

Hepatitis C, Prisons and Treatment Opportunities (HePaTO) – preliminary findings

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Australian prisoner facts and figures

- Australian full-time adult prisoner population ~30,000
- ~50,000 flow through prisons each year
- 27% Australian prisoners are Indigenous
- 94% men, 6% women
- Average age 33 years
- 126 prisons in Australia
- NSW ~180,000 prisoner movements each year
- Median sentence length 36 months
- Poor health

Prisons and hepatitis C

- Estimated 226,700 people living with chronic hepatitis C in Australia
- Current IDU in Australia = 173,907¹
- 11% IDU in prison in past year = 19,130²
- 53% of IDU test positive for HCV = 10,139²
- Currently treat 0.9% of eligible prisoners in NSW⁴
- 2010 National Prison Entrants BBV Survey - only 7 HCV positive prison entrants across Australia reported ever receiving HCV treatment³

¹ Wilson, D, et al. 2009, Return on investment 2: evaluating the cost-effectiveness of needle and syringe programs among injecting drug users in Australia. DoHA, Canberra.

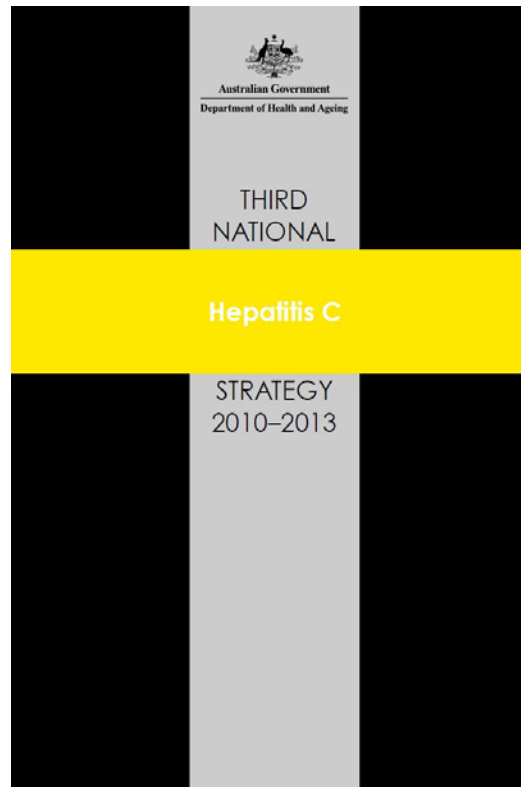
² Australian NSP Survey Report 2012

³ 2010 National Prison Entrants Bloodborne Virus Survey

⁴ Boonwaat et al. Establishment of a successful assessment and treatment service for Australian prison inmates with chronic hepatitis C. Med J Aust. 2010.

6.4 Treatment, health and wellbeing

“Custodial settings have the potential to be a focal point for hepatitis C testing, education and treatment for this priority population group”



Hepatitis C, Prisons and Treatment Opportunities (HePaTO) aims

Qualitative:

1. Explore issues associated with chronic hepatitis C (CHC) treatment in prisons in Australia (NSW, Qld, WA)

Mathematical modelling:

1. Estimate the potential number of prisoners who could be treated for CHC in prison
2. Evaluate the economic impact of treating CHC in prison

HePaTO Questions?

1. Is prison a good place to target individuals for hepatitis C treatment?
2. Are there knowledge, cultural and systemic barriers to providing hepatitis C treatment for prisoners?
3. Is there potential to scale-up hepatitis C treatment in prisons in Australia?

HePaTO Qualitative methods

In-depth Interviews

- 7 NSW prisons
- 5 Qld prisons
- 4 WA prisons

- 116 prisoners (pre-, current, completed, declined treatment)
- Referrals via the prison health clinics
- 29 health staff (nurses)

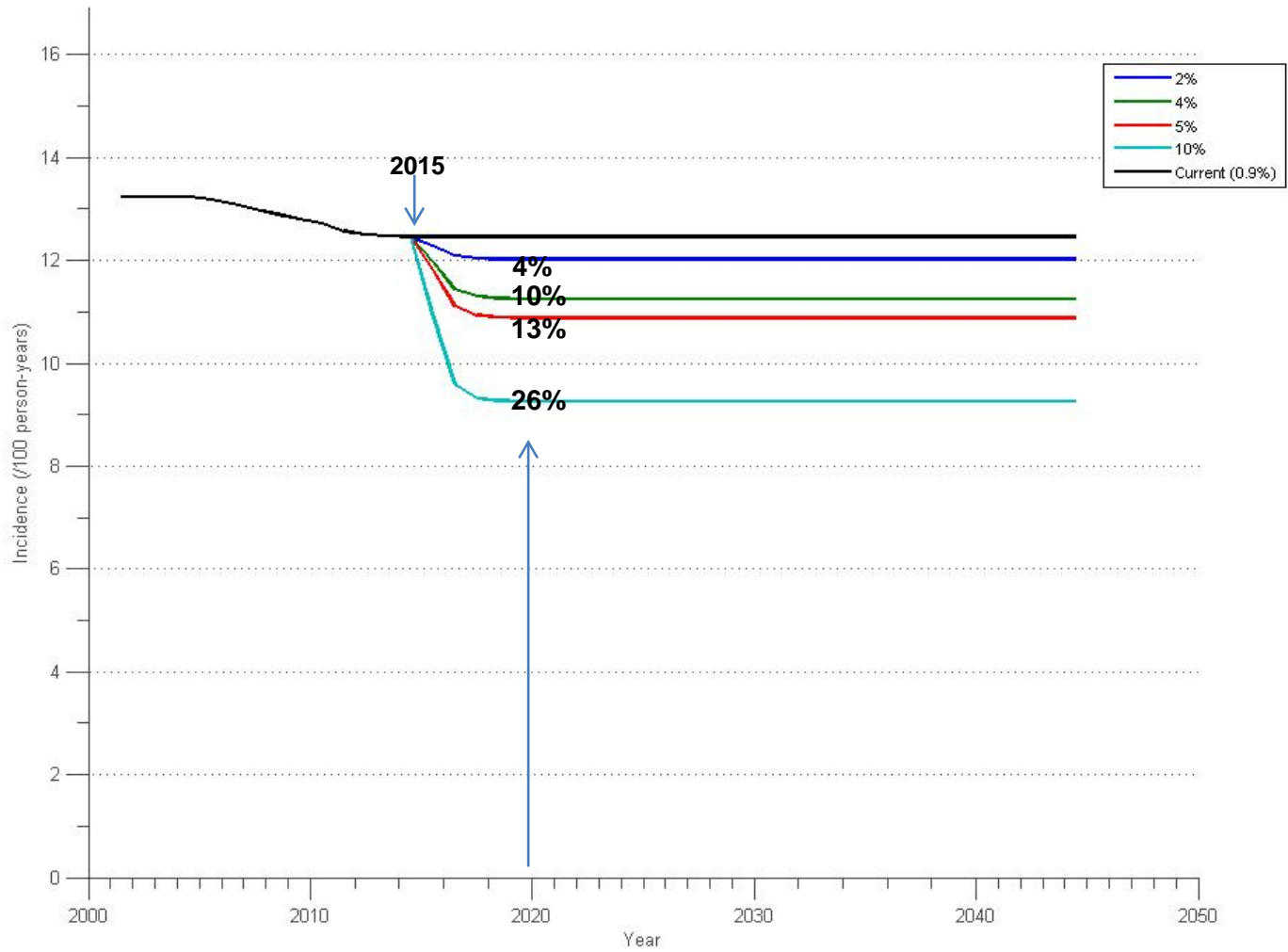
Qualitative Methods

- Guidelines for questions (e.g. barriers to treatment, perceptions of risk of HCV infection and reinfection, experiences with prison health services)
- Recorded in-depth interviews (NSW and Qld)
- Note taking in WA (digital recorders not permitted)
- Grounded theoretical framework

HePaTO Quantitative Component - Method

- Currently models the NSW prisoner population over time
 - Dynamic population level compartmental model
 - Compartments represent IDU status, HCV natural history state and treatment status
- Considers the prisoner flux
- IDU risk behaviour (injection frequency and needle sharing in prison)
- HCV progression
- HCV treatment scenarios (commencement, failure and SVR)
- Model calibrated against observed HCV incidence in NSW prisons and clinical data on the progression of HCV infection
 - National Prison Entrants Bloodborne Virus Surveys (2004, 2007, 2010)
 - Hepatitis Incidence and Transmission Study (HITS) (A. Lloyd, personal communication)
 - Australian NSP Survey
 - NSW Inmate Health Surveys (2001, 2009)
 - Expert opinion also canvassed

NSW HCV Incidence Rate under Treatment Scenarios



Conclusions

- Contact with the criminal justice system is an unfortunate but underutilised public health opportunity
- Prison represents a treatment opportunity for hepatitis C
- Challenges exist
- Current treatment numbers limited
- Need to scale-up treatment
- Investment required
- Commonwealth Government support for scale-up needed