A PRIMARY-CASE BASED MODEL FOR ASSESSMENT AND TREATMENT OF CHRONIC HEPATITIS C INFECTION IN RURAL AND REMOTE REGIONS OF AUSTRALIA

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Background
An approximate 230,000 Australians live with chronic hepatitis C virus (HCV) infection but until recently, only about 1% of patients were receiving the standard care of interferon and ribavirin-based therapy[1]. Furthermore, provision of such HCV antiviral treatment was largely confined to tertiary metropolitan centres[2]. A need existed for the decentralisation of care through alternative models utilising novel means such as telemedicine[3] or task transfer to skilled nurses[4]. The Liver OutReach Australia (LORA) program aimed to improve treatment access in rural and remote settings via a nurse-led, primary care and telemedicine-based model.

Methods
Safety, efficiency and acceptability of the model were evaluated at nine sites across regional Australia. Outcomes including clinical milestone completion and adverse event management were evaluated quantitatively and perspectives on the model were elicited from patients, healthcare providers and external stakeholders by qualitative semi-structured interviews.

Results
The LORA model had good uptake, with 290 patients enrolled, of whom 135 (47%) completed nurse-led assessments and specialist review utilising telemedicine. Of this group 102 (35%) subsequently commenced treatment. There were 147 patients (51%) still in progress in the clinical pathway at study closure. The model was efficient with median intervals between enrolment and work-up completion, and then to specialist review, and to treatment initiation of 37, 14 and 8 days respectively. Of those treated, 15 (15%) discontinued, including 5 due to non-response. There were a total of 16 serious adverse events associated with treatment of which 4 were subsequently determined to have been managed sub-optimally. Sustained virological response was achieved in 57% of patients with complete follow-up data (n=47). The model was widely endorsed by the various stakeholder groups with nurse empowerment and training particularly emphasised. However, weaknesses of the model identified included its failure to establish long-term sustainability in local communities and its timing towards the end of the era of interferon-based therapies.

Conclusion
Success of this model in the interferon era of HCV treatment provides clear evidence for feasibility of decentralised nurse-led care to allow scale up of treatment with the new, simpler direct acting antiviral therapies.

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