Nurse Practitioners Advancing Decentralized Hepatitis C virus (HCV) care in opioid treatment

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People living well

Presented by
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VADDA Conference 13th February 2025

Gateway Health acknowledges the Traditional Custodians of this land on which we stand and pay our respect to the Elders, past, present and future, for they hold the memories, the traditions and the culture of all Aboriginal and Torres Strait Islander peoples.

Artwork by Kim Gorey

Introduction

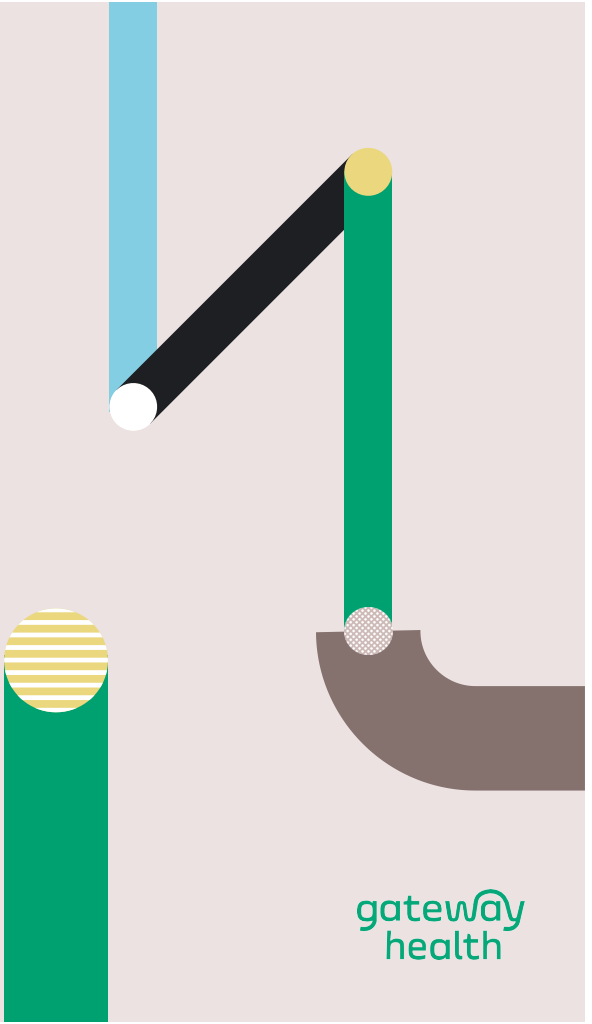
- Regional community health
- Nurse practitioner led opioid pharmacotherapy service
- Opioid Use Disorder and complex co-occurring health issues
- Work within a large AOD service with many specialties

Our Nurse practitioner Scope of practice:

- Primary specialty opioid agonist treatment
- Other AOD care
- Hepatitis C Virus Care
- Some targeted treatment of common co-occurring MH conditions

Sam Blake is also ADHD prescriber

We have built HCV treatment into routine care within the opioid treatment model



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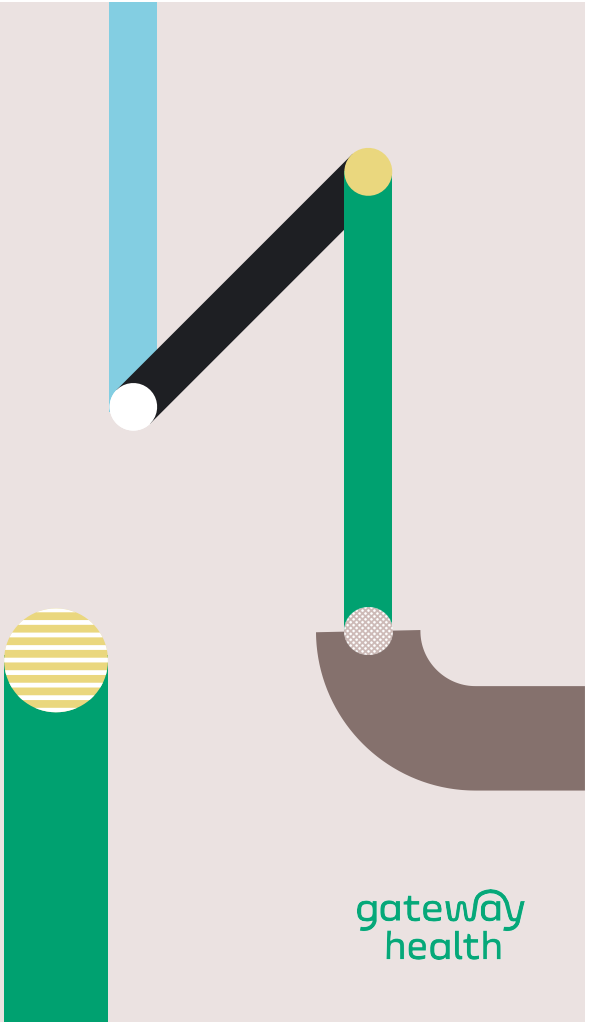
Learning Objectives

- Explore HCV and its symptoms, prevalence and transmission
- Understand the key steps in the Hepatitis C care cascade
- Consider the national hepatitis C strategy and how the AOD sector is integral to HCV elimination
- HCV in practice: A case study for context



“Let’s Do it”

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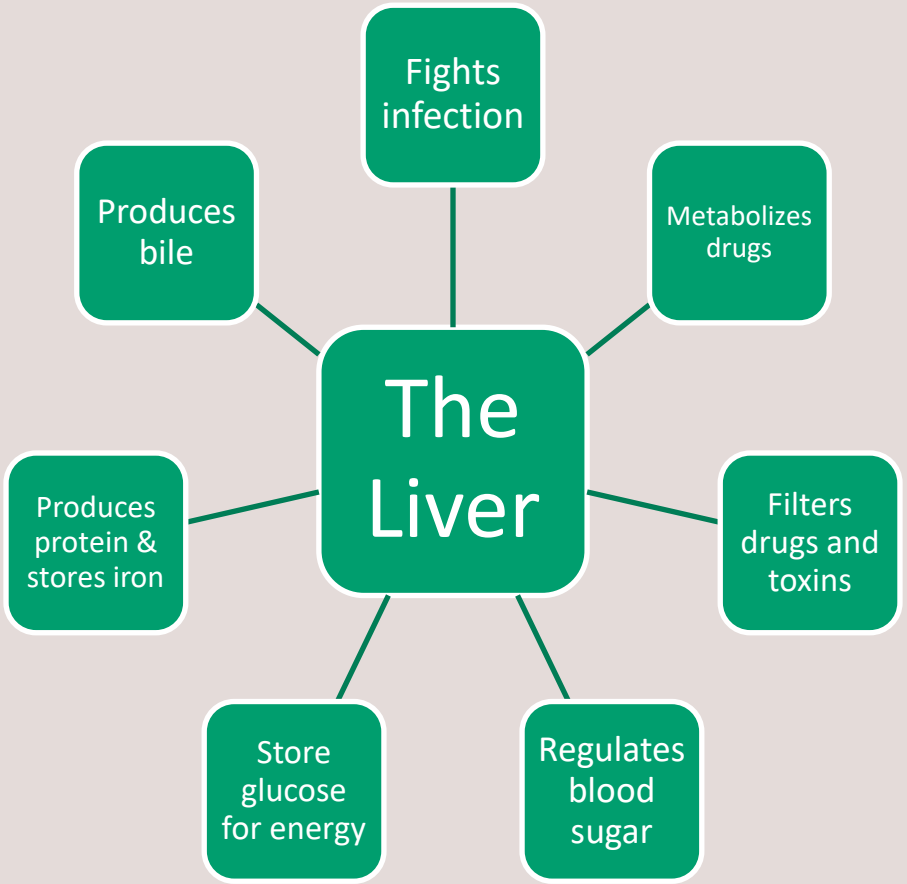
Fun Facts about the liver



The liver is essential to maintain balance in the body

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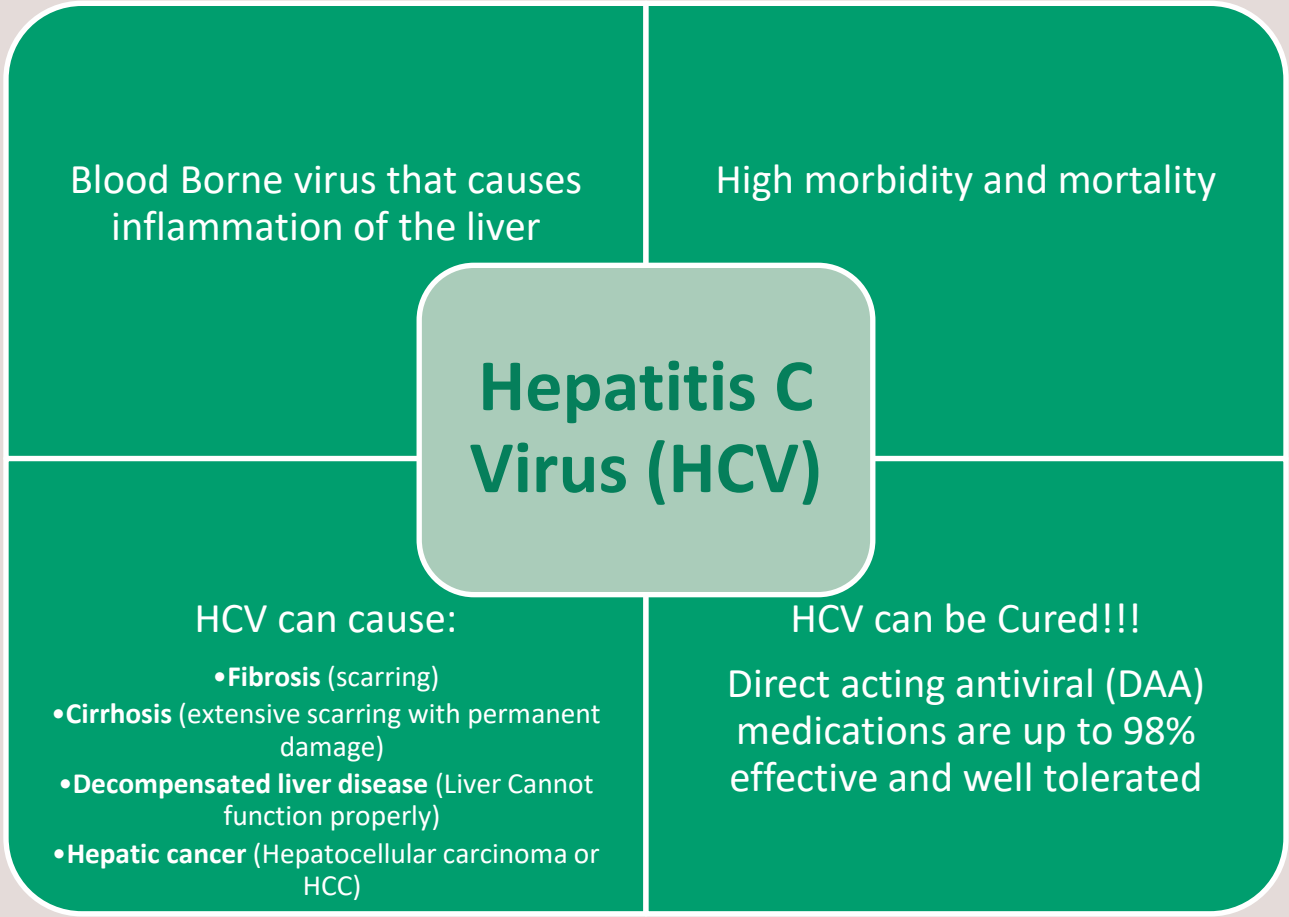

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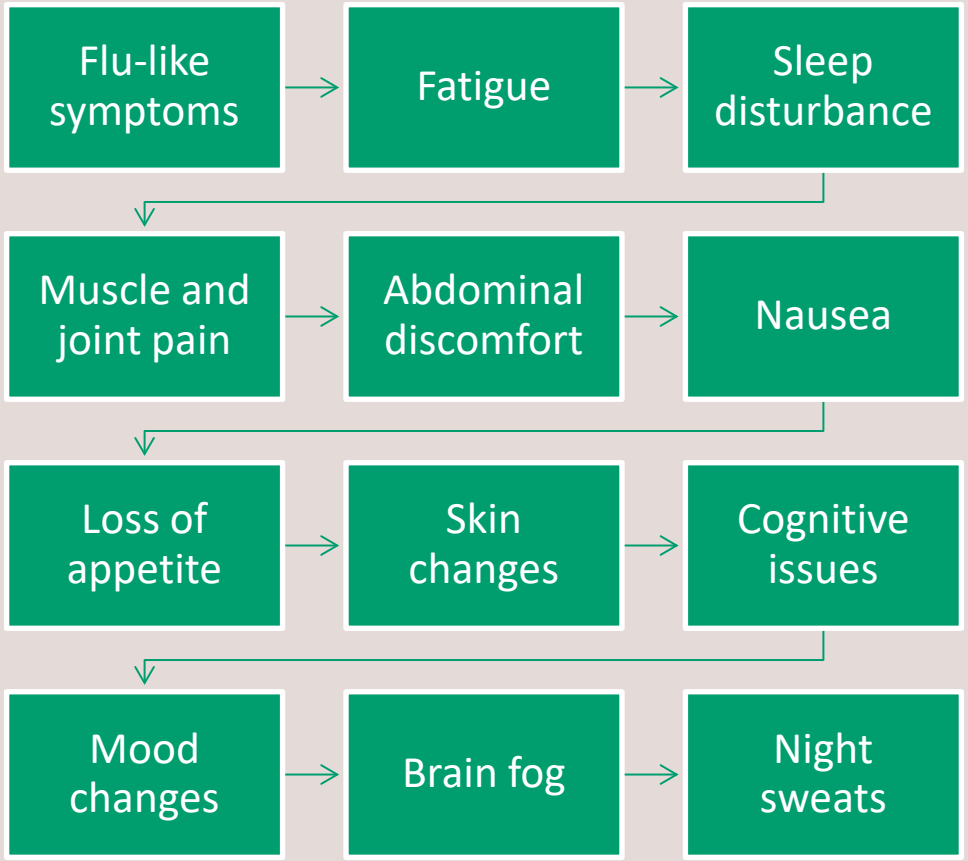
HCV Symptoms



HCV symptoms may overlap with intoxication or withdrawal symptoms.

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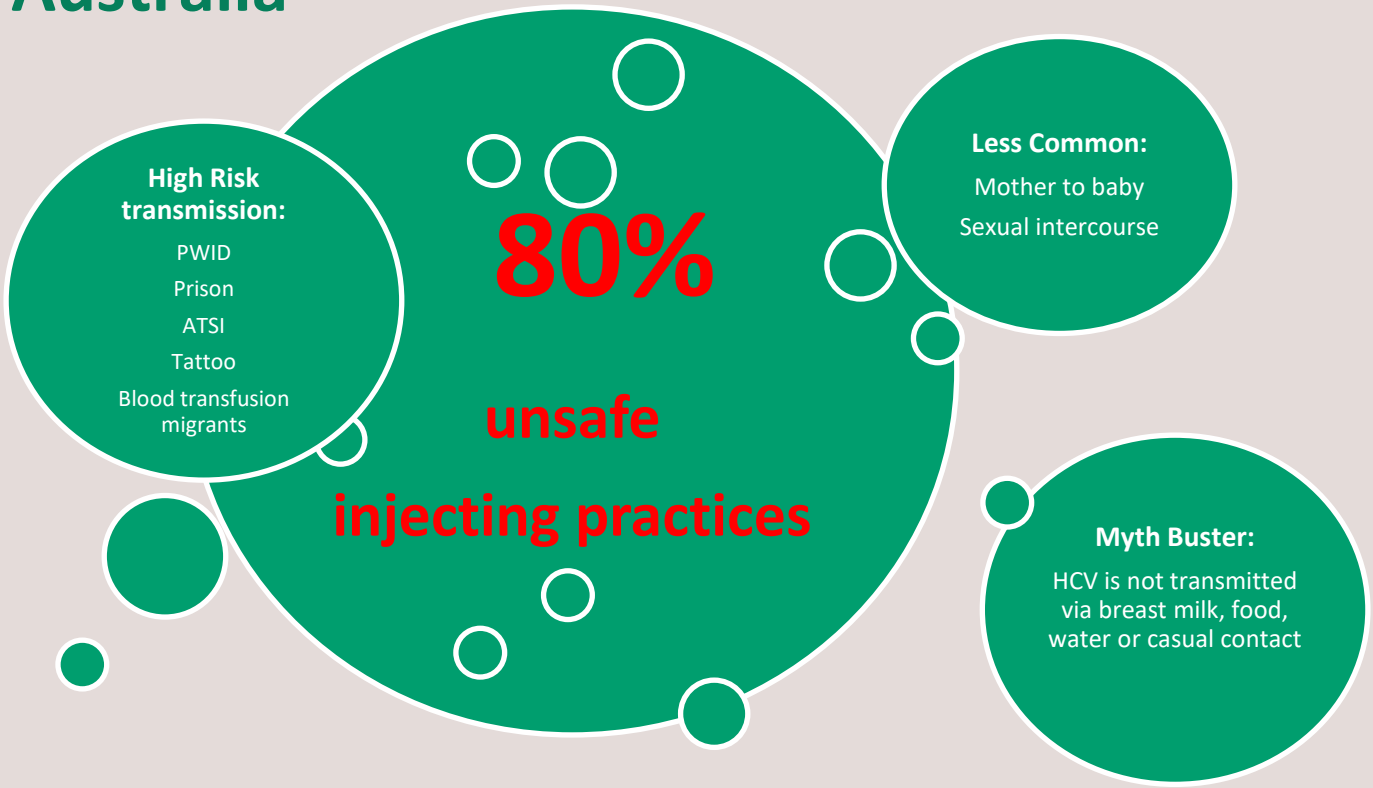
HCV Transmission in Australia



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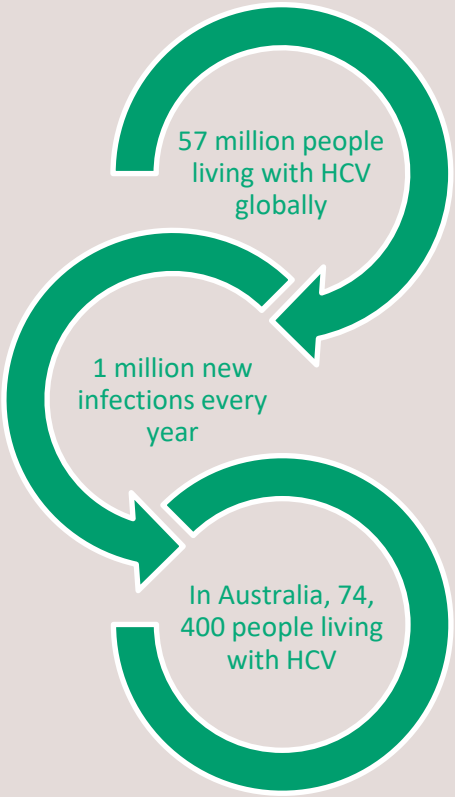
HCV Prevalence



Australia is working towards eliminating HCV as a public health threat by 2030

- Reduce HCV infections by 90%
- Reduce HCV related deaths by 65%

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HCV care cascade

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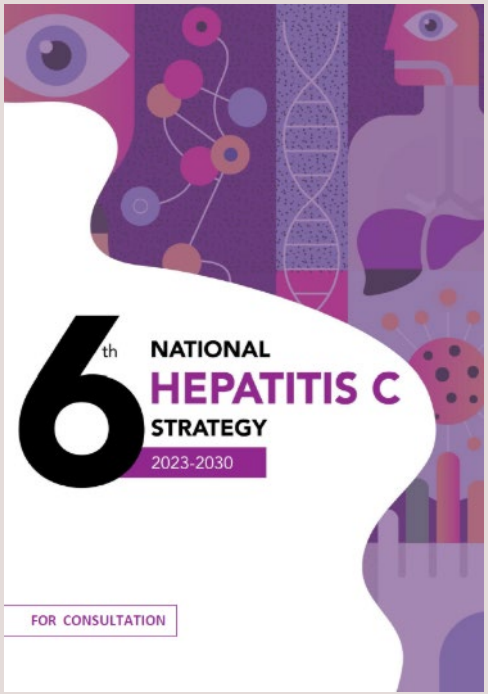
Australia's National HCV strategy



- De-centralize care
- Task Shifting to Harm reduction setting
- Nurse practitioners

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https://www.health.gov.au/resources/publications/draft-sixth-national-hepatitis-c-strategy-2023-2030-for-public-consultation?language=en

Case Presentation: Ben (pseudonym)

Presenting background

42 YO Caucasian Male

Attends NP led clinic for MATOD

Current treatment

Methadone 80mg with No takeaway doses

AOD history

IV Heroin, Cannabis, IV Methamphetamines, Alcohol, Tobacco, Benzodiazepines

*Past and current IVDU

Mental health history

Complex PTSD, anxiety disorder and major depression

Physical health history

COPD, previous endocarditis, Chronic nerve pain (post MVA 20 years ago),

HCV x2 both treated and cured

Social History

Lives with wife and 17 YO daughter

Previously incarcerated

Unemployed/financial hardship

Low health literacy

Social isolation

Often presents in crisis

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Current AOD Use

Substance	Route	Amount
Heroin	IV	1 point (1/10g) 3-4 x /week
Cannabis	Smokes	2-5 bongs Every night
Methamphetamine	IV	1 point (1/10g) 2-3 x /week
Alcohol	Ingests	Up to 3 STD drinks 4 x /week
Benzodiazepines	Ingests	Reduced off by GP 5 months ago

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Snap Shot

IVDU and incarceration are high risk screening factors for HCV
*prompting testing

Low health literacy, financial hardship, isolation and complex health are factors that create barriers to health care
*requiring support to navigate

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Results

Name of Test: HEPATITIS SEROLOGY
Requested: 18/12/2024 **Collected:** 18/12/2024 **Reported:** 27/12/2024 13:40

HEPATITIS SEROLOGY (SERUM)

Hep A IgM antibodies (by Abbott)	: Negative	
Hep A IgG (by Abbott)	: Reactive	
Hep B surface antigen (by Abbott)	: Negative	
Hep B core total antibodies (by Abbott)	: Negative	
Hep B surface antibodies (by Siemens)	: <3	mIU/mL (cutoff=10)
Hep C antibodies (by Siemens)	: POSITIVE	
Hep C antibodies (by Alinity)	: POSITIVE	

Hep A and B antibodies negative

Hep C antibodies positive

*antibodies only confirmed exposure, not active infection (requiring a RNA test)

Name of Test: HEPATITIS C PCR
Requested: 18/12/2024 **Collected:** 18/12/2024 **Reported:** 19/12/2024 14:04

HEPATITIS C VIRUS PCR

Specimen:
Serum

Result:
Hepatitis C virus RNA: DETECTED by polymerase chain reaction.

Requested Tests : HCP, HBL*, HIV*, HFP*

Hep C RNA positive

*confirming current infection

Name of Test: HIV ANTIBODY TESTING
Requested: 18/12/2024 **Collected:** 18/12/2024 **Reported:** 19/12/2024 18:38

)ate of Birth: 25/06/77

HUMAN IMMUNODEFICIENCY VIRUS (HIV) ANTIBODY/ANTIGEN COMBO (SERUM)

Not Detected (by Abbott HIV-1 and HIV-2)

This result does not exclude recent infection with HIV. If serum was tested within 3 months of exposure, please retest after that time.

HIV antibodies negative

Fun Fact: co-infection with HIV, HBV and/or HAV requires care by specialist service

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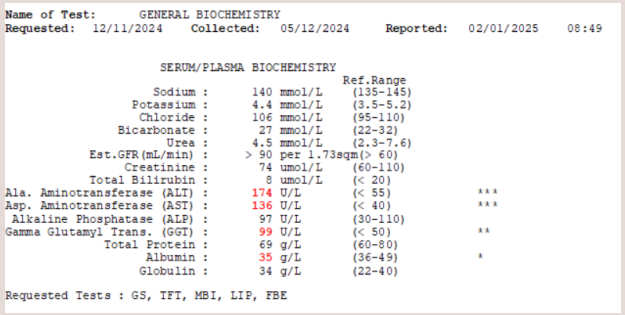
Liver testing and APRI

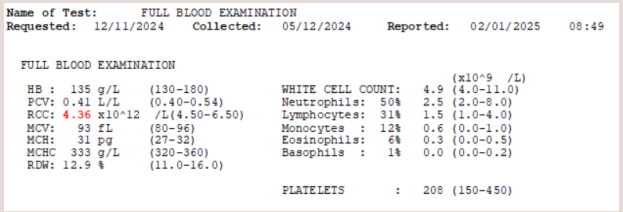


Name of Test: GENERAL BIOCHEMISTRY
Requested: 12/11/2024 Collected: 05/12/2024 Reported: 02/01/2025 08:49

SERUM/PLASMA BIOCHEMISTRY

			Ref.Range	
Sodium :	140	mmol/L	(135-145)	
Potassium :	4.4	mmol/L	(3.5-5.2)	
Chloride :	106	mmol/L	(95-110)	
Bicarbonate :	27	mmol/L	(22-32)	
Urea :	4.5	mmol/L	(2.3-7.6)	
Est.GFR(mL/min) :	> 90	per 1.73sqm	(> 60)	
Creatinine :	74	umol/L	(60-110)	
Total Bilirubin :	8	umol/L	(< 20)	
Ala. Aminotransferase (ALT) :	174	U/L	(< 55)	***
Asp. Aminotransferase (AST) :	136	U/L	(< 40)	***
Alkaline Phosphatase (ALP) :	97	U/L	(30-110)	
Gamma Glutamyl Trans. (GGT) :	99	U/L	(< 50)	**
Total Protein :	69	g/L	(60-80)	
Albumin :	35	g/L	(36-49)	*
Globulin :	34	g/L	(22-40)	

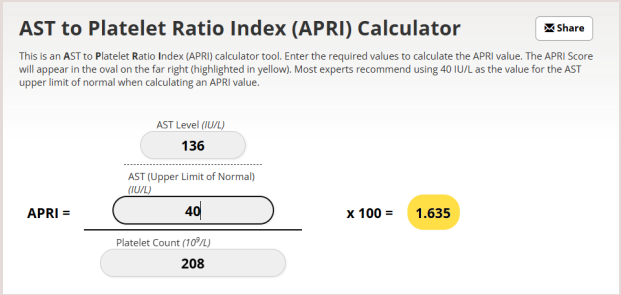
Requested Tests : GS, TFT, MBI, LIP, FBE



Name of Test: FULL BLOOD EXAMINATION
Requested: 12/11/2024 Collected: 05/12/2024 Reported: 02/01/2025 08:49

FULL BLOOD EXAMINATION

					(x10^9 /L)
HB :	135 g/L	(130-180)	WHITE CELL COUNT:	4.9	(4.0-11.0)
PCV:	0.41 L/L	(0.40-0.54)	Neutrophils: 50%	2.5	(2.0-8.0)
RCC:	4.36 x10^12 /L	(4.50-6.50)	Lymphocytes: 31%	1.5	(1.0-4.0)
MCV:	93 fL	(80-96)	Monocytes : 12%	0.6	(0.0-1.0)
MCH:	31 pg	(27-32)	Eosinophils: 6%	0.3	(0.0-0.5)
MCHC	333 g/L	(320-360)	Basophils : 1%	0.0	(0.0-0.2)
RDW:	12.9 %	(11.0-16.0)			
			PLATELETS :	208	(150-450)



Abnormalities in liver function and APRI higher than 1 indicating potential cirrhosis
*Requiring further diagnostics

Fun fact- Ordering reflect liver function tests reduces steps in the HCV care cascade

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Assessment

CARDIOVASCUALR/RESPIRATORY:

Hemodynamically stable

Mild basal creps/oxygen saturations normal

No JVP elevation

ABDO:

Abdo soft, non-tender and symmetrical

Mild pain to R)upper quadrant

Liver palpable upon inspiration

Spleen not palpable

Nil ascites

Nil Nausea and vomiting

SKIN:

Spider angioma noted to bilateral feet and hands

Mild jaundice to skin and whites of eyes

Nil peripheral odeama

NEUROLOGICAL:

GSC 15

Alert and orientated

Persistent fatigue

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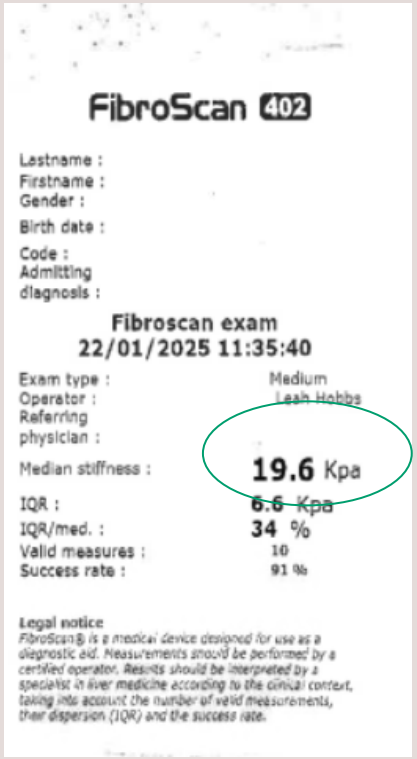
Further diagnostics



FibroScan 402

Lastname :
Firstname :
Gender :
Birth date :
Code :
Admitting diagnosis :

Fibroscan exam
22/01/2025 11:35:40

Exam type :	Medium
Operator :	Leah Hobbs
Referring physician :	
Median stiffness :	**19.6** Kpa
IQR :	**6.6** Kpa
IQR/med. :	**34** %
Valid measures :	10
Success rate :	91 %

Legal notice
FibroScan® is a medical device designed for use as a diagnostic aid. Measurements should be performed by a certified operator. Results should be interpreted by a specialist in liver medicine according to the clinical context, taking into account the number of valid measurements, their dispersion (IQR) and the success rate.

Hepatitis C	2 to 7 kPa	F0 to F1	Is normal.
	8 to 9 kPa	F2	Has moderate scarring.
	9 to 14 kPa	F3	Has severe scarring.
	14 kPa or higher	F4	Has cirrhosis.

Cirrhosis confirmed

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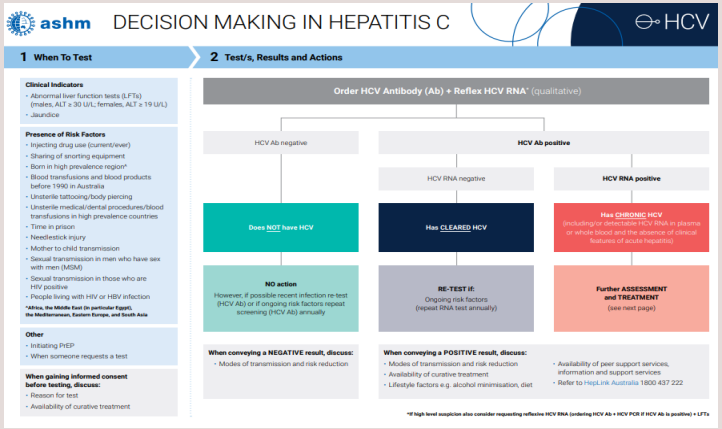
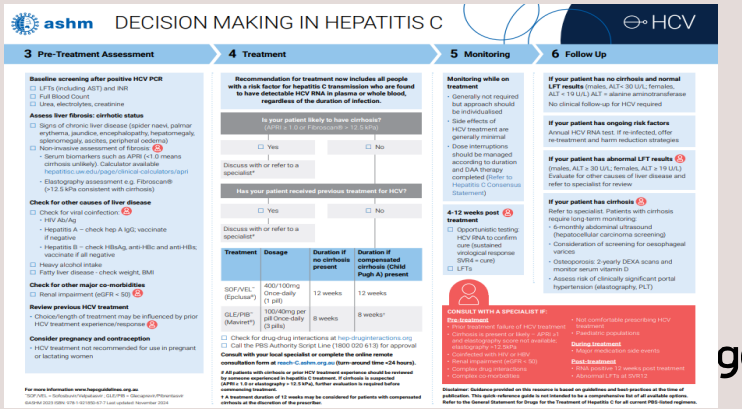
Clinical pathway- ASHM

Diagnosis confirmed: HCV with Compensated liver cirrhosis





*Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM)

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Counselling

Preventing HCV transmission

Psychoeducation regarding HCV, liver health, cirrhosis and reduce risk of reinfection

Psychoeducation regarding treatment options, ensuring patient preference is central

Counselling and support build self efficacy and motivation to address health

Don’t assume people don’t see HCV as a priority

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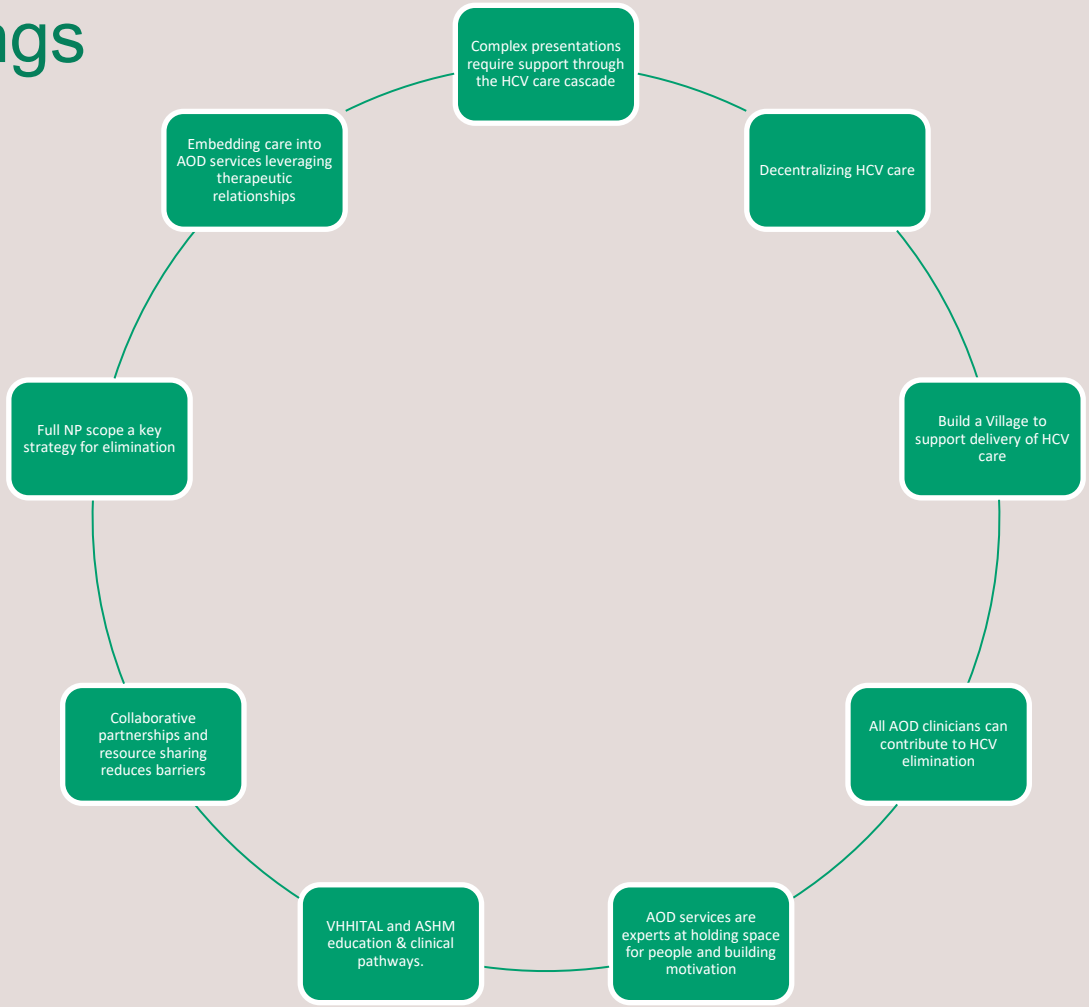
Key Learnings



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Free training

All AOD clinicians

Community of practice

https://ashm.org.au/

https://nwmphn.org.au/about/partnerships-collaborations/vhhital/

- Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM)
- Victorian HIV and Hepatitis Integrated Training And Learning program (VHHITAL)

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Any questions?

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