A systematic review to assess the quality, feasibility, and efficacy of electronic patient platforms designed to support adolescents and young adults with cancer

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Background: A range of innovative websites, mobile technologies, eHealth and mHealth platforms now exist to support Adolescents and Young Adults (AYAs) with cancer. Previous systematic reviews have tended to focus on the identification of technology-driven applications and solutions, yet little attention has been paid to understanding component features of existing platforms. Therefore, a systematic review has been conducted to assess the quality, feasibility, and efficacy of a range of digital health interventions, including websites, mobile technologies, mHealth and eHealth platforms. The review focuses on AYA aged between 13 - 39 years and platforms developed specifically for and targeted at AYA living with or beyond a cancer diagnosis.

Design / Methods: A search string was applied to a number of bibliographic databases including MEDLINE, CINHAL and PUBMED. The search strategy included a range of Medical Subject Headings and a range of relevant keywords for the interventions of interest in this review. To allow comprehensive synthesis of studies included in the review, data were extracted, appraised and evaluated. Adapted versions of previously identified coding schematics were used to assess the mode of delivery and quality of patient platforms. Methodological quality of included papers was assessed using the Quality Assessment Criteria for Evaluating Primary Research Papers from a Variety of Fields (QualSyst).

Results: The review is currently in progress. The review will be completed by the end of 2017 and thus, findings will be known by the time of the CBC Digital Health Conference in 2018.

Conclusion: The focus of this systematic review provides a necessary and important step in characterising the potential utility of technology-based interventions for young people with cancer to ensure success in terms of future development and implementation of appropriate and meaningful digital health interventions for this population.

Keywords: digital health; electronic patient platform; mHealth