BACKGROUND

Setting
- UNAIDS’ 90-90-90 targets have prompted formal documentation of HIV care cascades.
- ~ 10% of patients at the Chronic Viral Illness Service (CVIS) McGill University Health Centre, who received care in 2015 did not return for care in 2016. This proportion of lost-to-follow-up (LTFU) remains consistent from year to year.
- No formal system exists to re-engage and retain LTFU patients in care at the CVIS clinic.

Implementation Science
- Many evidence-based interventions (EBIs) do not get used in practice or take many years to be deployed. Also, EBIs occasionally prove to be ineffective with little understanding of why.
- Implementation science (IS) is the scientific study of methods to promote the systematic uptake of research findings and other EBIs into routine practice, and, hence, to improve the quality and effectiveness of health services.
- IS highlights the importance of implementation strategies and related outcomes in deploying EBIs.
- IS does not preclude the evaluation of intervention effectiveness: Hybrid implementation-effectiveness study designs allow for evaluations of implementation and effectiveness in parallel. Mixed methods are inherent to IS initiatives.

Aim: To develop an IS research study protocol evaluating both implementation and effectiveness of an EBI to improve engagement.

METHODS

Scoping literature review to identify EBIs.
- Three types of IS Frameworks were considered to guide and understand: 1) Process; 2) Determinants (barriers and facilitators); and 3) Evaluation (outcome measures for implementation and effectiveness of the EBI).
- The Standards for Reporting Implementation Science Studies (StaRI) Statement was used to guide protocol development and reporting.

RESULTS

Objective 1: The Enhanced Replicating Effective Programs (eREP) was used as the process framework (intervention and implementation planning).

Objective 2: Using the Tailored Implementation for Chronic Disease (TICD) framework, we identified important B&F to delivery of the EBI and prioritized implementation strategy measures to enhance adoption.

Outcomes (e.g., implementation, system, and client), as per Proctor et al., will inform the evaluation of the intervention and selected implementation strategies.

A combination EBI, inspired by previous literature, will be adapted to the CVIS clinic. It consists of two core elements: 1) Identifying and documenting LTFU patients; and 2) Contacting LTFU patients.

To guide the project, development of the implementation strategy, and the analysis,
- eREP, TICD, and Proctor et al.’s implementation outcomes were combined into one framework.
- Barriers and facilitators will be identified qualitatively through focus groups.
- Outcomes will be assessed quantitatively through questionnaires and project monitoring.

ADAPTING & OPERATIONALIZING THE EBI

- To adapt core elements of the intervention, we determined peripheral (adaptable) components for:
  1. Identifying and documenting LTFU patients, specifically:
    - a LTFU risk prediction tool; and
    - an automated, real-time list to identify and prioritize re-engagement of LTFU patients.

Lost & Found: Study Objectives & Methods

Objective 1: To assess provider-related implementation outcomes (acceptability, feasibility, fidelity, and adoption) and implementation determinants to evaluate the implementation of the intervention.

Objective 2: To assess the effectiveness of the intervention, as implemented, by determining the proportion of LTFU patients who are re-engaged in care over a one-year period.

Study design: A single-arm, pre-post, mixed-methods prospective pilot study using a type 2 effectiveness-implementation hybrid design is proposed.

CONCLUSIONS

Lost & Found, a clinic-based IS research protocol was successfully developed after integrating and using multiple IS frameworks.

By using an IS lens, we will optimize the real-world adaptation of a care-reengagement EBI and report on both implementation and effectiveness outcomes.

The pilot study began April 16, 2018.

If successful, implementation and effectiveness of our EBI will be evaluated using a stepped-wedge cluster randomized trial.