

## **Background:**

Readily accessible, smart-phone applications (Apps) have the potential to revolutionise and improve the delivery of patient care. Significant challenges associated with recruiting patients to haematology clinical trials include the rarity of diseases, complexity of trials, limited site locations, and maintaining knowledge of current trials in the context of rapid therapeutic developments. The Haematology Clinical Research Network, of New South Wales and the Australian Capital Territory (NSW/ACT) aimed to develop an App to facilitate clinician and patient access to current information on local clinical trials and improve trial participation by increasing referrals.

## **Methods:**

Key objectives were to develop an App that was free to download, simple to use and effective. Only publically listed data was to be included. Endpoints were rates of App usage, and cross-site and internal clinical trial referrals. Through liaison between the end-users (clinicians, trial managers and patients), and the contracted software developer, App specifications were refined through successive iterations. With the key search filters of Disease, Location, Sponsor and Study Status, the App has an easy to navigate listing of currently recruiting haematology trials. Useful features include: listing of inclusion and exclusion criteria; direct links to ClinTrials.gov; a lay summary; and direct contacts from the mobile device to participating study sites. Real-time data entry into the database app manager ensures currency of trial information.

## **Results:**

ClinTrial Refer went live in May 2013, on both iOS and Android platforms. As at 10th August, ClinTrial Refer has 654 users, over 4358 sessions and 13924 screen views. 91% of current users are repeat users. Despite its local application the App has been accessed in 46 countries. Among the target audience in NSW 290 repeat users returned for an average 11 sessions each indicating a high user acceptance. It is being endorsed on the websites of Australian blood cancer consumer groups. A survey has confirmed that since its launch, through having readily accessible data on their smart-phones, ClinTrial Refer has increased clinician awareness of the NSW trial portfolio. In just twelve weeks it has resulted in the cross-referral of an additional 30+ patients for clinical trials, representing a >300% increase over previous referral patterns. This improvement in trials knowledge management has also increased within-site recruitment; however it is harder to quantify the exact short-term impact of ClinTrial Refer within hospitals. The App has already been duplicated for other Australian state-wide haematology networks and the Adolescent & Young Adult Research Network, NSW.

## **Conclusion:**

**ClinTrial Refer** is an innovative but simple, readily accessible mobile Application. Its widespread adoption across 18 Haematology Clinical Research sites in NSW Australia is facilitating increased patient recruitment to

trials. Only recently available on iTunes and Google Play, it has attracted national and international attention as a template for any clinical trial network portfolio.

