



LONG-TERM OUTCOMES OF A NURSE-LED, STATEWIDE MODEL OF CARE FOR HEPATITIS C TREATMENT AMONG PEOPLE IN PRISON IN VICTORIA, AUSTRALIA

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Background & Analysis

Prisons provide a unique opportunity to screen for and treat hepatitis C (HCV). A prison-based, nurse-led, in-reach model of care for HCV treatment was implemented in all prison sites in Victoria, Australia in October 2015. We prospectively evaluated the outcomes of all treatments between 1st November 2015 and 31st December 2021. Data was recorded in a clinical database. The primary endpoint was the number of people commenced on therapy.

Outcomes & Results

- In total, 3,133 treatment courses were prescribed to 2,768 people.
- 13% of all HCV treatment courses prescribed in Victoria, 2016-21, totalling 18%, 23% and 18% of all Victorian DAA prescriptions in 2019, 2020 and 2021 respectively (Graph 1).
- Baseline characteristics are shown in table 1.
- Median age was 39 years, 91% were male, 91% self-reported a history of drug use and 9% had cirrhosis.
- Few people (20%) had engaged in hepatitis C care in the community prior to incarceration.
- Follow up data on treatment outcomes were available for (63%) people, with (93%) achieving SVR12 (table 2).
- The time from first assessment to treatment commencement significantly reduced over the course of the program.

Table 1. Baseline characteristics	N = 2,768
Age, years, median (IQR)	39 [33–45]
Male gender, n (%)	2,506 (91%)
Aboriginal and/or Torres Strait Islander, n (%)	481 (17%)
Heavy alcohol, n (%)	1,151 (42%)
Psychiatric co-morbidity, n (%)	1,688 (61%)
Injecting drug history, n (%)	
Reported IDU history (historic and/or current)	2,516 (91%)
IDU in month prior to incarceration	1,405 (51%)
Age commenced IDU, years, median (IQR)	18 (15 – 21)
Self-reported shared injecting equipment in prison (ever), n (%)	539 (19%)
Opioid agonist therapy, n (%)	1,169 (42%)
Previously engaged in hepatitis C care, n (%)	562 (20%)
Prior hepatitis C treatment, n (%)	179 (6%)
APRI, n (%)	2,360 (85%)
≥1.0	622/2,360 (26%)
Liver stiffness measurement, n (%)	1,768 (64%)
<12.5 kPa	1,158/1,768 (89%)
>12.5 kPa	188/1,768 (11%)
Cirrhosis, n (%)	250 (9%)
Compensated	230/250 (92%)
Decompensated	20/250 (8%)
Hepatocellular carcinoma, n (%)	9 (0.3%)
HBV serology, n (%)	2,662 (96%)
HBsAg	38/2,662 (1%)
Anti-HBc	685/2,662 (26%)
Anti-HBs	1,833/2,662 (69%)
HIV serology, n (%)	2,534 (92%)
Positive	21/2,534 (1%)

Table 2. Sustained virological response at least 12 weeks post treatment (SVR12), n (%)	Per protocol analysis (N = 1,757)
SVR12	
Overall	1,627 (93%)
Cirrhosis	
Yes	153/168 (91%)
No	1,474/1,589 (93%)
Number of prison transfers during treatment course	
0	1,173/1,270 (92%)
1	304/327 (93%)
2	112/118 (95%)
3	21/25 (84%)
4+	17/17 (100%)
Non-SVR12	
Virological relapse	29 (2%)
Treatment non-adherence	98 (6%)
Re-infection	197 (11%)

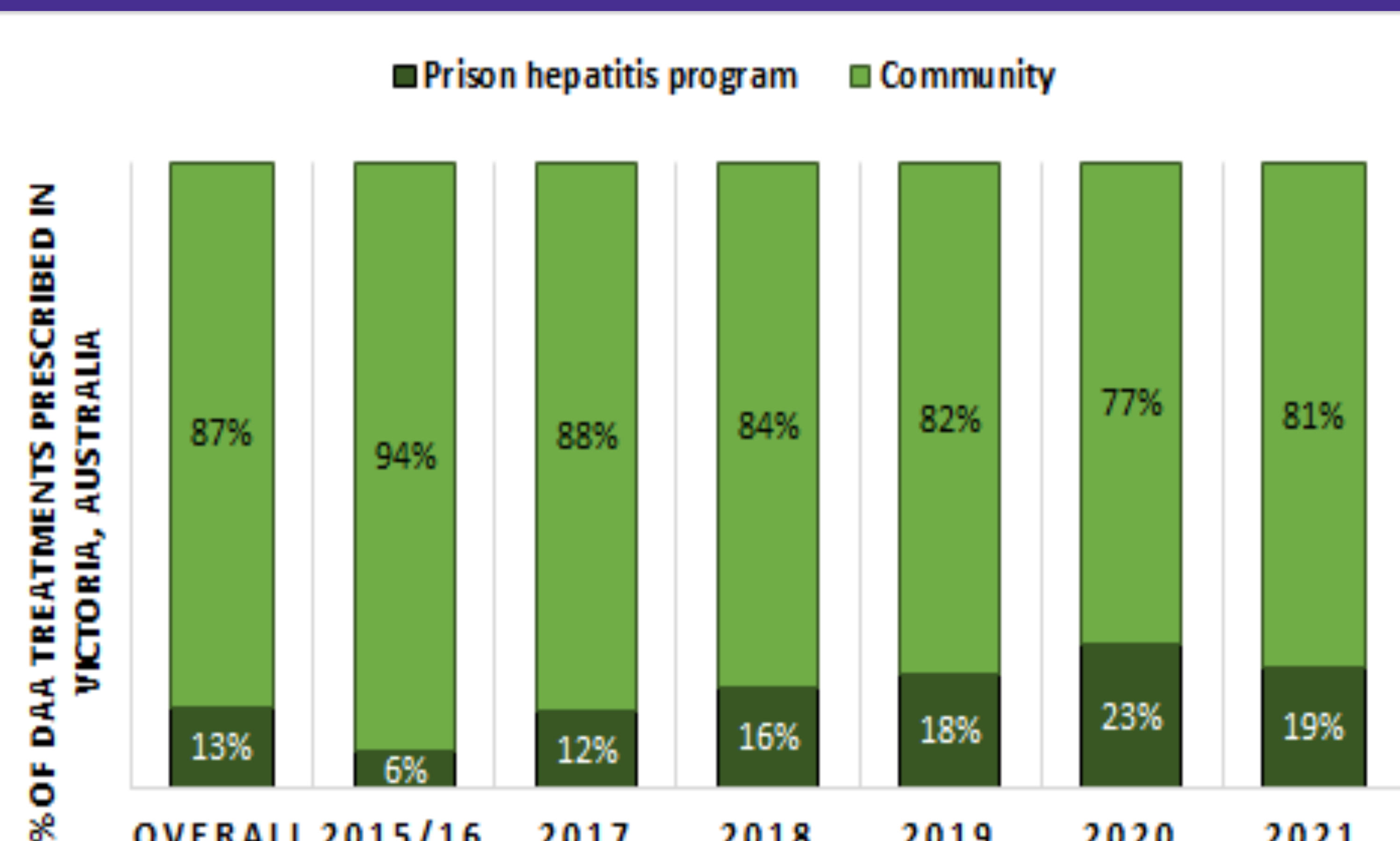


FIGURE 1: TOTAL VICTORIA DAA TREATMENTS 2015-2021

Conclusions & Applications

A nurse-led model of care was highly effective for treating large numbers of people in prison living with hepatitis C. By 2021, the nurse-led program accounted for many of the HCV treatments prescribed in Victoria, Australia. Prison programs with nurses at the centre of care play a critical role in achieving the elimination of hepatitis C.