

CANSA Pain Manager: development and feasibility of digital health intervention

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Purpose

To develop a digital health intervention to optimise cancer pain control in the South African context. This paper describes the solution development, content/rationale and initial feasibility testing.

Background

Pain is a common condition with a significant physical, psychosocial, and economic impact. Due to progress in mobile device technology as well as the increase in smartphone ownership in the general population, mobile apps can be used to monitor patients with pain and support them in pain management. One of the significant benefits of digital health in pain management for cancer patients is the ability to remotely monitor their symptoms. A patient can use a smartphone application to track their pain levels, sleep patterns, and medication adherence from the comfort of her home.

Approach Used

A collaborative process was followed whereby developers and end-users and stakeholders worked together to design, develop and refine the mobile application. It involved engaging all in the various stages of the app development lifecycle.

Solution Description

CANSA Pain Manager is a mobile application to help cancer patients and/or their caregivers manage their pain better, by keeping a Pain Diary of where in the body the patient experiences pain, what the level of intensity of the pain is and when (day/time) the patient is experiencing pain. The app has the capability to export the Pain Dairy as a pdf that can be sent to the doctor or nurse for evaluation whenever deemed necessary.

Initial Feedback

End users note that the advantage of using the App in pain management for cancer patients provides access to educational resources and support. Patients can access online platforms, forums, and support groups specifically designed for cancer patients experiencing pain. These resources provide them with information, coping strategies, and emotional support from individuals who have shared similar experiences. Connecting with others in a virtual community gives the patient a sense of belonging and empowerment, fostering resilience and a positive mindset.

Conclusions

Preliminary testing suggests that Pain Manager is feasible and could promote patient-centred pain management. We will conduct further small-scale evaluations to inform future refinement of the solution.