Alex Waddell

Walking the tightrope: Exploring digital health implementation through novel approaches to embedding implementation science in the design of digital health interventions

Digital health is not a future trend, it is exponentially increasing in our healthcare systems hoping to make patient and clinician lives easier. There is an evolving field exploring the intersection of implementation science and human-centred computing. This new field aims to ensure digital health technology is evidence-based and designed with and for communities to optimise healthcare outcomes. We see examples in the design and development of technologies such as patient facing mhealth interventions and electronic medical records. Much of the research to date has focused on how implementation science can use human-centred design methods such as journey mapping and user testing. By contrast, there have been calls to better integrate the two fields by merging implementation frameworks with frameworks that detail how to design technology to better detail the process and stakeholders and key considerations involved.

In this ECIP keynote I will explore the evolving intersection of digital health and implementation science - designing digital evidence-based interventions and technology to support real-world implementation. Specifically, I will present a novel approach combining human-centred computing and implementation science frameworks and provide worked examples of its application. Opportunities, challenges and future trends will be explored through questions with the EIE attendees:

- Do our frameworks need to evolve to properly capture the realities of digital health implementation?
- How can we better report iterative design processes used in the design of digital health to improve transparency, replicability and scalability?
- How can we work with our multidisciplinary colleagues in digital to design, develop and deliver digital interventions with implementation in mind?

About Alex Waddell

Dr Alex Waddell is a behavioural and implementation science research fellow with Action Lab in the Department of Human-Centred Computing at Monash University, Melbourne, Australia. Dr Waddell's research focuses on the design and development of digital health interventions for real-world implementation. Through co-design she helps bridge the gap between theory, data, and context to ensure that innovations are not just evidence-based, but impactful in real-world settings. She strives to create human-centred, sustainable outcomes that work for individuals, organisations, and systems.