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Title: Conversational artificial intelligence (CAI) and the Interface with the patient concerns inventory (PCI): Assessment of usability of eAltra web application

Body: Introduction

Head and Neck Cancer (HNC) patients have a wide range of unmet needs. The patient concerns inventory (PCI) allows patients to highlight issues they have. While the PCI is effective, patient experiences could be improved with better access to it. Use of conversational AI (CAI) represents an opportunity to improve information flow between patients and professionals remote from the consultation. In this trial, we explore how CAI can facilitate an 'always on' patient-clinician platform.

Materials and Methods

Prospective usability trial of a CAI implementation of the HN-PCI. Trial prototype system presents patients with an online mobile device app (eAltra). This app will be always available to patients in the non-hospital environment and invites patients to select items they would like to address at their next consultation. Thusly, items checked on the prompt list may better reflect patients' needs/- concerns.

Results

16 patients completed the chat interaction/trial. All agreed or strongly agreed that the platform was easy to use. All said that they would like to use eAltra during their treatment. All reported at least one psychological/social issue and 67% raised physical concerns.

Conclusions

This usability study demonstrates that the eAltra app is easy for patients to navigate and use

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