Abstract

Facilitating User Participation in Digital Health Research: The mHealth Impact Registry

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Abstract

Background: The proliferation of technology galvanizes providers, researchers, and entrepreneurs to revolutionize health care and care delivery with diverse audiences. Digital health provides promise in improving health outcomes; however, the pace of technology requires rapid research to remain relevant in the marketplace. User experience (UX) research provides critical information about patient/client preferences while rigorous research trials demonstrate digital health efficacy. Despite the need for such research, the recruitment and enrollment process for digital health research remains time consuming and expensive, particularly when engaging underrepresented populations. Developed in the Colorado School of Public Health, the mHealth Impact Registry is a newly launched platform designed for rapid and responsive recruitment of participants for digital health research studies. While the use of registries in research is robust, the application in digital health research is quite limited.

Objective: This poster illustrates the development and testing of the mHealth Impact Registry's Web-based platform, health status survey, mobile app, and participant database to reach underrepresented populations in digital health research.

Methods: Formative methods used a user centered approach to document user preferences for Registry design followed by iterative testing to ensure usability and navigability.

Results: End-user feedback was captured from multiple stakeholder groups (ie, Patient and Family Research Advisory Panel and mHealth Community Advisory Board) to refine recruitment strategy (ie, letters, video development). A health status survey was developed in both English and Spanish using the online software (ie, Qualtrics) that informs the back-end database. A detailed requirements document outlined technical and functional requirements for the mobile app (ie, iOS and Android) and Web-based platform (ie, Wordpress and Amazon Web Services).

Conclusions: Due to the need for rapid, rigorous, and inclusive research in digital health, a registry containing a pool of diverse participants would not only accelerate the recruitment and enrollment process but would also help to improve the reach and engagement of digital health solutions for underrepresented populations. The mHealth Impact Registry would house diverse participants, supporting quick enrollment and active participation in studies for which they are eligible. Improving the accessibility of participants and the speed of enrollment has promise in ensuring digital health solutions are relevant upon dissemination and commercialization.

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KEYWORDS

registries; research subject recruitment; underserved; user centered design; user experience evaluation



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