**Title:** Home and community based ART adherence clubs: a model of care for antiretroviral treatment (ART) delivery outside the clinic setting

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## Introduction:

Community models of care supporting long term retention of growing ART populations are receiving increasing attention. The community ART adherence clubs (CC) moved Médecins Sans Frontières' model from venues within or nearby a clinic to a club member's home or community venue near their homes. Groups of 15-30 patients meet every 2 months and receive pre-packed ART from a lay healthcare worker. Club members have their viral load (VL) taken prior to an annual clinical consultation at their clinic. When a club member has a high VL (>400), requires clinical follow-up, or misses their scheduled club visit, they return to mainstream care for enhanced clinical and adherence support.

## Methods:

Patients enrolled in CCs from May 2012 - November 2014 were included. Patient baseline characteristics, longitudinal VL data and retention in care outcomes were collected from clinic records. Patients with no recorded clinic or CC visit for three months were counted as lost to follow-up (LTFU).

## **Results:**

Amongst 203 patients enrolled, 78% were female and median age was 36.7 (IQR 32.2 – 42.8). Median time on ART prior to CC enrolment was 3.6 years (IQR 2.2-5.5) and in CCs was 336 days (IQR 224 – 728). 101 patients had more than 1 year of follow-up.

Overall 196 (97%) were retained, 172 (85%) in CC care, 22 (11%) in clinic care, 2 (1%) transferred out and seven (3%) were LTFU. Of those retained in CC care, 153 had at least one VL since club enrolment and 145(95%) were suppressed. Of those who returned to clinic care, 4 (18%) had a high VL when exiting the club.

Amongst those with 1 year of follow-up, 100(99%) were retained, 95 (94%) in CC care, 5 (5%) in clinic care, with 1 (1%) LTFU.

## **Conclusion:**

CCs ensure access to ART for patients close to home, supporting high rates of retention and adherence. This model reduces patient load in clinics, empowers patients to self-manage and may reduce community stigma. Similar models should be considered for wide-scale implementation, requiring emphasis a reliable drug supply, trained and supported lay healthcare workers, adapted monitoring systems, effective referral pathways, and adequate funding.

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