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# Accelerating Cancer Patient Recruitment Through a Mobile Application (Clinical Trial Finder)

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## Background

The engagement of both patients and physicians is a central aspect of clinical trial recruitment. With sufficient engagement and recruitment, clinical trials are frequently terminated early due to poor accrual and can achieve statistically significant results. An estimated 19% of phase 2 and phase 3 clinical trials in Canada are due to inadequate enrollment1. terminated Significant factors associated with research centers that need better recruitment include low physician referral rates, lack of awareness of clinical trials in patients, and a lack of available information regarding clinical trials.

Cancer Clinical Trials (CCTs) face a particular challenge in engaging and recruiting patients. Only 55% of cancer trials in the UK reached their originally specified recruitment goals. Among cancer patients, CCT participation is as low as 3% to 5%6, and only 10% of cancer survivors reported being aware that CCT participation was possible during treatment. Additionally, among cancer patients made aware of potential CCT participation, 73% were made aware by their physician. This suggests that measures to foster physician and patient engagement and raise awareness of ongoing CCTs could provide access to a previously untapped source of participants in CCTs.

#### Goal

Design a Clinical Trial finder app centered on ease of use, a fluid referral process, and quick access to technical support. After researching features in clinical trial navigators commonly requested by physicians, the KUMC team landed on 3 such features to focus on.

(a) (b) Disease Working Groups GI Cancer -> HCC 1st Line 2nd Line 3rd Line Local Treatment .

Figure 1: A sample of the navigation process for finding a clinical trial with windows for narrowing down from disease working group, cancer type, and first-line or second-line treatment: (a) disease working groups in menu navigation can be selected to narrow further, and (b) the number of trials under selection displayed.







## **Methods**

To encourage physician engagement in clinical trials, our focused primarily on addressing physician team concerns regarding making a referral. As previously mentioned, physicians desired information on local clinical trials, could be easily assessed for risks and benefits, and was internet accessible.

We included several secondary aims in development based on physician feedback. The first was to allow physicians to access clinical trial information on the go or at the bedside, as many physicians expressed that they often needed more time to search for clinical trials at a desk. The second of these was allowing physicians to find trials without manual searching. This aim ties into the first, where usability without manual searching would allow physicians to search for trials while on the move. The third was allowing physicians to differentiate between first-line and second-line treatment trials. The last was building a tool that would promote discussions of clinical trials at the patient's bedside.

Very few universities have built a trial searching application; among those applications, most of them are web-based and restricted to just a few research personnel. Others are specific to health systems, such as Stanford's SCI Cancer Clinical Trials app. However, most of these apps and other trial search functions are designed for patient and physician use. When designed this way, these systems typically do not provide much benefit to healthcare professionals for their medical expertise and lead to physicians spending similar amounts of time to laymen searching for trials before finding the information they need.

#### **More Details**

