# HOSPITALISATIONS OVER A YEAR FOLLOW-UP IN A COHORT OF ADULTS LIVING WITH HIV WITH SUSTAINED VIRAL SUPPRESSION IN AUSTRALIA

### Authors:

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#### Background

Patients successfully treated with antiretroviral therapy (ART) for HIV develop few AIDS-defining events, are successfully aging and living longer. This longitudinal analysis aimed to understand the reasons and risks for hospitalisation.

#### Methods

We recruited a national cohort of adults living with HIV on stable ART at 17 sites. A 90-item survey recorded demographics, physical health, life stressors, social supports, HIV disclosure, stigma/discrimination, healthcare access, treatment adherence, side effects, health/treatment perceptions, and financial/employment status. Neurocognitive, clinical and virological data were collected; including hospitalisations over 12 months. Baseline variables that were bivariately associated with hospitalisation (p<0.05) in the following year of follow-up were included in a Cox proportional hazards regression model.

# Results

Of 522 adults, 94.5% were male, mean age 50.8 years, mean HIV duration 12 years, median ART duration 11.0 years (IQR 1.2-6.8), median duration HIV RNA <50 copies/mL 3.3 years (IQR 1.2-6.8). Over 12 months, 94 (18.0%) participants had 143 hospitalisations. Hospitalisations were for various non-AIDS reasons including serious non-AIDS events (SNAEs) (see **Table**). Twenty-eight baseline variables bivariately associated (p<0.05) with hospitalisation over the following 12 months. However, the only variable significant in multivariable Cox regression was having started ART to prevent HIV disease progression (adjusted hazards ratio 0.6 [95% confidence interval 0.4-0.9] p=0.029).

# Conclusions

In this population of adults with suppressed HIV, hospitalisations were common over 12 months, mostly for procedures (minor/diagnostic) or SNAEs. Preventable reasons for hospitalisation included accidents, renal issues and infection. Hospitalisations were largely not predictable, the only significant variable being starting ART to prevent HIV progression, potentially a surrogate for early HIV.

### Table Reasons for hospitalisation

Reason for hospitalisation	Episodes, n (%)
Procedure – minor/diagnostic	25 (17.5)
SNAE	14 (9.8)
Accident/assault	13 (9.1)
Renal (stone/calculus/tumour/UTI)	11 (7.7)
Neurological	11 (7.7)
Infection	11 (7.7)
Cardiac (non-SNAE)	8 (5.6)
Other (various)	50 (34.9)
Total	143 (100)

# **Disclosure of interest statement**

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