Guiding the sector –Clinical support tools to achieve hepatitis C elimination in New South Wales

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Introduction

The NSW Ministry of Health (Ministry) is dedicated to eliminating hepatitis C as a public health concern by 2028. Progress towards elimination is monitored under the NSW Hepatitis C Strategy (2022 – 2025).

NSW observed large increases in hepatitis C treatment uptake in 2016, however the number of treatments has steadily declined since 2017. To reverse this trend, the Ministry developed a range of clinical support tools to increase testing and treatment across key settings listed in the NSW Hepatitis C Strategy (2022 – 2025).

Approach

The Ministry developed four clinical support tools in collaboration with stakeholders from key services including drug and alcohol, prisons, mental health and needle and syringe programs. The clinical support tools are outlined below:

- **Hepatitis C models of care in key NSW settings:** developed in partnership with Local Health Districts to outline models of care to increase testing and treatment in key settings including homelessness services, Needle and Syringe Programs, Alcohol and Other Drug and Mental Health. Successful initiatives included:
  - nurse outreach models using point of care testing
  - same visit treatment initiation
  - testing blitzes at community correction sites and homelessness services.
- **Enablers for hepatitis C treatment uptake in NSW:** evidence-based strategies to support priority populations treatment initiation and completion. Examples include:
  - incentives
  - medication collection support
  - peer workers to support patients through their care and treatment journey.
- **NSW Hepatitis C testing framework:** summarising
  - test type (venepuncture, Dried Blood Spot or Point of Care)
  - setting type
  - time to treatment initiation
  - risk of loss to follow-up
  - estimated cost.

See image 1 for further information.

Image 1: NSW Hepatitis C testing framework snapshot

NSW Hepatitis C Testing Framework

Increasing time to treatment initiation

	Point of Care RNA (GeneXpert)		Venepuncture		Dried Blood Spot RNA	
	Option 1	**Option 2**	**Option 3**	**Option 4**	**Option 5**	**Option 6**
Visit 1	Point of care (POC) Ab +/- POC RNA Treatment	POC RNA +/- Treatment	POC Ab +/- Venepuncture	Ab +/- RNA Venepuncture	POC Ab +/- DBS RNA	DBS RNA
Visit 2			Treatment	Treatment	RNA venepuncture	RNA venepuncture
Visit 3					Treatment	Treatment
Cost per Rx initiation	$1,169	$1,866	TBC	$1,571	$1,514	$2,416
Pros	• Currently no additional cost to services • Treatment at the point of care • Cost effective when using reflex Ab • Client acceptability • Reduced loss to follow up (LTFU)		• Utilises existing resources • MBS item for venepuncture		• Portable/ no clinical space required • Low tech/skill • MBS item for venepuncture • Client acceptability	
Cons/ Dependencies	• Need a POC machine (limited mobility) • Research		• Clinical space • Research • Possible LTFU	• Clinical space • Possible LTFU	• Research • Confirmatory venepuncture required • Possible loss to follow up from extra steps	
Funding	Research – NHMRC funded until 2024		LHD funded		Research - NSW Health funded until 2024	
Examples of possible settings	• AOD • Primary NSP • Outreach bus • Testing blitz e.g. dental clinic, homelessness service • Aboriginal Community Health • Pharmacies		• AOD • Primary NSP • Outreach bus • Sexual Health Clinic	• Mental health inpatient • Resi-rehab • GP • Antenatal • Emergency Dep • Sexual Health Clinic	• Clozapine clinic • Mental health inpatient • Resi-rehab • OTP clinic • Dental • Primary and Secondary NSP • Homelessness regular drop in • Community corrections • Aboriginal Community Health • Pharmacies	

Costs vary based on setting e.g. NSP vs. Drug and Alcohol setting. This framework is a guide only and local implementation should be based on setting type and available test.

- **Hepatitis C testing and care in NSW Alcohol and Other Drug services:** specific guidance to all NSW Alcohol and Other Drug services on the appropriate testing and care of people at risk of hepatitis C. The document identifies opportunities to enhance hepatitis C care, boost workforce capabilities and leverage new and existing partnerships. See image 2 for further information.

Image 2: NSW Hepatitis C testing and care in Alcohol and Other Drug services snapshot

Service Capability			Role of service in BBV testing and treatment				Example
Service Type	**Workforce**	**Pathology**	**Testing**	**Delivery of results**	**Treatment**	**Ongoing assessment**	**Example Service**
A	• Allied health and peer workers • Other workforce (not venepuncture trained)	• No on-site pathology collection • No Point of Care Testing (POCT)	• Dried Blood Spot (DBS) Testing	• According to site initiation plan- NSW Sexual Health Infolink (SHIL) or service • If HCV+, refer to another service for HCV work up bloods • Check attendance to referred service	• According to local referral pathway	• Offer testing every 12 months if client is at risk	• AOD counselling, Primary Needle & Syringe Program
B	• As for Service Type **A** • Part-time nurse, nurse practitioner or doctor • No arrangement with remote prescriber	• On-site pathology collection	• DBS Testing And • Venepuncture for HCV (HCV Ab +/- RNA), LFT	• According to site initiation plan - NSW Sexual Health Infolink (SHIL) or service • If HCV+, complete venepuncture confirmation (HCV Ab +/- RNA and LFT)	• Prescribe treatment or refer to appropriate service	• Offer testing every 12 months if client at risk	•

Outcome

The clinical support tools were endorsed at multiple hepatitis C governance committees including the Hepatitis C Strategy Implementation Committee and the Hepatitis C Strategic Clinical Action Group.

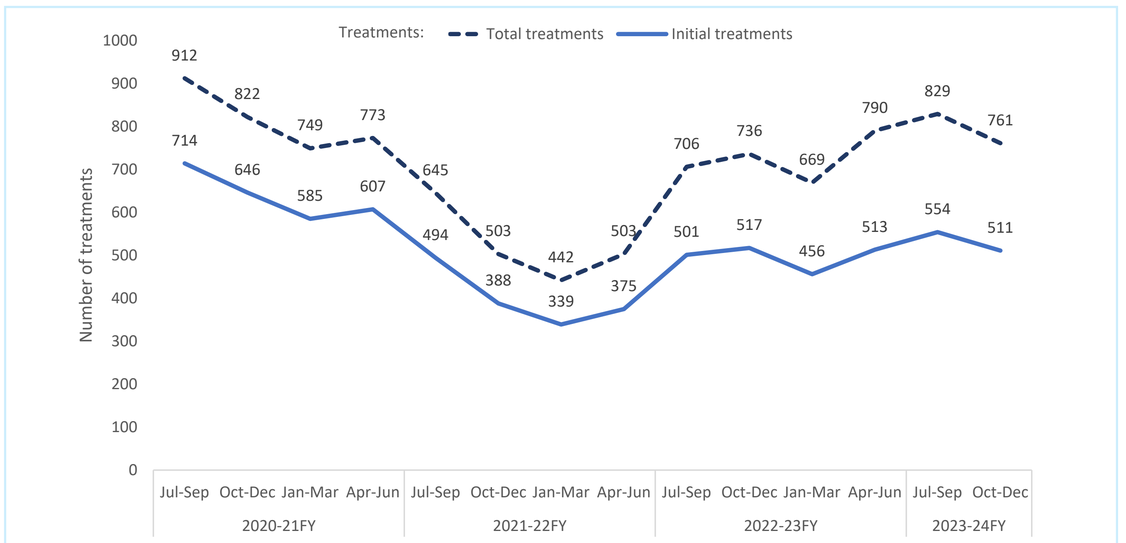
The tools were then distributed to Local Health Districts and Non-Government Organisations for implementation in all key services including drug and alcohol services, needle and syringe programs and Aboriginal community health services.

Conclusion

Clear clinical guidance and support tools for Local Health Districts and Non-Government Organisations are key elements for hepatitis C elimination in NSW.

The clinical tools support the expansion of testing, like Dried Blood Spot and Point of Care, and treatment initiatives. In 2023 testing increased by 34% and treatment initiations increased by 17% compared to 2022 (figure 1). NSW has treated 59% of people (36,605) estimated to be living with hepatitis C, saving an estimated $103,748,045 in avoidable health costs.

Figure 1: Number of people prescribed hepatitis C treatments in NSW by quarter between July 2020 and December 2023



Next steps

The Ministry in partnership with Local Health Districts and Non-Government Organisations will continue to emphasis the use of the clinical support tools to guide hepatitis C testing and treatment across key settings, with a focus on linkage to care for priority populations including in General Practice settings and through the remote prescribing program.