

# A COST-EFFECTIVENESS ANALYSIS OF PRIMARY VERSUS HOSPITAL-BASED SPECIALIST CARE FOR DIRECT ACTING ANTIVIRAL HEPATITIS C TREATMENT

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**Background:** Hepatitis C virus elimination may be possible by scaling up direct-acting antiviral (DAA) treatment. Due to the safety and simplicity of DAA treatment, primary-based models of care are now feasible, efficacious and may be cheaper than hospital-based specialist care. The Prime Study was a randomised controlled trial comparing the uptake of DAA treatment and cure outcomes between primary and hospital-based care settings. In this paper, we use Prime Study data to estimate the cost of initiating treatment for people diagnosed with hepatitis C in primary care compared to hospital-based care.

**Methods:** The total economic costs associated with delivering DAA treatment (post hepatitis C diagnosis) within the Prime study – including health provider time/training, medical tests, equipment, logistics and pharmacy costs – were collected. Appointment data were used to estimate the number/type of appointments required to initiate treatment in each case, or the stage at which loss to follow up occurred.

**Results:** Among the hepatitis C patients randomised to be treated within primary care, 43/57 (75%) commenced treatment at a mean cost of A\$1,007 (range: A\$934-1,099) per patient initiating treatment. In hospital-based care, 18/53 hepatitis C patients (34%) commenced treatment at a mean cost of A\$2,197 (range: A\$2,127-2,469) per patient initiating treatment – more than twice as high as primary care.

**Conclusion:** Compared to hospital-based care, providing hepatitis C services in primary care can improve treatment uptake and reduce the costs of treatment initiation. To improve treatment uptake and cure, countries should consider primary-based care as the main model for hepatitis C treatment scale-up.

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