

A COSTING ANALYSIS OF A STATE-WIDE, NURSE-LED HEPATITIS C TREATMENT MODEL IN PRISON

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Background

Hepatitis C is highly prevalent among prisoners. The simplicity of direct-acting antiviral (DAA) treatment for hepatitis C makes it possible to use novel models of care to increase treatment uptake within prisons. We estimate the average non-drug cost of initiating a prisoner on treatment using real world data from the State-wide Hepatitis Program (SHP) in Victoria, Australia – a coordinated nurse-led model of care.

Methods

Data were considered from prisoners presenting to the SHP (following antibody-positive diagnosis) during the evaluation period, November 2015 to December 2016. All costs associated with the SHP were estimated, including staffing salaries, medical tests, pharmacy costs and overhead costs. DAA costs were excluded as in Australia an unlimited number are available, covered by a federal government risk-sharing agreement with pharmaceutical companies. The average non-drug cost of treatment initiation through the SHP was compared to equivalent costs from primary and hospital-based models of care in the community.

Results

The total non-drug cost accumulated by prisoners in the SHP was AUD\$749,470 (uncertainty range: AUD\$728,905-794,111). 659/803 were PCR positive, 424/659 had sentences long enough to be eligible for treatment, and 416/424 were initiated on treatment, resulting in an average non-drug cost of AUD\$1,802 (95% CI: AUD\$1799-1841) per prisoner initiated. A protocol change allowing prisoners with short sentences to start treatment reduced the average non-drug cost to AUD\$1263 (95% CI: AUD\$1263-1287) per prisoner initiating treatment – 11% and 56% cheaper than estimated equivalent costs in primary (AUD\$1654) and hospital-based (AUD\$2847) models of care in the community, respectively.

Conclusion

Delivering hepatitis C treatment in prison using a nurse-led model of care is cheaper than delivering treatment in the community. These findings provide an economic rationale for implementing coordinated prison-based hepatitis C treatment programs.

Disclosure of Interest Statement:

The authors gratefully acknowledge the support to the Burnet Institute provided by the Victorian Government Operational Infrastructure Support Program, the State-wide Hepatitis Program nurse and pharmacy team, Justice Health Victoria and the health service providers in Victorian Prisons. The authors acknowledge investigator-initiated support from Gilead Sciences and National Health and

Medical Research Council for this project. MS and MH are the recipients of NHMRC fellowships. AT received funding from the NHMRC (MRFF Practitioner Fellowship 1142976). NS and APe have received investigator-initiated research funding from Gilead Sciences. AT is an advisory board member for Gilead Sciences, AbbVie, Bristol-Myers Squibb (BMS), Merck and Roche Diagnostics, and a speaker for Gilead, Merck, BMS, AbbVie, Roche Diagnostics. MH, APe and the Burnet Institute receive investigator-initiated research funding from Gilead Sciences, Abbvie and BMS. TP and APe has received honoraria for speaking duties from Gilead Sciences. No pharmaceutical grants were received in the development of this study.