

## TRENDS IN TIME TO TREATMENT INITIATION AMONG PEOPLE DIAGNOSED WITH HEPATITIS C IN A NETWORK OF AUSTRALIAN CLINICAL SERVICES BETWEEN 2015-2019

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**Background:** Monitoring of hepatitis C cascades of care has relied largely on serial cross-sectional estimates of the distribution of populations across cascade stages. Improvements in cross-sectional cascade estimates over time are influenced by improvements in clinical care, but also declining incidence and the progression of time. We explored changes in time between hepatitis C diagnosis and treatment initiation among individuals attending Australian clinical services.

**Methods:** Data were extracted from 55 services participating in an Australian sentinel surveillance network (ACCESS). Individuals were included in analyses if they had evidence of seroconversion (a negative HCV-antibody test followed by a positive HCV-antibody or RNA test; “seroconversion-case”) or a positive HCV-RNA test on their first ACCESS record (“prevalent-case”). We calculated the proportion of individuals with evidence of DAA treatment and the median number of days between diagnosis (first RNA-positive date) and treatment initiation. We used Kaplan-Meier methods to estimate the 1-year (since diagnosis) cumulative incidence of treatment initiation, disaggregated by year of diagnosis (2015-2019).

**Results:** 654 seroconversion-cases and 4,595 prevalent-cases were detected between 2015-2019. 35% of seroconversion-cases (median time to treatment-initiation, 122 days) and 44% of prevalent-cases (median time to treatment-initiation, 84 days) had evidence of DAA treatment within the ACCESS network up to December 2020. Among all 5,244 individuals, the cumulative 1-year incidence of treatment initiation since diagnosis increased from 8.3% among those diagnosed in 2015, to 35.9% in 2016 and 44.9% in 2017, then decreased to 42.4% in 2018 and 41.8% in 2019. Trends were similar across seroconversion-cases and prevalent-cases.

**Conclusions:** While traditional cascades show improvement over time, our analysis shows the proportion of individuals initiating treatment within 1 year of HCV diagnosis within our network has decreased since 2017. Slower treatment uptake in may reflect depletion of treatment-ready individuals. Strategies to reduce loss-to-follow-up will be important in maintaining treatment numbers required to reach elimination targets.

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