

# **Long-acting antiretroviral therapy promotes engagement, retention in clinical care and virological suppression among hard-to-reach and vulnerable people living with HIV**

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## **Background:**

Engagement in care is regarded as requisite for achieving virological suppression among the hard to reach and vulnerable populations living with HIV. Strategies to improve the cascade of care have focused on removing barriers, support, and counselling-based interventions. Long-acting antiretroviral therapies (LA-ART) lower the barrier to adherence compared with daily pill-taking and facilitate regular nurse-led clinical contact. We sought to determine whether use of LA cabotegravir plus rilpivirine among those in REACH, a hospital-based service for hard to reach/vulnerable, would lead to a change in subsequent engagement and retention in care, duration of virological suppression and broader health outcomes.

## **Methods:**

Of 166 individuals in REACH, the medical records of the 34 individuals currently receiving LA cabotegravir plus rilpivirine were examined. Complexity was quantified using a validated tool (CCRS-HIV). Demographic information, adherence to injection clinic attendance and nurse review, serial HIV RNA concentrations, and health service episode data were analysed.

## **Results:**

Among this cohort, 82% of individuals had CCRS-HIV scores >40 (classified as complex presentations), 24% were experiencing homelessness or unstable housing. 24% required support from public health case management and 26% were engaged with community services including case management, disability support and homelessness services. Fifteen percent identified as Aboriginal. There were six individuals who commenced LA cabotegravir plus rilpivirine with HIV viremia above 40cps/ml (range 43 to 6340 cps/ml). After commencement of injections, 95.9% of doses occurred within target dosing windows over a mean 45.6 weeks (range 4 to 92 weeks) and administered consistently in a nurse-led clinic. Since commencement of LA ART, all 34 individuals have had sustained virological suppression. Analysis of effects of broader health outcomes are ongoing and will be presented.

## **Conclusions:**

LA ART has led to sustained virological suppression and engagement in regular nurse-led care among the most hard-to-reach and vulnerable people living with HIV.

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