

# Estimating Progression Through The Cascade Of Care Among Patients With Hepatitis C Infection In Victoria, Australia After The Introduction Of Direct-Acting Antivirals

Michael Traeger<sup>1</sup>, Alisa Pedrana<sup>1,2</sup>, Bridget Draper<sup>1</sup>, Jason Asselin<sup>1</sup>, Joseph Doyle<sup>1,3</sup>, Carol El-Hayek<sup>1</sup>, Jessica Howell<sup>1,2,3,4</sup>, Alexander Thompson<sup>4,5</sup>, Margaret Hellard<sup>1,2</sup>, Mark Stoové<sup>1,2</sup>

## Background

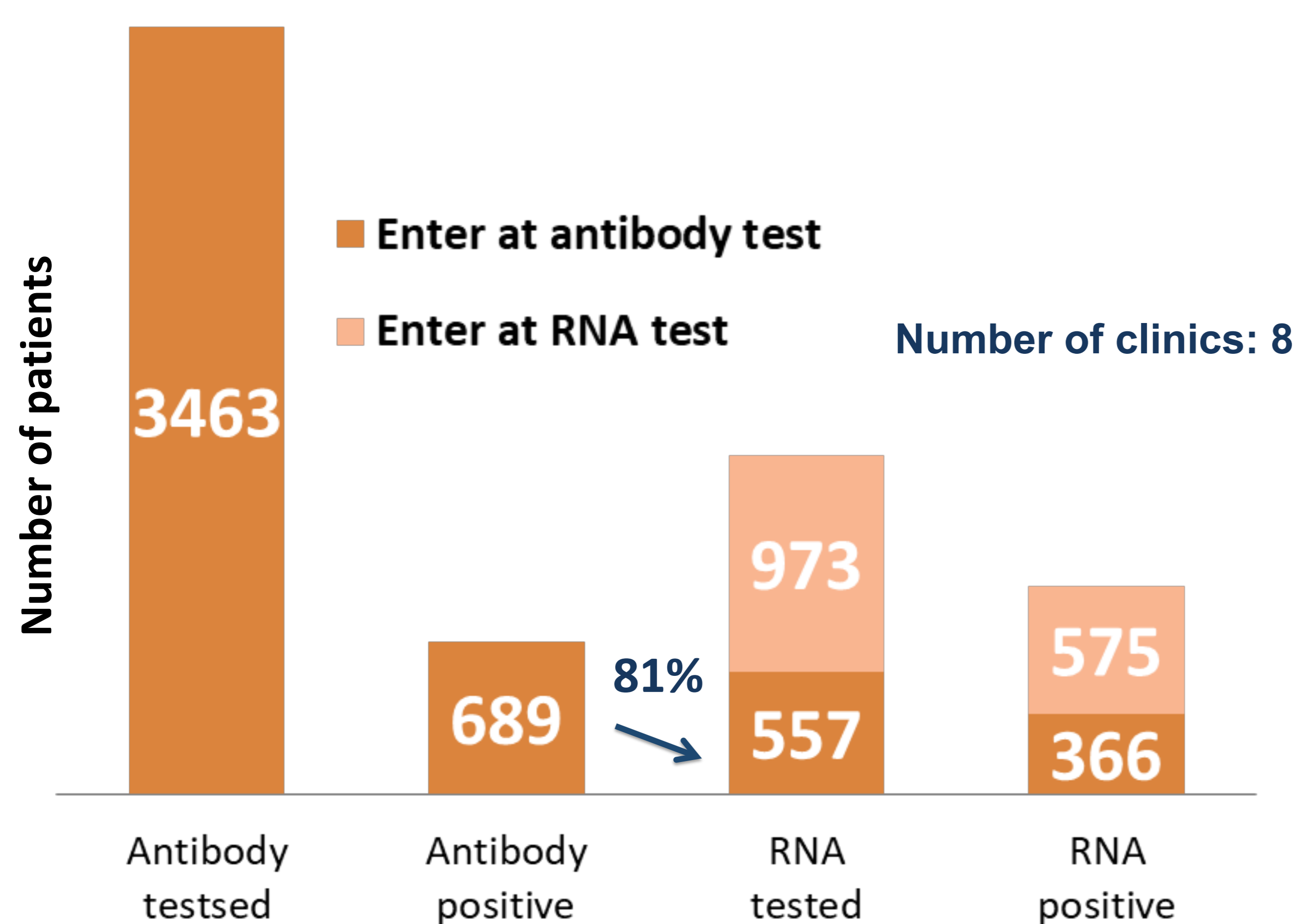
- Hepatitis C virus (HCV) direct-acting antiviral (DAA) treatments were listed for public subsidy in Australia in March 2016
- National elimination strategies focus on testing and treatment uptake among people who inject drugs (PWID), and achieving elimination targets will require localised responses at the health service level
- The Eliminate Hepatitis C (EC) partnership is working towards establishing a community-based treatment program to increase HCV treatment uptake in PWID using nurse-led models of care in the community
- We use epidemiological surveillance data to describe the current state of patient progression through the HCV care cascade among patients attending health services in Victoria, Australia post-DAA introduction

## Methods

- HCV testing and treatment data were extracted retrospectively between March 2016 and March 2018 via the Australia Collaboration for Coordinated Enhanced Sentinel Surveillance of STIs and Blood-borne Viruses (ACCESS)<sup>1</sup>
- We extracted patient data from eight services participating in ACCESS which engage large numbers of PWID, including community health centres and primary care clinics
- We calculated network-wide HCV care-cascades describing the progression of patients transitioning between screening, diagnosis, treatment and sustained virologic response 12 weeks post-treatment (SVR12)

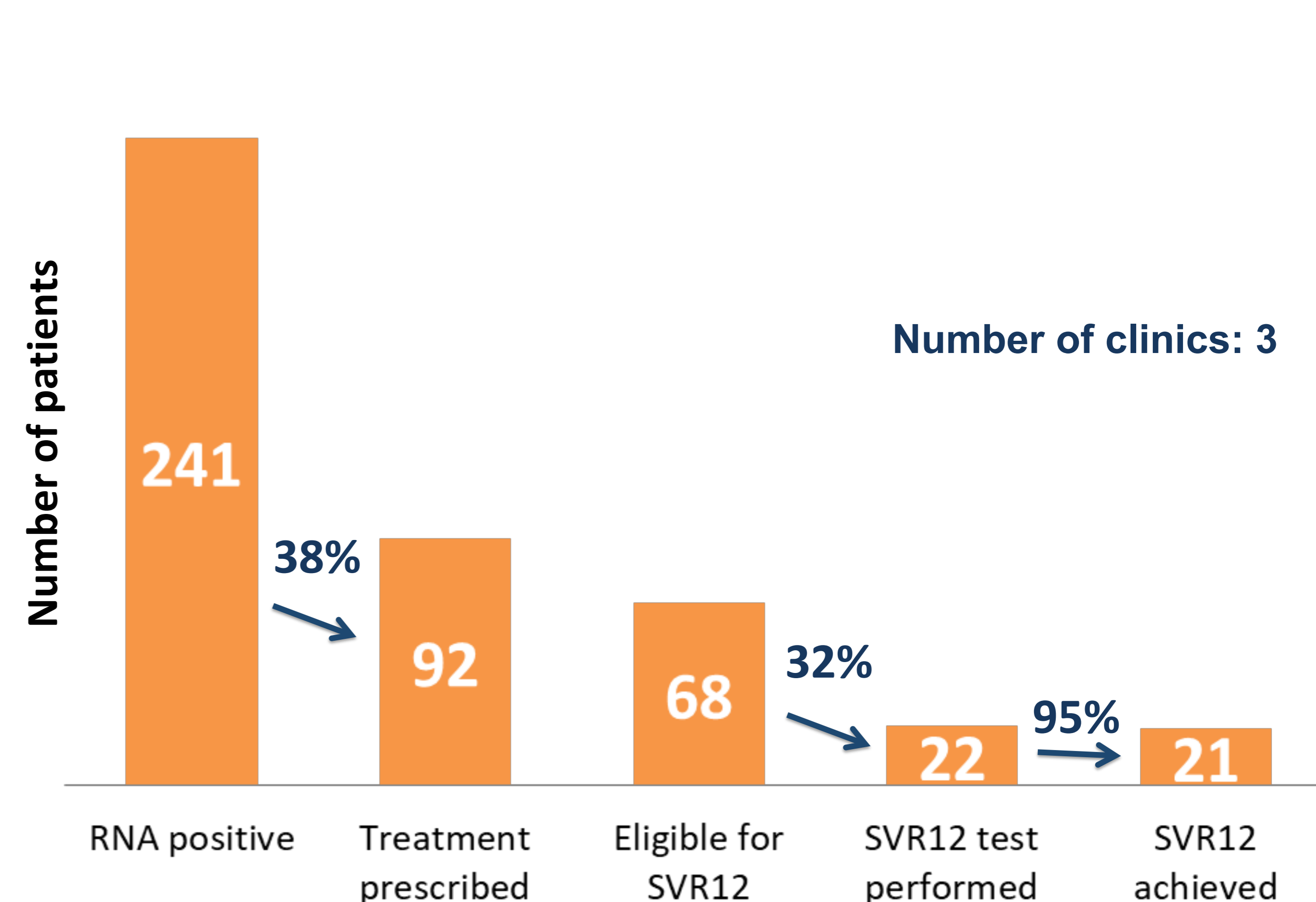
## Testing

- Between March 2016-March 2018, 50,568 unique patients visited included clinics
- 4367 patients (9%) were screened for HCV (antibodies or RNA)
- Of 3463 patients tested for HCV antibodies, 689 (20%) were antibody-positive
- Antibody positivity ranged from 11% to 68% across services
- 557 antibody-positive patients (81%) underwent subsequent RNA testing
- 973 patients had an RNA test as their first test event during the study period
- RNA positivity of those tested was 62%



## Treatment and SVR12

- Electronic prescription data were available from three services only
- At these services, 241 patients tested HCV RNA-positive during the study period
- Of the 241 RNA-positive patients, 92 (38%) were prescribed DAA treatment at the clinic where they were tested
- Of 68 patients on treatment with sufficient follow-up time during the study period for an SVR12 RNA test, 22 (32%) completed SVR12 testing
- 21 of 22 patients (95%) receiving SVR12 testing successfully cleared the virus



## Discussion

- HCV screening was relatively low across our clinical network, and antibody positivity among those tested varied significantly across services. This indicates a need for increased screening targeted towards those most at risk of HCV infection.
- Among patients receiving positive antibody test results, subsequent RNA testing was relatively high (81%).
- At clinics with available prescription data, treatment uptake was low among RNA-positive patients, and less than a third of those starting hepatitis C treatment returned for SVR12 testing at the service where they received treatment.
- Epidemiological surveillance data can be used to drive services delivery improvements, and can help identify gaps in the cascade of care at the clinic-level.
- These data suggest a need to focus on increasing HCV treatment uptake and retention in care among HCV-infected individuals visiting community health centres and general practices.

### References

<sup>1</sup>Callander D, Moreira C, El-Hayek C, et al. Australian Collaboration for Coordinated Enhanced Sentinel Surveillance (ACCESS): A Protocol for Monitoring the Control of Sexually Transmissible Infections and Blood Borne Viruses.

**Author Affiliations:** <sup>1</sup>Disease Elimination Program, Public Health Discipline, Burnet Institute, Melbourne, Australia; <sup>2</sup>Department of Epidemiology and Preventive Medicine, Monash University, Melbourne, Australia; <sup>3</sup>Department of Infectious Diseases, The Alfred and Monash University, Melbourne, Australia; <sup>4</sup>Department of Gastroenterology, St Vincent's Hospital Melbourne, Melbourne, Australia; <sup>5</sup>Department of Medicine, University of Melbourne, Melbourne, Australia

**Correspondence:** michael.traeger@burnet.edu.au

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