



**AVHEC** 2019

## Key Findings Report

### 2nd Australasian Viral Hepatitis Elimination Conference

5 – 6 August 2019

Novotel Sydney Brighton Beach Hotel



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## AUSTRALIA'S PROGRESS TOWARDS HEPATITIS C ELIMINATION – ANNUAL REPORT 2019

Australia is aiming to eliminate hepatitis C as a public health threat by 2030. This elimination goal is in line with global targets set by the World Health Organization (WHO) and targets included in Australia's National Hepatitis C Strategy 2018–2022.

Prepared by Burnet Institute and the Kirby Institute, this report brings together national data sources to assess Australia's progress towards eliminating hepatitis C. Some data were not included due to unavailability at the time of reporting; future reports will provide the most comprehensive picture possible.

[Read the report](#)

# INTRODUCTION

Despite breakthroughs in anti-viral medication, many people living with chronic hepatitis across our region are not receiving care and many more are undiagnosed. Miracle drugs are not enough if people don't know they are living with an infection or don't understand the importance of treatment.

The [Australian Viral Hepatitis Elimination Conference](#) was inspired by the growing need to identify and reach those slipping through the gaps in treatment and care. The program showcased clinicians, community, researchers and policymakers and centred both the challenges of reaching World Health Organization targets for elimination, and innovative, holistic, and community-led solutions. AVHEC19 reiterated the importance of both clinical and lived experience to find a way forward in meeting the remaining challenges on the road to eliminating chronic hepatitis in Australia, and the region.

## Conference Objectives

- Focus on increasing diagnosis/testing and improving models of care, treatment paradigms, reinfection strategies etc.
- To provide a forum for health professionals working in viral hepatitis, to encourage an increase in their hepatitis B management roles.
- Evaluate the status of the Australasian sector in working towards the 2030 WHO elimination goals.
- Strengthen relationships and partnerships between primary and tertiary care, the multicultural and Aboriginal and Torres Strait Islander health workforce, government and community organisations.
- Improve support mechanisms for primary care professionals involved in the management of viral hepatitis.



# AVHEC 2019 CONFERENCE: OVERARCHING MESSAGES AND FINDINGS

- Viral hepatitis is the world's 7<sup>th</sup> biggest annual killer, and in contrast to HIV, TB and malaria, the number of annual deaths is increasing.
- Only 12 countries are truly on track for viral hepatitis elimination by 2030 as per [WHO targets](#) : 90% reduction in incidence; 80% eligible people receive treatment; 65% reduction in deaths.
- Globally, 90% of people living with viral hepatitis remain undiagnosed.
- Elimination is possible. We have a highly effective vaccine (hepatitis B) and highly effective therapies to treat (HBV) and cure (HCV). But miracle drugs are not enough if people don't know they are living with hepatitis or don't understand the importance of treatment.
- Elimination is going to require a significant upscale in investment in Australia and the region.
- Stigma and discrimination is the most notable barrier.

## Key Statistics: Viral Hepatitis

- WPR has the highest mortality due to viral hepatitis in the world.
- SEAR has the 2<sup>nd</sup> highest mortality due to viral hepatitis in the world.

## Key Statistics: HCV

- Over 70 000 Australians have accessed DAAs, highly effective and curative hepatitis C treatments. ~2/3 of the estimated population living with hepatitis C is yet to be treated.
- Hepatitis C testing rates need to increase by 50% to reach the targets.
  - [≈ 1500 people/month to reach elimination targets.](#)
  - [4725 PWID/yr.](#)
- The uptake of treatment has been accompanied by declines in new hepatitis C infections.
- There is declining hepatitis C incidence among people who inject drugs, HIV-positive gay and bisexual men and lower prevalence of infection among recent injectors suggesting early evidence of a treatment as prevention benefit.
- Hepatitis C notification linked data also indicates a decline in advanced liver disease complications and liver-related deaths.
- Rates of DAA treatment uptake have declined in the past 2 years.

## Key Statistics: HBV

- In Australia:
  - 64% diagnosed – 36% undiagnosed;
  - 20% of those diagnosed are engaged in care;
  - 8% are receiving treatment.
- In the region:
  - Only 2.3% of those infected are estimated to be diagnosed.

# A GLOBAL AND LOCAL PERSPECTIVE ON THE PROGRESS TOWARDS VIRAL HEPATITIS ELIMINATION

**KEYNOTE SPEECH: “Lessons learned and challenges ahead: Investing in and sustaining the viral hepatitis response globally”** Professor Margaret Hellard, Deputy Director, Programs, Burnet Institute

**"Every time we get an opportunity to speak with somebody who might have influence over what the Global Fund and World Bank do we have a responsibility to say something."**

In the Opening Plenary Prof Margaret Hellard, Deputy Director, Programs Burnet Institute, provided an overview of the global mission to eliminate viral hepatitis – both lessons learned and challenges ahead. Looking at the state of virulence and responses around the world, several successful models were showcased, from Georgia, South Africa and China

[Audio](#)

## Key Messages

- We need countries to have strategic plans.
- We need global funders to invest.
- We need to understand how the Sustainable Development Goals and similar initiatives are working and we need to engage with them.
- Where possible integrate programs - it's cost effective.
- Make viral hepatitis elimination the exemplar. Put it to the Minister of Finance.
- Address stigma as this is the most significant barrier to progress.
- The war on drugs has been a failure. End it now.

## Strategies to attract financing

- Speak the language of funders. For Global Fund, Gates, World Bank's Global Financing Facility etc:
  - Frame the case for elimination within the language of universal health care, with reference to Disease Control Priorities (DCP) and Country Specific Health Benefit Packages (CS-HBPs);
  - Get viral hepatitis listed as a country priority and embed targets within universal health coverage (UHC) activities. These receive international funding as part of Sustainable Development Goals;
  - Build an investment case for elimination that provides achievable country-specific targets and strategic actions to optimise resource allocation.
- Convince finance ministers of the economic and productivity benefits of elimination (good return on investment).
- Convince the international health community of the catastrophic health impact of failing to work towards elimination.
- Share learnings and success stories on how to integrate viral hepatitis programs into health systems, access affordable drugs and attract investment.
- Never stop campaigning. See every meeting as a campaigning opportunity.
- Convince governments to think of viral hepatitis elimination as an exemplar rather than a nuisance. This could be their opportunity for a great success story.

- Where possible, integrate activities into existing health programs to strengthen infrastructure, improve co-ordination and optimise resource allocation.
- Note: Financing needs to take account of health system costs:
  - Improving injection and blood safety
  - Harm reduction programs and services
  - Strengthening surveillance systems
  - Technology to link patients into care

Models clearly show that between 2018-2030 the cost of eliminating HCV globally would be 51 million dollars. This compares to \$343.2 billion expected expenditure on HIV Tuberculosis and Malaria over the same time period.



**READ:** [“Eliminating Viral Hepatitis: The Investment Case Report of the WISH Viral Hepatitis Forum 2018](#)

**“We need these exemplar countries to show the way forward.”**

COUNTRY	KEY TO SUCCESS
Pakistan	Health benefits package
Australia	Multi-pronged approach; partnership with community
Rwanda	Expanding on universal health coverage
Egypt	Testing, linkage to care and treatment
China	Investment in prevention
Scotland	Accurate data to inform the response
South Africa	Development of an investment case
Georgia	Development of a national plan

## KEYNOTE SPEECH: “HCV Elimination in New Zealand – How are we tracking?”

Professor Ed Gane, New Zealand Liver Unit at Auckland City Hospital

New Zealand’s trailing progress towards hepatitis C elimination was given an extra boost with the introduction of the pangenotypic DAA **MAVIRET** in February 2019. However after just a few months, treatment uptake is already beginning to slow. Professor Ed Gane, whose dedicated and innovative work contributed to the development of new DAA therapies for hepatitis C, explained how New Zealand is now back on track, with innovative campaigns and initiatives to increase diagnosis and improve linkage to care, and the development of its first [National Hepatitis C Action Plan](#).

[Presentation Notes](#) | [Audio](#)

### Key Messages

- In contrast to HIV, NZ's response to hepatitis C has been poor. This has resulted in
  - Increasing HCV disease burden;
  - Increasing HCV related deaths from liver cancer;
- At current rates NZ won't reach WHO eliminate targets until after 2050.
- Of the 50 000 New Zealanders living with chronic hepatitis C infection only 50% have been diagnosed and 4% treated.
- This is set to change with the introduction of the first National Hepatitis C Action Plan. The first draft of this plan has been sent out for consultation.
- To reach hepatitis C elimination, treatment uptake needs to be increased by:
  - Simplifying treatment for community prescribing,
  - Finding the undiagnosed and
  - Improving linkage to care.

*Note: Simplifying treatment uptake alone is not enough.*

### Simplifying treatment uptake: Learnings from New Zealand

- Simplified, pangenotypic regimens have the greatest impact on treatment uptake.
- GP reluctance has been a major barrier:
  - Education and awareness to overcome this essential;
  - Online resources and online learning have been the most successful education tools in NZ: GPs want to learn from peers, not tertiary specialists.
- Incentivising treatment in the community for both patients and GPs works. Areas with highest [incentives for GPs](#) are getting highest levels of engagement. 60% of patients now commence DAAs in the community with GP prescribers. In some areas this is getting close to 70%.

### Strategies to increase diagnosis

#### Targeted testing (ANZ/UK approach) using recognised risk factors:

- Ideal for CADS, AOTS, Needle Exchange
- Fails at population level ([Vermeiren et al. PLOS1 2012; 7 e51194](#))

#### Birth cohort testing (US approach) e.g. Born 1945-65 “Woodstock” and Vietnam War era

- Not relevant in most countries

### Universal testing:

- Cost-effective if combined with cheap diagnostics and National HCV Registry
- Registry prevents duplicate tests and ensures all diagnosed are linked to care
- Examples include Iceland, Georgia, Egypt, Uzbekistan, Mongolia, Sweden

### Examples of campaigns:

- HPA National Awareness Campaign
- Community Butterfly Campaign



### Improve Linkage to Care

#### Simplified testing and assessment:

- Genotyping is no longer required as part of the HCV diagnosis. Diagnosis can now be done through a single blood test. Reflex Ab/Ag tests at community labs.
- Biopsies no longer required. Use Fibroscan or if not available, APRI blood test.

#### Outreach services for marginalised populations:

- Alcohol and Drug services clients: ideal population for HCV test and treat population.
- Prisons: lack of prevalence data and no national approach in NZ. Need new standardised approach e.g. 'opt-out' testing.
- Māori population: need specific outreach services.

### New Zealand's National Hepatitis C Action Plan

#### Will include enhanced prevention and harm reduction:

- Treatment as prevention;
- Better access to needle and syringes perhaps without the need for one-for-one exchange;
- Better public awareness and understanding to reduce stigma;
- Better access to testing and screening throughout the country;
- Targeted screening for the most at risk groups;
- Wider testing in the broader population making Māori a priority.



# IMPROVING POLICY, SERVICES AND PRACTICE

## KEYNOTE SPEECH: “Hepatitis C Diagnosis and Treatment: An update from Asia”

Mr Giten Khwairakpam, Manager, TREAT Asia/amfAR

It took patient voices, through groups like the World Hepatitis Organisation, to finally get viral hepatitis on the World Health agenda. Since then, progress has been rapid, with hepatitis C treatment policies being developed at unprecedented speed. Mr Giten Khwairakpam shared the significant progress that has been made in Asia but warned that inconsistencies in DAA pricing and short falls in funding are making it challenging for many countries to implement national policies.

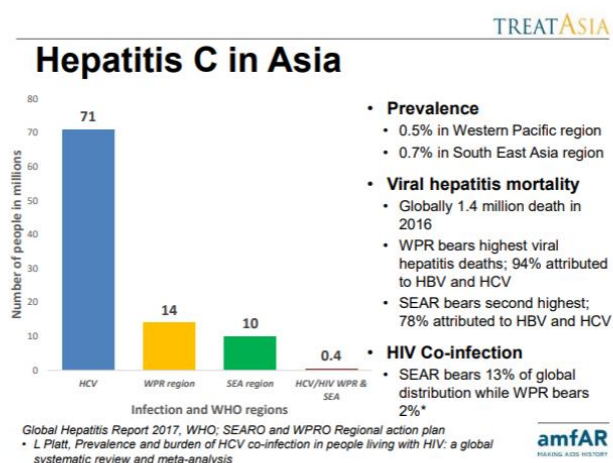
[Presentation Notes](#) | [Audio](#)

### Key Messages

- There is growing international political will for hepatitis programs to be translated into effective national programs.
- National action plans need to include clear targets, indicators and costings.
- There is emerging but slow program implementation.
- Major barriers include lack of awareness, funding, and inconsistencies in DAA drug pricing.
- Fast-track approaches are needed for advancing regulatory approval process for DAAs

### Overview of Viral Hepatitis in Asia

- WPR has the highest mortality due to viral hepatitis in the world.
- SEAR has the 2nd highest mortality due to viral hepatitis in the world.
- For HIV/VH co infection, WPR bears 2% and SEAR 13% of global distribution.



### Policy Development: Progress

Significant progress being made in Asia with the development of national policies:

- 17/37 countries in Western Pacific Region (WPR) either have or are developing national plans;
- 4/11 countries in South East Asia Region (SEAR) have national plans and all will have them by end of 2019.

However, not all countries are able to fund the implementation of policies and rely heavily on international funding.

## Funding Options: What are other countries doing?

### Global Fund-supported programs:

- Reprogramming with available “balance” funds;
- Focuses on care for those with HIV co-infection;
- India, Cambodia and Thailand have utilized this option.

### Community-led programs:

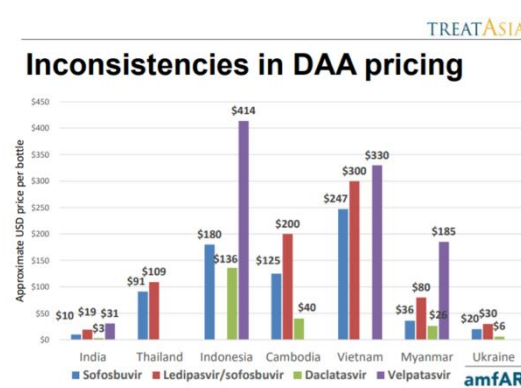
- In India, CoNE (PWID group) providing services to diagnose and treat people in high risk groups and prison settings in collaboration with the government;
- In Indonesia, Satu Hati providing screening services inside prisons in Jakarta in collaboration with the government.

### Other programs

- MSF implementing diagnosis and treatment in Cambodia, India;
- CHAI assisting government in Indonesia, Myanmar, Vietnam.

### Drug Pricing: A Barrier to Elimination

- Drug-pricing remains a major obstacle.
- DAA prices have been dropping, but inconsistent across countries.
- Asia needs to get affordable DAAs as fast as possible.
- Access to DAAs can be fast tracked by:
  - Registration of WHO pre-qualified medications;
  - National procurement led by UNDP;
  - Special import license.



## Screening and Treatment Access: Progress in Key Countries

India	Indonesia	Thailand
National viral hepatitis control program launched in July 2018.	Program under Sub-directorate of hepatitis from June 2017.	DAAs (SOF and SOF/LDV) included in the national Essential medicine list in January 2018.
Plans to test 160,000 to 3.1 million people over 3 years.	Plans to test 140,000 people a year.	Generic DAC is not available in Thailand consequently G3 patients are treated using peg-IFN.
Plans to treat 100,000 people annually over the next 3 years.	Plans to treat 3000 people a year.	

## KEYNOTE SPEECH: “Lifting the invisibility cloak: the role of nurses in hepatitis C elimination” Doctor Jacqui Richmond, Nurse Educator Burnet Institute

### “We just need a nurse.”

“Everyone says they just need a nurse,” said Dr Jacqui Richmond, referring to roll out of hepatitis C elimination programs across Australia. “And yet if you look at the data, look at many of the committee structures, we’re invisible,” she said. In this eloquent and thought-provoking presentation, Dr Richmond called for the work of nurses to be properly recognised through the capture of data. “Let’s get nurses and researchers to team up,” she said.

[Presentation Notes](#) | [Audio](#) | [Report Back](#)

### Key Messages

- Nurses are at the coal face of hepatitis C care yet they remain invisible. The absence of any nursing representation on the [Hepatitis C Elimination](#) steering committees of NT QLD, VIC and WA clearly illustrates this.
- This invisibility means their experience and perspective is easily overlooked and yet is so essential to developing an effective hepatitis C response.
- It also leaves nurses vulnerable, as without evidence of their work to secure funding, the ongoing sustainability of their involvement is at risk.
- We need to start measuring what nurses do to remove this invisibility.

### Person centred care is a critically important concept that summarises everything nurses do today.

- In order to reach our elimination targets, we need to drive the cascade of care through primary care.
- We need flexible, person-centred models of care to engage people with, and at risk, of hepatitis C, “where they are”. Nurses - the most trusted profession and present everywhere in the country - are best placed for this.

### Getting them in the picture: Collecting data

- Some data is fairly straightforward e.g. number of scripts written by nurse practitioners.
- Measuring the complexity of forging a relationship of trust with someone who has been marginalised or the time it takes to engage someone in care is more difficult. So much of what nurses do, which revolves around human relationships and developing trust, is hard to measure.
- But this needs to be captured and it needs to be noted.
- Imagine what we could achieve if each state had more nurse practitioners?



# Eliminate Hepatitis C Australia Partnership

Reaching the 170,000+ Australians who have yet to start life-saving hepatitis C treatment is the driving force behind Eliminate Hepatitis C Australia (EC Australia).

EC Australia, launched at Parliament House by Federal Health Minister, the Hon Greg Hunt MP, in partnership with the Paul Ramsay Foundation, is a multi-million dollar targeted, national response to the serious decline in the uptake of highly effective drugs to cure hepatitis C among Australians living with the deadly virus.

Co-ordinated by Burnet Institute, the EC Australia partnership aims to:

- Eliminate hepatitis C as a public health threat in Australia by 2030
- Inform government policy
- Increase hepatitis C awareness, testing and treatment for high risk and vulnerable communities.

[Find out more](#)

**KEYNOTE SPEECH: “Maximising DAA uptake: Tensions between 'lay' and 'expert' knowledges”** Doctor Joanne Bryant, Associate Professor Centre for Social Research In Health UNSW

Education and correcting misconceptions relating to DAA therapy is central to increasing hepatitis C treatment uptake, but social researcher Dr Joanne Bryant raised the question: who needs to be educated, the professionals or the lay people?

[Presentation Notes](#) | [Audio](#)

### Key Messages

- Dismissing 'lay' understandings as erroneous and wrong can be stigmatising and risks reinforcing suspicion and mistrust.
- We should not assume that all people have faith in scientific and biomedical claims about DAA treatment.
- Although biomedical information about DAAs as well as broader messages around living well and 'renewal' are important, it is the delivery that is crucial.
- Peer networks provide a unique and trustworthy entry point ([Henderson, Madden, Kelsall, 2017](#)).
- We need the political will to fund peer programs and projects to ensure that patients can make truly informed decisions regarding their own health.
- Community and culturally relevant story-telling works well.

## ANNUAL REPORT OF TRENDS IN BEHAVIOUR VIRAL HEPATITIS, CENTRE FOR SOCIAL RESEARCH IN HEALTH UNSW

Dr Joanne Bryant also presented finding from the [Annual Report of Trends in Behaviour Viral Hepatitis](#), which presents data from a selection of the behavioural and social research conducted by the Centre for Social Research in Health.

### This year's report emphasised:

- The continuing need to be innovative with prevention approaches, particularly for those who either do not want or cannot access treatment, or indeed for those who have successfully completed treatment and want to remain virus-free.
- The importance of responsive models of care for viral hepatitis, with a focus on patient-reported outcome measures and peer-delivered models of care. The Deadly Liver Mob is an example of an intervention with key learnings.
- The devastating impact of stigma, which prevents people accessing care.

[Read the report](#) | [View the presentation notes](#)



# ENGAGING PEOPLE IN TESTING AND CARE

**KEYNOTE SPEECH: “Finding the Missing Millions: Patients’ Lived Experiences Informing Screening and Care Efforts”** Doctor Su Wang, Medical Director, Centre for Asian Health, President-Elect, World Hepatitis Alliance

**“The more we talk about it, the more it destigmatises it for the whole community.”**

Dr Su Wang provided perspectives of both treating hepatitis as a GP, and as a person living with hepatitis B in the US. Her presentation offered an update on global progress and novel approaches to overcoming barriers to diagnosis as identified in “[Find the Missing Millions](#)” report, with a particular focus on her experience of diagnosing and treating viral hepatitis in New York. Without massive scale-up, more people will become infected and lives lost, she said.

[Presentation Notes](#) | [Audio](#) | [Hear Dr Wang’s Story](#)

## Key Messages

- Patient voices have played a critical role in building driving the progress we have seen in recent years. See the work of the World Hepatitis Alliance (WHA).
- We need people to speak up. The lived-experience is essential to overcoming barriers to diagnosis along with screening and linkage to care.
- People living with viral hepatitis and affected communities need to be at the heart of every effort to eliminate viral hepatitis.
- They bring fundamentally important perspectives and experiences which greatly enhance the effectiveness of strategies and programs. They also provide a much-needed support network, and drive advocacy efforts.
- Without massive scale-up, more people will become infected and lives lost.
- We need to simplify Hepatitis B guidelines.

“[Find the Missing Millions](#)” program, initiated by the World Hepatitis Alliance (WHA), identified 5 main barriers to the diagnosis of viral hepatitis B and C:

1. Lack of public knowledge of the diseases
2. Lack of knowledge of viral hepatitis among healthcare professionals
3. Lack of easily accessible testing
4. Stigma and discrimination
5. Out-of-pocket costs for the population

**Meaningful partnership with the affected community and civil society organisations can:**

- Contribute to the delivery of stronger awareness campaigns;
- Strengthen innovative approaches to finding the undiagnosed through peer support services;
- Help identify gaps within action plans which would otherwise be missed; and offer a platform to address stigma and discrimination,
- Ensure an equitable response so that the most vulnerable and marginalised are not left behind in the effort to eliminate viral hepatitis.
- Read “[Overcoming the Barriers to Diagnosis of Viral Hepatitis](#)”

## KEYNOTE SPEECH: “Community mobilisation - The way ahead” Mr Stuart Loveday, Chief Executive Officer, Hepatitis NSW

**“If we spend additional funds now we will save far greater amounts of money into the future and more importantly we will save lives.”**

Stuart Loveday, Hepatitis NSW’s longstanding CEO, put in a plea for funding, highlighting the increase in investment required to reach less engaged communities. Whilst celebrating Australia’s successes he also queried whether hepatitis elimination was actually possible so long as the war on drugs fuels stigma and discrimination, and whilst outreach is limited to PWID. Regarding hepatitis B, Mr Loveday lamented the withdrawal of funding for community organisations to mobilise affected communities, stating, “People with hepatitis B and the agencies working with them are in a terrible situation.”

[Presentation Notes](#) | [Audio](#)

### Key Messages

- We cannot do what is needed to achieve all 3 viral hepatitis elimination goals with existing resource allocations.
- Hepatitis B has been the poor cousin to hepatitis C when it comes to targeted interventions. We need to recognise this and provide funding and resource to community organisations across Australia to work in partnership with HBV priority populations.
- Migrant populations may be the biggest challenge of all.
- Need to ensure:
  - New funding does not draw from other successful existing programs and
  - Successfully evaluated programs are built on and fine-tuned year to year.

## OVERVIEW: HEPATITIS B IN AUSTRALIA

**“Every death from hepatitis B represents a policy failure. In 2019 we should not be at this stage in Australia”.**

Australia has done exceptionally well in terms of vaccination but had not done well at all at supporting people living with hepatitis B into testing, monitoring and - where needed - treatment.

- 64% diagnosed – 36% undiagnosed;
- 20% of those diagnosed are engaged in care (2022 national strategy target is 50%);
- 8% are receiving treatment (2022 target is 20%);
- Minimal increases between 2016 and 2017.
- Lack of response connected to high burden in migrants who - because of their status - struggle to advocate for their rights.
- From a community awareness and mobilisation point of view there has been extremely limited resources provided by government especially when compared to the responses to HIV and more recently – albeit it to a lesser extent – hepatitis C.
- With relatively small amounts of funding, state-wide agencies have delivered value added outcomes. Buy-in from community partners with no previous association with hepatitis B has proven to be a huge added bonus in terms of capacity, optimism and bang for buck. But the programs that were shown to be successful for hepatitis B are no longer funded.

NOTE: Working with communities affected by hepatitis B is vastly different from working with those affected by hepatitis C:

- Hepatitis B is family business.
- There is a diverse range of cultures, all requiring individually tailored responses.
- Stigma and discrimination stems from different sources.

## OVERVIEW: HEPATITIS C IN AUSTRALIA

- Australia currently on track for elimination by 2030 (NSW 2028) but progress is slowing:
  - Need minimum 1500 people/ per month to access the new DAAs to achieve elimination goals.
  - In 2019 these are averaging closer to 1000 per month, with many retreatments.
- The road ahead will become increasingly difficult unless we take further action and invest now.
- Don't forget the aging, silent cohort.
- Significantly greater efforts are required to reach less engaged communities:
  - GP mobilisation, education, incentivisation;
  - Ongoing, targeted PLUS broad awareness campaigns;
  - Peer based programs;
  - Greater nurse involvement;
  - Mobile outreach;
  - Greater system capacity in secure settings.

### **Efforts need to stop focusing exclusively on subsets of PWID and reach out to the broader community.**

- Take inspiration from NZ's recent initiatives e.g. Butterfly Campaign.
- The consistency and momentum of the NSW strategy has stalled in 2019 with the fine tuning of campaigns resulting in the decision to focus only on subsets of PWID.
- The two can and should run concurrently. This increases the chances of mobilising all communities affected by hepatitis C and reaching elimination goals.

### **Three big barriers to hepatitis C elimination remain:**

1. No vaccine to prevent transmission.
2. No controlled sterile needle programs in any Australian prisons.
3. Despite all the hard work and endless efforts, we will not reduce stigma and discrimination in any meaningfully way until we have drug law reform and legalise drug use.

**KEYNOTE: “Married at first site? Engagement and the challenge of eliminating hepatitis C in Australia”** Professor Alex Thompson, Director of Gastroenterology, St. Vincent's Hospital Melbourne

Using the analogy of the hit TV series ‘Married at First Site’, Professor Thompson reminded us that after the initial elation thanks to new tools and treatments, hepatitis C elimination, like marriage, is going to take sustained effort and a whole lot of work.

### Key Findings

- Engagement of marginalised individuals not currently in care is now the key challenge for eliminating hepatitis C in Australia.
- PWID are the priority: we need to treat 4725 PWID per year.
- People with hepatitis C do not like going to hospital. We need new models of hepatitis C care for PWID in the community.
- We need to reduce barriers to testing and treatment uptake.

### Priority population

80% of people living with hepatitis C in Australia report a history of injecting drug use. We need to break the cycle of transmission.

### Increasing Engagement in the Community

Studies show that treating hepatitis C in the community is more effective than hospital-based care.

- See ‘[\*Outcomes of Treatment for Hepatitis C in Primary Care\*](#)’.

### New models of hepatitis C care for PWID in the community need to take in to account:

- OST/NSP facilities
- Homeless persons programs
- Mental Health
- General practice
- Prisons

*Note: clients frequently move between these services. Co-ordination in service provision needs to be improved.*

### Increasing Testing Uptake

Hepatitis C testing rates need to increase by 50% to reach the targets ([see report](#)) .

- Point-of-care testing is attractive but logistic barriers need to be overcome for “test and treat” strategies.
  - See ‘[The Rapid-EC study – A feasibility study of point-of-care testing in community clinics targeted to people who inject drugs in Melbourne, Australia](#)’ which found only 5% of patients waited 105 minutes for hepatitis C test results.
- Hospitals offer another opportunity through Emergency Departments.
  - See ‘Hepatitis [C in the Emergency Department \(ED\): Screening and linkage to care for Hepatitis C infection in the ED using point-of-care testing](#)’ which showed a simple survey of risk factors could help identify people with HCV. However once diagnosed, linkage to care was poor.

- Pharmacies
  - [\*SuperDOT-C study\*](#) showed promise in ability of pharmacy staff to recruit OST patients and encourage them to initiate treatment. Interesting strategy for increasing testing and increasing linkage to care.
- Prisons:
  - See '[\*Outcomes of treatment for hepatitis C in prisoners using a nurse-led, statewide model of care\*](#)' which showed that hepatitis C treatment using a decentralised, nurse-led model of care is highly effective and can reach large numbers of prisoners. Large scale prison treatment programs should be considered to support hepatitis C elimination efforts.

### **The role for Hospital-Based Treatment**

The small number of people with more serious liver disease can be successfully referred to tertiary care.

### **Monitoring**

- [\*SMART C study\*](#) provides evidence for simplified monitoring; suitable for most patients.
- On-treatment monitoring no longer recommended.



# MEASURING OUR PROGRESS AND SUCCESS

## KEYNOTE SPEECH: “Progress on Hepatitis C elimination in Scotland” Professor Sharon Hutchinson, Professor of Epidemiology, Glasgow Caledonian University

Scotland, as part of the UK, is one of the 12 countries on track to reach 2030 elimination targets thanks to a strategy informed by robust evidence, combined with ongoing monitoring and evaluation which continually informs updates to it. Professor Sharon Hutchinson’s research provided the key evidence to guide the public health response to hepatitis C in Scotland, culminating in the Scottish government investing significantly in their 2008-2015 Action Plan. In this presentation Professor Hutchinson shared some of their learnings.

[Presentation Notes](#) | [Audio](#)

- In 2008 HCV population estimated to be 38 000 (0.75% prevalence), around 90% related to injecting drug use – similar to Australia.
- Scotland benefited from a hepatitis C action plan that predated the introduction of DAAs and covered the whole spectrum from prevention to diagnosis and treatment.
- Scotland adopted a performance management approach.
- Government targets on treatment numbers both at national and local level proved to be important in scaling up efforts.
- Disease targets included: a 75% reduction in liver failure by 2020.
- Scotland’s response provides compelling evidence of population impact of DAAs in averting liver morbidity/mortality, and emerging evidence on HCV treatment as prevention.
- Monitoring data has been critical to help identify issues in the scale-up of services and drive innovation to achieve elimination. Separate funding was allocated to facilitate this.
- The Scottish working group developed the following recommendations for case finding:
  - Opt-out testing for high risk groups (e.g. prisons, drug/harm reduction services, homeless services)
  - Local MCNs to support GPs in testing initiatives
  - Pilots of POC testing and other novel testing initiatives
  - Local awareness raising campaigns led by Public Health
  - Training for primary and secondary care HCWs
  - Treatment provided at the testing venue, where possible
  - Regular look-back re-engagement exercises
  - Feasibility study to identify people at risk from OST/drug addiction administrative records
  - Pilot of birth cohort screening in high deprivation areas

*Note: An increase in injecting cocaine in Scotland has led to the highest rate of HIV infection in 30 years.*

Read the [Scottish Government Elimination Strategy 2019-2024](#).

## KEYNOTE SPEECH: “Hepatitis C in NSW - The pathway to elimination by 2028”

Doctor Kerry Chant, Chief Health Officer, NSW Health

**“NSW is on track to receive virtual elimination by 2030 but we need to make sure no one misses out on treatment.”**

NSW is a world leader in hepatitis C elimination, currently on track to reach targets by 2028 - two years head of WHO goals. NSW Chief Health Officer Dr Kerry Chant shares details of NSW’s data-driven approach.

[Presentation Notes](#) | [Audio](#)

### Key Messages

- Harm reduction and prevention programs are an essential component of the response.
- Relationships with community organisations and research institutes also key.
- To achieve elimination NSW needs to:
  - Focus on implementation at scale;
  - Continue to enhance and innovate models of care in partnership with patients and community partners;
  - Systematic approach to testing and treatment across services required, particularly those serving priority populations;
  - Increased testing in needle syringe programs and in drug and alcohol settings needed;
  - Ongoing response must be supported by research (note to collaboration with Kirby Institute)

### NSW has used prevalence modelling to inform elimination targets and set KPIs:

- Estimated 80,700 people living with hepatitis C in NSW.
- Worked with the Kirby Institute to estimate prevalence in each of NSW’s 15 health districts then set targets for each district.
- KPIs + quarterly reporting used. Local districts held accountable through performance management framework.
- Reporting measures embedded into grant program funding for Aboriginal Community Controlled Health Services.

### NSW 2014-2020 Strategy focuses on testing, treatment and prevention with a settings focus:

- Needle Syringe Program
- Drug and alcohol treatment services
- Mental health services
- Aboriginal Community Controlled Health Services
- Correctional facilities
- Primary care

## Key Findings from Strategy Implementation

### Testing

- Look at [NSW Dried Blood Spot \(DBS\) testing pilot](#).

### Treatment

#### Correctional facilities:

- Achieved virtual elimination in 12 prisons in NSW by June 2019 - Further scale-up planned. See [Hepatitis Prisons Elimination \(HIPE\) Program](#).
- Justice Health KPI to screen 9,000 patients in custody for BBVs and STIs and treat 1,500 people for HCV in 2019/20 with a focus on treating Aboriginal people.

#### Primary Care

- Close to half of hepatitis C treatment now initiated by GPs.

#### Population Focus

- [ETHOS Engage](#) found treatment uptake was lower among PWID who were:
  - Homeless;
  - Not currently receiving opioid substitution therapy;
  - Injecting more than daily within the last month.

### Prevention

- Needle Syringe Program (NSP) – State-wide focus to enhance services offered to include access to hepatitis C testing and treatment and peer support.
- Opioid Treatment Program (OTP) - Number of clients enrolled in the OTP continues to increase (>21,000 in 2018).
- Newly TGA registered long acting depot buprenorphine being scaled across NSW treatment services.

### What Next?

- Enhance and innovate models of care and services in partnership with patients and NGO partners (Hepatitis C Council and NUAA) e.g. DBS, HIPE, peer outreach;
- Scale up testing and treatment in priority settings;
- Support translational research and policy relevant evidence-generation;
- Use and refine data for system planning and measuring success;
- Continue to collaborate with clinicians, community, researchers and others.

*Note: Reinfection surveillance program has been introduced.*

## KEYNOTE SPEECH: “Progress towards hepatitis C elimination in Australia - A National Update” Doctor Alisa Pedrana, Senior Research Fellow Burnet Institute

**“Workforce development in a range of settings, particularly primary care, to promote and deliver hepatitis C testing and treatment is essential.”**

Public health researcher Dr Alisa Pedrana has been co ordinating the drafting of [Australia’s progress towards hepatitis C elimination Annual Report 2019](#) - the first national report of its kind. In addition to identifying the successes, this presentation of the report highlights gaps in our knowledge and informs future directions in Australia’s hepatitis C elimination response.

### Presentation Notes

#### Key Findings

##### The good

- ~70,000 people have received DAA therapy by the end of 2018
- Treatment rates have been accompanied by declines in new infections

##### The bad

- Rates of DAA treatment uptake have declined in the past 2 years
- ~2/3 of the estimated population living with hepatitis C is yet to be treated

##### The future

- Maintaining and increasing momentum is a challenge. Increased efforts to engage affected populations are needed:
  - Effective primary prevention measures;
  - Raised awareness about hepatitis C treatment and cure;
  - Increased testing and linkage to care among people at risk, using data to inform this.

#### The successes

Moving to unrestricted access to direct-acting antivirals (DAAs) for the treatment of hepatitis C has brought catalytic change:

- ≈ 1/3 of estimated CHC population (2016) now received DAA therapy.
- Treatment uptake has been relatively high in some priority populations:
  - PWID: treatment uptake appears to be proportionately higher than in the broader hepatitis C infected population.
  - Concerted efforts have also been made to diagnose and treat hepatitis C among HIV-positive gay, bisexual and other men who have sex with men (GBM).
  - Success supported by declining hepatitis C incidence in these two groups, and lower prevalence of infection among recent PWID, suggesting early evidence of a treatment-as-prevention benefit.
- Decline in advanced liver disease complications and liver-related deaths suggests people with significant liver disease, who may no longer have current transmission risk, are also accessing treatment.

#### What’s needed next?

- Renewed focus on case finding and linkage to treatment;
- Understanding of differences in health-seeking behaviours and healthcare access among priority populations;
- Workforce development in a range of settings, particularly primary care, is essential.

Challenges include gaps in our knowledge of the epidemic among some priority populations and settings, with limited data to accurately assess progress in

- Aboriginal and Torres Strait Islanders
- Prisoners
- People living in rural and remote areas

Urgent action is needed to understand the hepatitis C epidemic among these priority populations and identify their needs. Suggestions include:

- Targeting treatment uptake by geographical area.
- Using and linking existing data systems to improve understanding of testing and treatment.



# RE-ORIENTATING HEALTH SERVICES FOR PRIORITY POPULATION ACCESS

**KEYNOTE: “Epidemiology of viral hepatitis and responses in Australasia and our region”** Professor Benjamin Cowie, Director, WHO Collaborating Centre for Viral Hepatitis

**“It is a fundamental human rights issue that an accident of where you happen to be living determines whether you have access to life-saving treatments.”**

In the Western Pacific Region, viral hepatitis related mortality exceeds that of HIV, TB and malaria combined. Some analysis even suggests that mortality from hepatitis B alone exceeds that of these diseases together. When considering the scale of this disease burden, responses have lagged far behind.

There are, however, some real success stories unfolding and the most recent report from WHO shows some encouraging global viral hepatitis trends.

Professor Ben Cowie shares some of the data that proves we really are making a difference, and urges for Australia to take this moment to have a serious rethink about how we can address remaining barriers, in particular, the inequities that mean some are denied access to care.

[Presentation Notes](#) | [Audio](#)

## Key Messages

- For an in depth global overview read the WHO [Progress Report on HIV, viral hepatitis and sexually transmitted infections 2019](#).
- WPR has a particularly long way to reach hepatitis B elimination targets: only 2.3% of those infected are estimated to be diagnosed.
- The “one size fits all” approach does not work. Understanding diversity within priority populations is essential.
- Equity in treatment access remains a major challenge, even in Australia.
- Australia’s [Viral Hepatitis Mapping Project](#) highlights inequities in access to treatment by location within the country. We need to drill down further into this data to identify emerging trends and guide our response.

Viral Hepatitis				
WHO Region	Hepatitis B		Hepatitis C	
	Proportion of people infected who are diagnosed, 2015 (%)	Proportion of diagnosed people treated, 2015 (%)	Proportion of people infected who are diagnosed, 2015 (%)	Proportion of diagnosed people treated, 2015 (%)
African Region	0.3	18.4	5.7 [3.9–7.0]	2.2 [0.6–3.0]
Region of the Americas	9.6	16.4	36.3 [33.8–37.4]	11.1 [10.7–11.8]
South-East Asia Region	2.6	6.2	8.7 [6.0–9.8]	7.1 [4.9–8.4]
European Region	13.1	5.0	31.2 [25.2–34.7]	4.9 [4.2–7.2]
Eastern Mediterranean Region	1.7	0.5	17.7 [17.4–18.0]	12.1 [11.2–12.4]
Western Pacific Region	2.3	7.9	21.5 [20.3–21.6]	4.8 [4.7–5.0]

Source: Web Annex C. Estimates of the coverage of diagnosis and treatment for hepatitis B and C virus infection, by WHO region and income group, 2015. In: Global hepatitis report 2017. Geneva: World Health Organization; 2017 (<https://apps.who.int/iris/bitstream/handle/10665/277006/WHO-CDS-HIV-18.47-eng.pdf?ua=1>, accessed 2 May 2019).

## Successes

### Hepatitis B

- Infant vaccination, where our region leads the world:
  - China alone has prevented 30 million CHB infections and averted 5 million future deaths.
- Overseas vaccination programs are also the reason why hepatitis B levels are set to plateau in Australia (migration).
- Even though hepatitis B uptake has been modest, it has still saved thousands of lives.

### Hepatitis C

- In addition to modelling telling us Australia is on track re hepatitis C, we now have real world data.
  - Read '[\*Declining hepatitis C virus-related liver disease burden in the direct-acting antiviral therapy era in New South Wales, Australia\*](#)' which shows that DAA scale-up has had a major population-level impact on HCV morbidity and mortality in NSW.

### The Challenges: Hepatitis B diagnosis and treatment

- Prevention can reduce the rate of new infections, but what about those already infected?
- In Australia, modelling suggests the number of people living with chronic hepatitis B will continue to increase.
- A breakdown of people living with hepatitis B in Australia by country of birth and by priority population reveals a vast cultural and linguistic diversity of people, changing patterns of migration and shifting epidemiology.
- Even within Australia's Indigenous population there is great diversity, with geographical location having a profound impact on access to services.
- Australia will not reach hepatitis B elimination targets unless there is an entire rethink about how we approach hepatitis treatment in this country.
- We need to unpick the determinants of these inequities.

**KEYNOTE SPEECH: “How stigma can undermine the viral hepatitis elimination strategy by 2030 in WPRO region”** Mr Dee Lee, Director, Inno Community Development Organisation

**“People won’t seek help for fear of being stigmatised.”**

This presentation emphasised the devastating impact of stigma and discrimination on diagnosis of viral hepatitis in the western pacific region.

[Presentation Notes](#) | [Audio](#)

### Key Findings

In the Western Pacific region, stigma and discrimination is the barrier affecting the broadest range of people:

- 38% of people surveyed identified stigma and discrimination as the main barrier to hepatitis B diagnosis. This compares to 4% in Africa, 17% in the American and 17% in Europe.
- Particularly relevant to migrant communities who may fear stigma and discrimination when seeking health care in new countries.
- For hepatitis C diagnosis → 74%, particularly affecting PWID.

### Discrimination can take many forms:

- Most countries now have viral hepatitis guidelines in most countries now but very few have anti-discrimination laws.
- People constantly fear rejection because of their status.
  - 2016 hepatitis B survey in Philippines, Vietnam and China found nearly 50% of those surveyed received pre employment rejection.
- Other examples of common place discrimination include:
  - Rejection from schools
  - Being asked to eat separately
  - Rejection from spouses, other family members and communities.
- Suicide is not uncommon.

### Action to be taken:

- Raising awareness and health promotion is critical.
- A wholistic approach is necessary. People with the lived experience need to mingle with policy makers, particularly in countries such as Vietnam, China.
- Need to balance awareness with public fear.
- Encourage people to speak up and share their story but this will require support.

## KEYNOTE SPEECH: “What’s required to eliminate viral hepatitis in Aboriginal and Torres Strait Islander” Associate Professor James Ward, Head, Infectious Diseases Research Aboriginal Health, SAHMRI

In this compelling presentation, Associate Professor James Ward urged the audience to learn from Australia’s HIV response and ensure Indigenous Australians and the services they access are not left behind, particularly when it comes to biomedical breakthroughs.

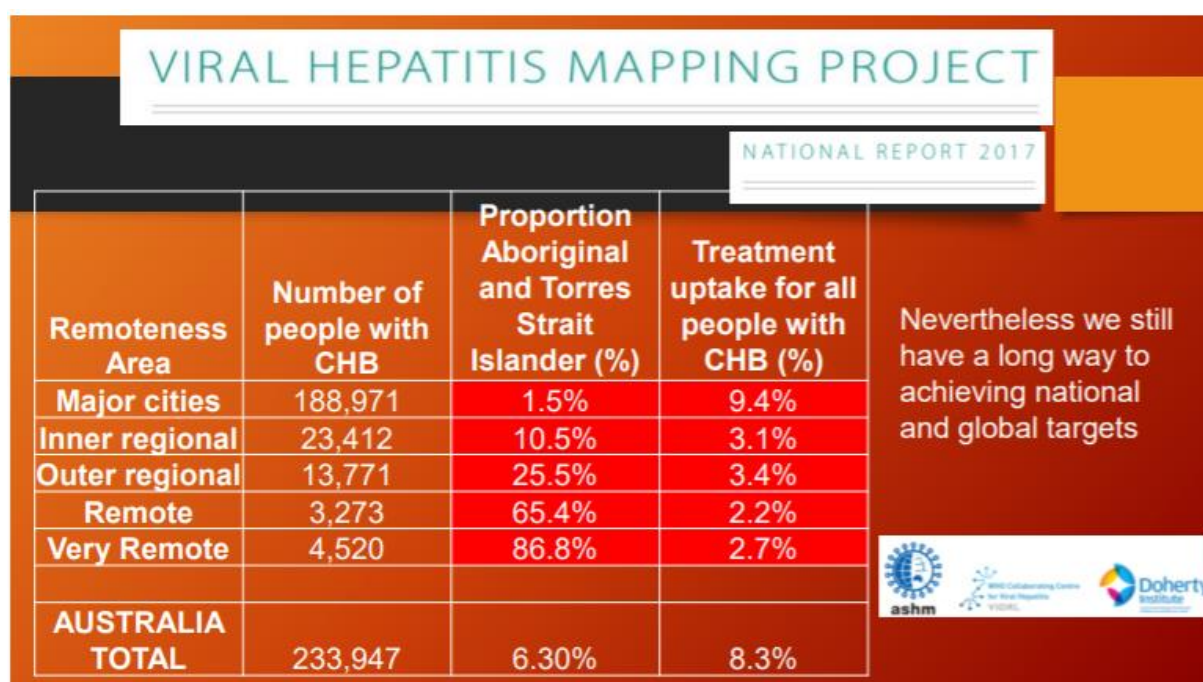
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### Key Messages

- A combination of biomedical, behavioural, structural and cultural strategies will be required to impact viral hepatitis.
- Need to have the right people designing and delivering the programs.
- Need to reframe the approach in communities away from only individuals to thinking more about families and communities and using a wellness perspective.
- We need to tap into the strength and wisdom within Indigenous communities.
- The issues of racism and recognition of our peoples cannot be ignored.

### Overview Hepatitis B

- Achieving high vaccination rates. There’s been great work done across the country that probably requires further support to scale up.
  - Read [Trends in the prevalence of hepatitis B infection among women giving birth in New South Wales](#) study which found that a significant reduction in HBV prevalence in Indigenous women giving birth associated with the introduction of the HBV vaccination program in NSW.
- Still a long way to go achieve national and global elimination rates. View the [Viral Hepatitis Mapping Project](#) which assesses geographic variations in the prevalence of viral hepatitis and the disparities which exist in access to care.



## Overview Hepatitis C

- Rates of infection in Indigenous Australians still increasing.
- Rates of DAA uptake in remote and rural communities is half that of urban areas, leaving Indigenous populations disproportionately affected.
- Suggestions of around 7500 Indigenous Australians being in need of hepatitis C treatment likely to be way too low. Previous estimates were over 20 000. Further investigation required.
- Hepatitis C diagnoses  $\geq 6$  x higher in young Aboriginal people than older.
- Need to look carefully at reducing new infections.
- Need to think carefully about harm reduction approaches.
- Need a far reaching but targeted national campaign to promote testing and treatment for hepatitis C, reinforced by local initiatives. Look at the Young Deadly and Free campaign.
- Without this Aboriginal people may be left behind. Look at PrEP campaigns, which focused on gay, white men and didn't resonate with Aboriginal communities.

## Other notes

- $\geq 50\%$  of the Indigenous population use Aboriginal Community Controlled Health Services.
- Identify gaps in treatment cascades - are they client or clinician? Pay particular attention to Continuous Quality Improvement (CQI) programs.
- There may be a role for incentives, but if so for whom, and how should they be administered?
- Need to reduce siloed approach.
- Need a central repository for all the great work being done so that others can learn from it.
- One of the greatest challenges in remote and rural Australia is translating resources into different language groups.



**KEYNOTE: “Viral Hepatitis and Māori Health”** Professor Chris Cunningham,  
Massey University

**“How do you interpret silence? Silence has a particular cultural meaning that may differ between cultures. Does silence mean agreement or disagreement? This can be critical in a clinical context.”**

Professor Cunningham provided a snapshot of viral hepatitis and Māori health.

[Presentation Notes](#) | [Audio](#)

### Key Messages

- Working definition of inequity is an unfair and remediable inequality. You can't modify ethnicity but you can modify the health response.
- Maori have poorer surveillance rates, treatment rates, liver disease rates and HCC rates.
- Co-morbidities such as metabolic syndrome; diabetes; obesity are an issue, and Māori liver donation is almost non-existent.
- Hepatitis B surveillance and ongoing monitoring is key to increasing survival and the best way to warehouse people until there is a cure.
- Whole population screening of specific sub-groups may be viable.
- There are many Māori with hepatitis B in Australia that have gone missing - please help find and look after them.
- Effort is still required to improve access to vaccination, surveillance and treatment; but we are getting there.
- Nurse-led, by-Māori-for-Māori services are doing a fantastic job working with communities.
- Mainstream services can be very effective but to succeed require focus on workforce development and cultural competency.
- Nurses are the real leader of cultural safety in New Zealand.
- The intervention that really matters with Indigenous populations is mindfulness: be mindful that you may be different from the person you are speaking to.
- Look at the [Butterfly Campaign](#).

### WORLD INDIGENOUS PEOPLES’ CONFERENCE ON VIRAL HEPATITIS

Funds are available to send people who don't normally go to conferences. Are there any indigenous people you could support to attend?



# GP FORUM SATELLITE EVENT

Fourth August, fifty General Practitioners (GPs) from around Australia gathered to share their experiences and workshop strategies for eliminating hepatitis C in their communities.

Presentations were wide-ranging and captured an impressive variety of experiences and viewpoints.

Delegates heard from General Practitioners who prescribe treatment for patients with hepatitis C in capital cities, rural Australia, Aboriginal Medical Services, mental health services, and [the back of a Kombi van](#).

Scientia Professor Greg Dore of the Kirby Institute gave a comprehensive overview of treatment uptake in Australia, in the context of global hepatitis C elimination goals. Dr Charan Jeet, a General Practitioner from Sydney, provided the valuable yet rarely-heard perspective of the GP who wants to be a part of the fight for hep C elimination, but doesn't quite know how to start. Those of us working to increase treatment rates in primary care settings stand to benefit from hearing more from Dr Jeet and others like him.

Last year's Forum featured the launch of the '[Aus GPs End Hep C](#)' pledge statement, which laid out goals for GP participation in hepatitis C elimination. This year's event ended on a high note, as Dr Joss O'Loan, a GP from Brisbane's Kombi Clinic, lead the delegates in celebration of progress made towards one of those goals; an estimated 17% of Australian GPs have now written a script for direct acting antiviral hep C treatment, up from only 10% the previous year.

In the words of Dr Eben Viljoen, a GP who travelled from South Australia to attend the forum: "A great day of learning from some inspiring speakers fighting for #AusGPsEndHepC – now to become a Hep C champion!"

## CALL TO ACTION: SIGN UP TO BE NO HEP MEDICAL VISIONARY!

Are you a medical professional working in the field of hepatitis and are taking actions to eliminate this global killer? If so, we invite you to join other medical professionals from across the world who have committed to taking actions to accelerate this goal.

NOhep MEDICAL  
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Asia Pacific Region

# NURSE FORUM SATELLITE EVENT

On the 4<sup>th</sup> August the Viral Hepatitis Nurse led Models of Care Forum brought together over 50 nurses from Australia and New Zealand to share knowledge and discover new ways of working. The program explored the forum theme of *Innovation, Agility and Velocity towards Elimination* with a dynamic program of workshops, oral and poster presentations. Participants heard from nurses delivering innovative models across the continuum of care, in settings which included alcohol and other drugs, prisons, and other primary care. Key challenges emerged such as securing funding and working within structural limitations. [Sian Pritchard](#) a Nurse Practitioner in Victoria gave an inspirational presentation on securing novel funding streams and engaging with stakeholders.

Successful nurse-led models demonstrated strong partnerships and engagement with clients wherever they are on their journey. [Sinead Sheils](#) from Sydney Local Health District and [Gary Keogh](#) from Queensland Injectors Health Network (QIHN) both co-presented with peer workers on the benefits of working with peers to increase engagement and the value of lived experience. [Marrianne Black](#) from the Ethnic Communities Council of Queensland presented how working with bi-lingual health workers builds trust, reduces stigma and assists culturally and linguistically diverse people navigate the health system.

Nurses are an agile workforce with the capacity to play the long game - building rapport and advocating for the client to keep them engaged in care. Investing in nurses and supporting them to work to their full scope of practice is vital to reach Australia's targets of viral hepatitis elimination.

Check out all the report-backs of nursing presentations at the Viral Hepatitis Nurse-led Models of Care Forum and AVHEC [here](#).

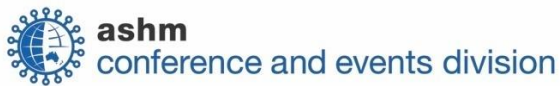


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