and 4 - EchoGo Pro / Ultromics Ltd: This project will assess how automating coronary artery disease risk prediction in stress echocardiogram clinics will benefit the NHS and patients.

Phase 4 - e-Stroke Suite / Brainomix Ltd

This project will evaluate a tool that uses AI methods to interpret acute stroke brain scans, and helps doctors make the right choices about treatment.

Learning to date

All projects are in the initial phases of work and an update will be given in mid-2021.

Supporting quotes

AHSN

The AI awards aim to help with faster and more personalised diagnosis for greater efficiency in the care pathway can be valuable for patients and NHS. With our support in the grant applications, over £5million of funding has been leveraged for the company's projects. All in all, a huge success.

Dr. Mamta Bajre, Lead Methodologist, Oxford AHSN

Plans and timescales for spread and adoption

The second competition (Round 2 AI in Health and Care Awards) has closed. The Award was open to any artificial intelligence (AI) technology. For Phases 3 and 4, applications are being encouraged in the following focus areas: triage, imaging, screening, and intelligent operational automation.

Contact

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