

## **Screening Emergency Admissions at Risk of Chronic Hepatitis 3 Extension (SEARCH-3X): universal is better than risk-based screening for viral hepatitis**

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**Background:** Despite availability of curative therapies for hepatitis C virus (HCV), many Australians remain undiagnosed or not linked with care. We evaluate the use of universal, automated HCV screening in the emergency department (ED).

**Methods:** A novel pilot clinical service, Screening of Emergency Admissions at Risk of Chronic Hepatitis eXtension-3(SEARCH-3X) was implemented at five EDs in Sydney. A computer-algorithm automatically added hepatitis C antibody (HCVAb) when adults underwent routine biochemistry testing in ED. Data on demographics, prevalence, and clinical care were collected. Ethics:2022/ETH00158.

**Results:** Data is available from 3/5 sites. Of 15,313 unique patients tested, 2.1%(317) were HCVAb positive, of whom 98%(310/317) were medically fit for follow-up, of whom 98% (303/310) were contactable, and 94%(292/310) underwent HCV RNA testing.

HCVAb prevalence was 10.2%(55/537) in Indigenous Australians, 2.2%(139/6330) in non-Indigenous Australians, and 1.5%(123/8446) in overseas-born patients. The highest prevalence was among those born in Cambodia (6.4%,13/204), Vietnam (6.0%,37/618), and Egypt (5.0%,6/119).

New HCV diagnoses were made in 11%(33/310). Current HCV Infection (RNA positive) was detected in 14% of HCVAb positive with RNA testing (40/292), of whom 73%(29/40) reported no prior treatment. Of current HCV patients, 85%(34/40) initiated treatment, 10%(4/40) were contraindicated, and 5%(2/40) were lost-to-follow-up. Of the 34 initiating treatment, 76%(26/34) completed treatment at time of reporting. Among HCVAb positive patients without current HCV, 68%(171/252) reported prior treatment. At screening, among those “ever treatment eligible” (previously treated plus untreated HCV RNA positive, n=223) prior treatment coverage was 87%. There were no patient complaints and ED operations were unaffected.

**Conclusion:** Universal automated ED screening is an effective strategy to identify and treat HCV cases. A large proportion of those ever-eligible have been treated, but most patients with current HCV at screening were untreated. Data analysis from five sites (25,000 tested) will be available later in 2025.

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

*We recognize the considerable contribution that industry partners make to professional and research activities. We also recognize the need for transparency of disclosure of potential conflicts of interest by acknowledging these relationships in publications and presentations.*