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Evaluation of BeYou+ an mHealth application to support self-management strategies for people living with HIV



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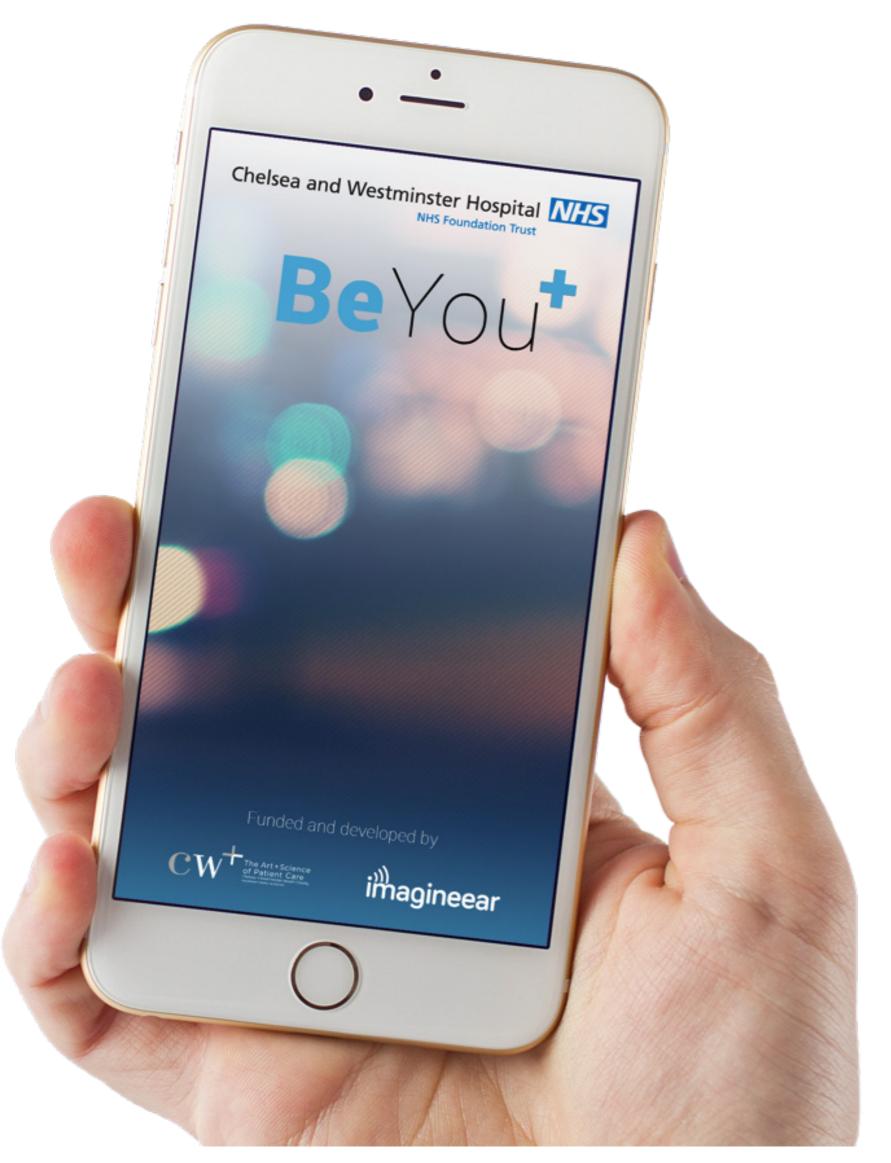
Chelsea and Westminster Hospital WHS **NHS Foundation Trust**

INTRODUCTION

BeYou+ is a newly developed app designed by experts at Chelsea and Westminster NHS Foundation Trust, to provide users with reliable information about their body, mind and life. It is the only known mobile health (mHealth) app to support selfmanagement strategies for people living with HIV. The app gives users the ability to set goals, achieve rewards, input health information and set calendar reminders. BeYou+ is available to download cross-platform on Apple and Android devices, and was publically avaiable from June 2016.

METHODS

Between July and December 2016, usability and usefulness evaluation of BeYou+ (version1.1.1) was conducted by; (a) expert heuristic evaluation using Nielsen's 10 Heuristics¹, Android Material Design Usability Guidelines² and iOS Design Guidelines³ (b) expert review against existing research publications^{4,5,6,7,8,9} relating to systems designed for use by people living with HIV, across 8 themes including intentions, identification, privacy, security, information, management and representations (c) feedback from potential users (d) feedback from current users and (e) end-user evaluators who had not used or downloaded BeYou+. Feedback and end-user evaluation was obtained via anonymous online questionnaire with enduser evaluation including BeYou+ screenshots and omitting questions on self-management, quality of life and well-being. Participants were recruited online via social media platforms or push notifications within BeYou+ app. One interview was conducted for more in-depth understanding of perspectives.



Find out more about **BeYou+** here:



Vimeo.com/162059872



www.cwplus.org.uk/beyouplus



BeYouPlusApp

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RESULTS

Total 28 recommendations were made from expert reviews. Overall the app has good usability and the app design could be improved even more by attending to issues in structuring information, consistency and clearer labelling. BeYou+ supports intention of use allowing users to set goals, input and track lab results. Identification requires potential users to search for BeYou+ on generic engines using term "HIV app". Anonymity and security is preserved through passcode access, local data storage and no reference of HIV in name or logo. BeYou+ provides simple visualisations and representation could be expanded to allow users to track other data. Feedback was obtained from 44 potential users and 6 current users, mean age 35 and all identify as men who have sex with men. Informational content was perceived as useful but the added value of having this information on a paid-for app needs clarification. Tracking lab results is appreciated and extending this to other health data eg: symptoms is suggested. Medication adherence and potential interactions is of great importance to respondents and this aspect could be improved in the app. While setting goals is important, users wanted more flexibility in the frequency of goals and how they are notified.

CONCLUSION

BeYou+ has been designed very well and presents a few usability issues relating to structuring of information, consistency and clearer labelling that could be addressed quickly in an updated version. BeYou+ is considered useful by people living with HIV, but there are several avenues for improvement including; clarifying added value, expanding health information tracking, medication adherence support and more flexibility in goal frequency & notification.

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