AUSTRALIA WILL NEED TO INCREASE TESTING TO ACHIEVE HEPATITIS C ELIMINATION

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Background: Unrestricted government-subsidized direct-acting antiviral (DAA) treatment for hepatitis C means Australia is well placed to achieve the WHO hepatitis C elimination targets. We aimed to assess national progress towards these targets.

Methods: Quarterly data from January 2013 to June 2018 on governmentsubsidized hepatitis C RNA testing and hepatitis C treatment were obtained (accounting for almost all testing and treatment in Australia). An autoregressive integrated moving average (ARIMA) model was used to measure changes in testing and treatment associated with DAA availability. The potential epidemiological impact of continued testing and treatment trends was estimated using a mathematical model.

Results: In 2015, an estimated 227,000 Australians lived with hepatitis C. From 2013-2015 (pre-DAA), an average of 6,747 treatments were initiated per year. This increased over 4-fold to an average 28,010 treatments per year between 2016 and mid-2018 (post-DAA), but with a declining trend after a peak of 35,659 treatments in 2016. From 2013-2015, there were an average of 17,385 diagnostic RNA tests per year, which increased to an average 23,819 per year between 2016 and mid-2018. If current trends in testing and treatment continue, the model projected that all those diagnosed would be treated by 2025, and by 2030 only 70% of those infected would be treated, leading to a 59% reduction in incidence, well short of the WHO 80% reduction target. We estimate that a 50% increase in the identification and testing of people exposed to hepatitis C is required for Australia to reach the WHO elimination targets.

Conclusion: Australia's hepatitis C elimination programs should focus on increasing testing to ensure there is sufficient linkage to care and treatment uptake to achieve the 2030 targets.

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