Introduction

- Of the ~1.3 million Canadians and Americans living with HIV less than a third make it through the cascade of care from diagnosis to the viral suppression.
- Once linked to care 20-40% are lost to follow-up (LTFU).
- Those LTFU represent a poorly defined dynamic group that contributes to increased HIV transmission and healthcare costs, confounds the accuracy of epidemiological reporting, and have increased HIV-associated morbidity.

Study Cohort

- The Southern Alberta Clinic (SAC), located in Calgary, Alberta, is the primary site of HIV care for 93% of people living with HIV (PLWH) within a region of ~1.5 million residents and an HIV prevalence of 133/100,000 (~0.13%).
- All HIV care is centralized to a single clinic where services including all HIV medications are provided free of charge to patients under a universal healthcare system.
- The SAC cohort consists of diagnosed PLWH in the province whose medical records post diagnosis were available for record review.
- SAC clinic clinical outcomes and population epidemiological data form the basis of this study.

Materials and Methods

- Study population: Adult SAC cohort participants engaged in care, defined as ≥2 clinic appointments and HIV related labs within preceding 12 months.
- Data sources: SAC clinic database and provincial electronic health record (EHR) capturing healthcare encounters, community labs, and prescriptions (Alberta Network).
- Definition of LTFU:
  - SAC cohort: ≥12 month from last clinic appointment without formal transfer of care, and documented death.
  - EHR data: in-province healthcare encounters from EHR without re-linkage to HIV care.
  - SAC care: EHR labs/prescriptions post LTFU showing engagement in HIV care, within province but outside of region (Northern Alberta Clinics), without record/request of transfer.
  - Lost: no further medical records after LTFU.
- SAC cohort: consists of diagnosed PLWH in the geographic catchment area and has prospectively gathered demographic, clinical, and biologic sample data since 1989, with more than 42000 patients enrolled.

Research Objectives

1. Quantify and characterize those LTFU in the SAC cohort.
2. Determine if and how often non-HIV healthcare services are being accessed by those LTFU.
3. Evaluate HIV outcomes amongst those LTFU.

Results

- SAC Cohort HIV Care Cascade: Alberta diagnosis 2006-13

Discussion & Implications

- Retrospective design & limited non-uniform EHR data on those LTFU were major limitations of our study, while short period of follow-up limits conclusions about impact of HIV progression.
- LTFU rate was low in our cohort compared with other published North American & European cohorts (9% vs. 6.30%–15%) potentially reflecting our strict definition of engagement in care & non-inclusion of those linked but not engaged.
- Younger age and distance from HIV clinic predicting LTFU as well as Hispanic ethnicity being protective are consistent with findings in other cohorts; however, unlike other cohorts we did not identify gender or recent HIV diagnosis as being associated with LTFU.
- Native Canadian ethnicity predicting LTFU has not been well described but may reflect known social disparities that disproportionately impact this population in Canada. Further targeted research is needed.
- Although the number of LTFU with EHR data in our cohort was small this group provides novel insight into LTFU healthcare access patterns and underscores the need for interventions to improve re-linkage to HIV care following treatment interruptions in care.
- The finding that greater previous engagement in care predicted return to care amongst LTFU reinforces the need for care retention interventions targeting groups at greatest risk of LTFU.

Conclusions

- Predictors of LTFU in this cohort were:
  - Younger age
  - Native Canadian ethnicity
  - Distance to HIV clinic (residence outside of Calgary)
  - Lower CD4 counts & unprogressed VL.
  - Greater prior engagement in care predicted return to care.
  - Movement amongst provincial HIV care providers frequently occurred without formal transfer often resulting in interruptions in care.
  - A majority (55%) of LTFU in HIV care were also lost to the greater provincial healthcare system without any records of healthcare contact for an extended period.
  - 14% of LTFU had frequent healthcare contacts without re-linkage to HIV care, representing missed opportunities to re-engage.

Citations

- JAIDS. 2012;60(3):249-59.

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Poster Information

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Figure 3: Percent of SAC cohort participants who were diagnosed locally between 2006 – 13 grouped by HIV care continuum category