# OPPORTUNITIES TO REDUCE HEALTH RISKS FOR PEOPLE WITH HIV AND HIGH LEVELS OF MULTIMORBIDITY

## Authors

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### Background:

Multimorbidity as measured by a Cumulative Illness Rating Scale (CIRS) predicts unplanned admission. We aim to describe those with higher levels of multimorbidity and explore opportunities to improve care.

#### Method:

Attendees of 4 North Coast NSW Sexual Health Services between 1 December 2016 and 1 April 2018 were recruited and consented to participate in a study of changes in multimorbidity. The treating specialist completed CIRS for each participant and those with upper quartile CIRS scores were compared to the remainder in respect to demographic data, specific conditions and care characteristics. As antiretroviral recommendations change rapidly, antiretrovirals currently used and changes since 2013 were included in the analysis. Comparison was by t-test for means and chi-squared statistic for proportions.

## **Results:**

Complete data was available for 286 of 298 people recruited. Most were men (90.9%). The median CIRS score was 6 (IQR 4-10, range 0-21). HighCIRS, a score of 11 or more, were older (mean 61.5 vs 52.2yrs, p <0.001), had a longer duration of HIV (mean 23.3 vs 16.9yrs, p<0.001), but did not differ by gender. HighCIRS were more likely to have vascular disease (65.5% vs 32.0%, p<0.001), diabetes (10.9% vs 1.7%, p = 0.001), renal disease (10.9% vs 1.3%, p<0.001), osteoporosis (20.0% vs 4.3%, p<0.001) and mental health concerns (36.4% vs 22.5%, p=0.033) but were no more likely to have alcohol and drug concerns (12.7% vs 11.3%, p=0.759).

HighCIRS were more likely to have shared care with a GP (72.7% vs 48.1%, P = 0.001), and had a higher mean number of letters to the GP in the previous year (1.3 vs 0.5, p<0.001). HighCIRS were more likely to be using protease inhibitors (41.8% vs 18.6%, p<0.001). This group had a higher mean number of antiretroviral tablets prescribed (2.2 vs 1.6, p<0.001) and had fewer changes in antiretrovirals in the preceding 5 years (1.2 vs 1.6, p=0.003).

## **Conclusion:**

The CIRS score identified a subgroup of people with distinct health and care characteristics who were prescribed more antiretroviral tablets, were more likely to be prescribed protease inhibitors and had less antiretroviral changes. Protease inhibitors increase the risk of drugdrug interactions and multiple tablets increase the pill burden for people with HIV, so opportunities to adjust antiretrovirals safely should be considered.

#### **Disclosure of Interest Statement:**

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