

Mobile App for Schizophrenia

Market Need

Schizophrenia is one of the most serious mental illnesses in Canada and the US, affecting approximately 1% of the population. Schizophrenia impairs a person's ability to think clearly, manage emotions, make decisions, relate to others, and to generally function in society. About 75% of people living with schizophrenia develop it between the ages of 16 and 40. Those with schizophrenia have both positive and negative symptoms where positive symptoms include hallucinations and delusions, and negative symptoms include cognitive impairment and deficits in motivation. Motivation deficits are a prominent feature that significantly deters how patients function in the community. Current assessments for these deficits rely heavily on subjective input and are constrained to capturing data in limited research or clinical settings. Mobile health apps have become a growing area in the healthcare industry, and offer a solution to the problem of motivation deficits in schizophrenia. The use of mobile health apps by medical providers is becoming more prevalent. The mobile health app market is estimated at \$28.3 billion in 2018, and should reach \$102.4 billion by 2023.

Technology Description

Our scientists have developed a mobile app to objectively assess and encourage motivated behaviour, specifically goal-directed activity, which involves setting and completing plans and goals. The app allows for geo-location sensing that captures real-world behaviour and is connected to a reminder system that prompts the individual to pursue their goals. This app is geared primarily towards schizophrenia patients, as pronounced motivational deficits hinder many individuals with this illness. The app consists of an assessment and a treatment component, and our investigators envision this approach to be relevant for a number of neuropsychiatric illnesses where a market exists for such goal-completion apps.

Stage of Development

- The app has been developed and is currently undergoing clinical validation in a schizophrenia population at CAMH to assess its functionality and utility. This app would be a highly valuable tool for physicians and patients for improving motivation and promoting recovery, and for pharma who would benefit from the use of the app to assess patient response to medication.

Advantages

- Assesses real-world motivation levels, which is a critical component of negative symptoms that impedes functional recovery
- Provides an avenue for mobile treatment to improve motivation in patients that is linked to their actual behaviour
- Enables personalized and collaborative goal-setting and outcome monitoring between the patient and their treatment team
- Developed at CAMH and specifically within our early psychosis population where clinicians work with the clinical team and patients to evaluate patient outcomes through clinical trials with this app

Notable Publication(s)

Foussias et al (2015) J of Psychopharm

FOR MORE INFORMATION CONTACT

Dr. Klara Vichnevetski
Director, Industry Partnerships & Technology Transfer
klara.vichnevetski@camh.ca
416 595-6056

Centre for Addiction and Mental Health
33 Russell Street, Suite 4039
Toronto, Ontario, Canada M5A 2S1
www.camh.ca