

## Executive Summary of the Research Protocol

### **Lost & Found: Evaluating the implementation and effectiveness of a clinical intervention to re-engage HIV-positive patients into care**

At the Chronic Viral Illness Service (CVIS), 10% of active HIV positive patients in 2015 did not have any clinical follow-up in 2016. Currently, no formal system exists to re-engage and retain these patients in care. Furthermore, little is known regarding the sociodemographic, psychosocial and clinical care correlates of these patients with care interruptions.

Lost & Found is a nurse-led intervention to re-engage loss to follow-up (LTFU) patients into HIV care. Developed using an implementation science approach, this intervention is informed by previous EBIs to re-engage LTFU patients, and adapted to the needs of staff and patients at the CVIS clinic. Lost & Found consists of two core elements, supported by evidence from previous re-engagement studies: 1) Identifying and documenting LTFU patients and; 2) Contacting LTFU patients. To adapt these core elements to our clinic, we have created a LTFU risk prediction tool and an automated, real-time list to identify and prioritize re-engagement of LTFU patients. Our team of nurses will telephone patients to encourage re-engagement into care.

Delivery and ongoing adaptation of the intervention will be done using a three-pronged implementation strategy consisting of 1) packaging the intervention into core and peripheral elements; 2) internal facilitation; and 3) planning, engaging, executing, evaluating, and reflecting (PEEER) cycles. This pilot study will follow a type II implementation-effectiveness hybrid structure, allowing us to simultaneously evaluate our intervention and implementation strategies.

We will employ a mixed-methods approach to assess implementation and effectiveness outcomes. This assessment will permit context-sensitive adjustments for optimizing our intervention and the implementation strategies. The implementation outcomes will serve as the indicators for a successful implementation strategy and as intermediate outcomes for the effectiveness of the intervention

All nurses at the CVIS will participate in this one-year study. Both questionnaires and focus groups will be used to report on selected implementation outcomes (acceptability, feasibility, fidelity and adoption). Using a pre-post evaluation of the primary study outcome (proportion of LTFU patients re-engaged into care), we will report on the effectiveness of this intervention. In addition, a self-administered questionnaire will be used to collect information from re-engaged patients to inform determinants of LTFU.

This study will provide preliminary evidence for 1) the success of our implementation strategies; 2) the effectiveness of the intervention; and 3) the sociodemographic, psychosocial, and clinical characteristics of LTFU patients. Ultimately, this information can be used to inform future re-engagement efforts and implementation research in other HIV care centres.