## A point-of-care intervention to improve hepatitis C diagnosis and treatment uptake among people attending Aboriginal Community Controlled Health Services: the SCALE-C study

## Authors:

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**Background:** In Australia, First Nations Peoples are a priority population for hepatitis C virus (HCV) elimination. This study evaluated the prevalence and factors associated with current HCV infection among people attending Aboriginal Community Controlled Health Services (ACCHS) in regional Australia.

**Methods:** "Strategies for hepatitis C testing and treatment in Aboriginal communities that Lead to Elimination" (SCALE-C) was a community-based "test and treat" intervention integrating point-of-care HCV testing, non-invasive liver fibrosis assessment, and linkage to care in four ACCHS. A standardised simple HCV risk assessment guided choice of point-of-care test: HCV antibody (Bioline HCV) for those at no/low risk (defined as no lifetime history of HCV, injecting drug use or incarceration), HCV RNA (Xpert HCV Viral Load Fingerstick) for those at risk. Participants with HCV infection were offered direct-acting antiviral treatment. This analysis focused on people with HCV infection and/or reported lifetime risk. Factors associated with HCV infection were assessed using logistic regression.

**Results:** Between May 2018-July 2022, 536 individuals were enrolled (79% Aboriginal and/or Torres Strait Islander; 49% women; median age, 39 years), of whom 528 had HCV testing. Among those who reported no/low or unknown risk (n=275), 2 (<1%) participants had detectable HCV RNA. Among those at risk (n=252), 43 (17%) participants had detectable HCV RNA.

Among people with HCV infection and/or lifetime risk who had known HCV status (n=246), median age was 38 years, 78% identified as Aboriginal and/or Torres Strait Islander, and 29% were women. HCV infection was associated with injecting in the last month (adjusted odds ratio: 5.5; 95%CI: 1.2, 24.7, p=0.027).

Among participants with HCV infection (n=45), 28 (62%) initiated treatment, and 16 (57%) achieved sustained virological response.

**Conclusion:** Risk-based screening with point-of-care HCV testing at ACCHS facilitated diagnosis. Additional interventions are required to reduce the HCV burden among Aboriginal and Torres Strait Islander Australians.

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