HEPATITIS C VIRUS (HCV) TESTING, LIVER DISEASE ASSESSMENT AND DIRECT-ACTING ANTIVIRAL (DAA) TREATMENT UPTAKE AND OUTCOMES IN A HOMELESS SERVICE IN SYDNEY, AUSTRALIA: THE LIVERLIFE STUDY

Bajis S[1], Smith J[2], Owen G[2], Cooper L[2], Chudleigh A[2], Hajarizadeh B[1], Martinello M[1], Mowat Y[1],Tamaddoni M[1], Marshall AD[1], Adey S[3], Read P[4], Gilliver R[4], Treloar C[5], Maher L[1], Grebely J[1], Dore GJ[1] on behalf of the LiveRLife Study Group

[1]The Kirby Institute, UNSW Sydney, Sydney, New South Wales, Australia; [2]Matthew Talbot Hostel, St Vincent de Paul Society NSW Support Services, Sydney, New South Wales, Australia; [3]NSW Users and AIDS Association, Sydney, New South Wales, Australia; [4]Kirketon Road Centre, Sydney, New South Wales, Australia; [5]Centre for Social Research in Health, UNSW Sydney, New South Wales, Australia

Background:
People who are homeless are vulnerable to illicit drug use and HCV, and have poor access to primary healthcare. We aimed to determine prevalence of HCV infection, liver fibrosis burden, and DAA treatment uptake and outcomes among people who are homeless in Sydney, Australia.

Methods:
Participants were enrolled in an observational cohort study with recruitment at a service for the homeless over eight liver health campaign days in February and December 2016. Inclusion criteria were age ≥18 years and written informed consent. Finger-stick whole-blood samples for Xpert® HCV Viral Load and venepuncture blood samples were collected. Participants completed a self-administered survey and received transient elastography and clinical assessment by a general practitioner or nurse. Clinical follow-up was recommended 2-12 weeks after enrolment. For participants initiating DAA therapy, medical records were audited retrospectively and data on treatment outcomes were collected.

Results:
Among 205 participants (median age, 47 years), 6% (n=13) were female, 40% reported ever injecting drugs (n=83), of whom 58% (n=48) injected in the last month and 28% (n=23) were receiving opioid substitution treatment. Overall, 24% (n=49) of participants had detectable HCV RNA and 5% (n=10) had cirrhosis (≥12.5kPa). Among those with detectable HCV RNA, 20 (41%) commenced DAA treatment (sofosbuvir/ledipasvir for genotype 1a, n=11; sofosbuvir/daclatasvir for genotype 3, n=9). Sixteen were treated at the homeless service by a general practitioner and four were referred for specialist treatment. Among those treated at the homeless service, 69% (11 of 16) achieved sustained virological response (SVR12), and five were lost to follow-up.

Conclusion:
HCV DAA treatment uptake among people who are homeless participating in this study was encouraging. No virological failure was documented, but further efforts are required to optimise follow-up. Innovative HCV models of care are needed to increase treatment uptake and retention in care among people who are homeless.

Disclosure of interest Statement:
The Kirby Institute is funded by the Australian Government Department of Health and Ageing. The views expressed in this publication do not necessarily represent the position of the Australian Government. SB is supported by an Australian Postgraduate Award from UNSW Sydney. JG is supported by a National Health and Medical Research Council Career Development Fellowship. GD is supported by a National Health and Medical Research Council Practitioner Research Fellowship. JG is a consultant/advisor and has received research grants from Abbvie, Cepheid, Gilead Sciences and Merck/MSD. GD is a

consultant/advisor and has received research grants from Abbvie, Bristol Myers Squibb, Gilead, Merck, Janssen and Roche. LM is supported by a National Health and Medical Research Council Senior Research Fellowship.