## **"TRYING TO FIND PEOPLE TO FIT THE TECH": A QUALITATIVE EXPLORATION OF THE LESSONS LEARNT INTRODUCING ARTIFICIAL INTELLIGENCE (AI) BASED TECHNOLOGY IN ENGLISH SOCIAL CARE**

(Lessons of introducing AI-technologies into English Social Care)

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## ABSTRACT

**Introduction**: Technology is regarded within UK's health and social system as the most attractive way of improving care and addressing significant service pressures. Sensor-based technology with AI capabilities is one type of new and emerging technology that may be useful, but if its benefits are to be realised then it is important to understand how social care services can be supported to select and sustainably implement the most appropriate forms of this technology

This study explores how one example of this technology was implemented in English social care. Gaining staff perspectives on decision-making processes and implementation, to inform recommendations for others exploring the potential of new and emerging technology.

**Methods:** Qualitative data was collected from three social care providers across England via interviews with senior decision makers, operational leads, and care staff. A total of 18 interviews were conducted. The data were analysed within the 7 domains of the Non-adoption, Abandonment, Scale-up, Spread, and Sustainability (NASSS) framework, developed specifically to help plan the implementation and rollout of technology health or social care programmes and share structured learning from previous experiences.

**Results:** We identified issues within each NASSS domain regards the selection process and implementation of AI-based technology in social care. Specifically, the cohort and setting expected to benefit from SAT was poorly defined (Condition); the system was complicated to install, maintain and use (Technology); a lack of evidence and expertise confused the procurement process (Value proposition); staff felt uneasy and ill-equipped to cope with their new roles (Adopters); gaps in training and infrastructure were apparent (Organisation); there were policy driven imperatives to adopt technologies (Wider system); and the culture shift towards more preventative care had yet to be realised in practice (Embedding over time).

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**Conclusion:** The research confirmed a number of common implementation challenges, adding particular insights around the anxieties experienced by front-line staff of a change in role that removed them from direct contact with service users and the management of data that held clinical connotations, the difficulty of introducing a preventative intervention in a system geared to meeting acute needs and responding to crises. The fact that so many familiar barriers were identified suggests a need to focus on helping policy makers and local leaders avoid similar pitfalls in the future to prevent further recurrence.

**Keywords**: social care, technology, artificial intelligence, decision-making, implementation