Designing for Engagement - finding new ways to improve online clinical research on the U-CARE platform for study participants and researchers

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Introduction

• Clinical research informatics (CRI) provides essential tools to support and reshape the clinical research landscape.1
• It is a relatively young field of research, and many challenges need to be addressed, like data access and recruitment and retention issues.1 2
• The U-CARE Platform is a clinical research informatics system that provides traditional functionality to optimise clinical research design and execution and supports online clinical interventions, e.g., iCBT.

Background

• Despite its benefits, the Platform has untapped potential to expand its reach.
• In previous studies on the Platform, participants mentioned not relating to the content, lack of personalization, and unpleasant emotions evoked by the intervention.3 4
• These aspects of participants’ experiences remain poorly understood and further research is necessary.

Research aims

Aim 1 - To investigate and establish previous experiences with U-CARE Platform 1.0, and identify key factors affecting user’s engagement with the mentioned system.

Aim 2 - Based on identified factors, design alternative solutions satisfying research aims and improving U-CARE study participant engagement and retention.

Aim 3 - Synthesise the findings through design methodology guidelines.

The research aims are to increase participant engagement and retention with a new platform that better suits the users’ needs. These enhancements will improve the quality of a study’s results, increasing its value and reducing waste.

Furthermore, the platform focuses on optimising time and effort on:

Recruitment and consent

• Reduce the researcher’s time spent and effort in the recruitment, screening, enrolling, and consent steps.
• Online resources expand the geographical reach of recruitment.
• Real-time updates on each step.
• Centralised data.

Data collection and management

• Reduce time, effort, and errors in manual data entry and consultation.
• Structured data collection.
• Allow remote data collection of participants in different locations.
• Centralised data repository.
• Avoid paper-based processes.

Experiments and data analysis

• Allow for faster testing of feasibility studies, treatments, and interventions and collect participants’ feedback.
• Real-time monitoring.
• Visualisation and dashboards for quick access to data.

Methods

Study 1
Exploring previous experiences with U-CARE Platform 1.0 and identifying key factors affecting researcher and participant engagement with the platform.

Methods
Mixed-methods approach with quantitative and qualitative data collected through surveys, semi-structured interviews, and shadowing sessions.

Study 2
Design of alternative solutions satisfying research aims and improving study participant engagement and retention.

Methods
Qualitative research composed of co-design workshops and usability tests. Quantitative data collected through in-field evaluations.

Study 3
Creation of a framework and its evaluation on the U-CARE Platform.

Methods
Collaborative sessions with key stakeholders, where the findings will be analysed and structured into frameworks and guidelines.

Research persons

U-CARE study participants, as patients and informal caregivers who participated in the studies previously performed on the U-CARE Platform 1.0.

Researchers, PhD students who utilise the Platform to conduct studies, as well as psychologists, therapists, and healthcare practitioners who support U-CARE study participants.

Are you interested in participating in the research?
Get in touch with us!
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List of references