# CHARACTERISATION OF POPULATIONS WITH HEPATITIS C TO IMPROVE ACCESS TO ANTIVIRAL THERAPY PROGRAMS: A POPULATION-BASED LINKAGE STUDY

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**Background:** The aim of this study was to assess the characteristics of people who inject drugs (PWID), and evaluate common co-morbidities among current PWID and non-PWID with a hepatitis C virus (HCV) notification in NSW.

**Methods:** HCV notifications 1993-2012 were linked to hospital admission data 2000-2014. Injecting drug use (IDU)-related admissions were defined by hospitalisation due to injectable drugs and/or injecting-related infectious disease.

**Results:** Study population comprised 95,005 people with an HCV notification, 32% (n=30,702) of whom had no episode of hospitalisation, and 68% (n=64,303) were hospitalised at least once during the study period. Among those with a recorded hospital admission, 28,468 individuals never received opioid substitution therapy (OST), and had no IDU-related admission (group 1), 13,180 people had no history of OST, but at least one IDU-related admission (group 2), and 17,399 people had a history of OST and at least one IDU-related admission (group 3). Current PWID included individuals in groups 2 and 3. Group 1 had the oldest age distribution (median birth year 1962, IQR 1956-1970); drug-, liver-, and alcohol use disorder-related admissions comprised <1%, 6%, and 3% of hospitalisations in this population, respectively. In group 2, median birth year was 1965 (IQR 1956-1973); drug, liver-, and alcohol use disorder-related admissions comprised 5%, 5%, and 7% of their hospitalisations, respectively. Group 3 had the youngest age distribution (median birth year 1971, IQR 1964-1978); drug-, liver-, and alcohol use disorder-related admissions comprised 17%, 3%, and 5% of hospitalisations in this population, respectively.

**Conclusions:** People with HCV infection have high levels of co-morbidities. Hospitalisation could be utilised for enhanced HCV RNA screening/confirmatory testing and consideration for HCV treatment commencement, particularly for more marginalised current PWID with longer planned inpatient care for injecting-related infectious diseases.