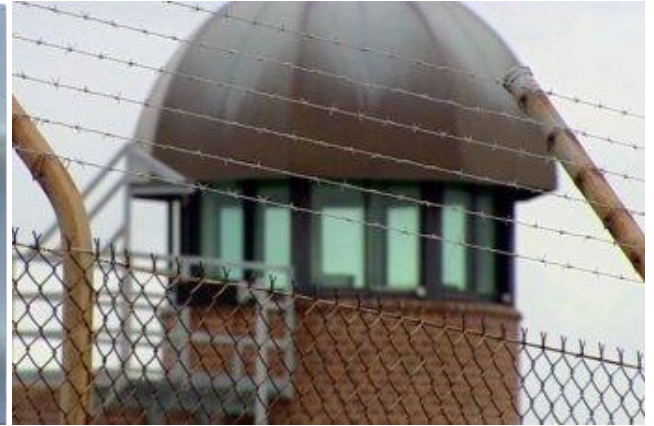# Surveillance and Treatment of Prisoners with hepatitis C (SToP-C)

Professor Andrew Lloyd | **Wednesday 7th October 2015**

Australian prison population
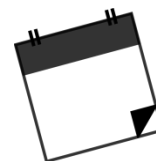
30,775
Total population

5%
Increase from 2012

34
Median age

92%
Male

81%
Born in Australia

25%
Aboriginal ethnicity

58%
Previously incarcerated

50%
Report injecting drug use

Current prevention strategies

No preventative vaccine

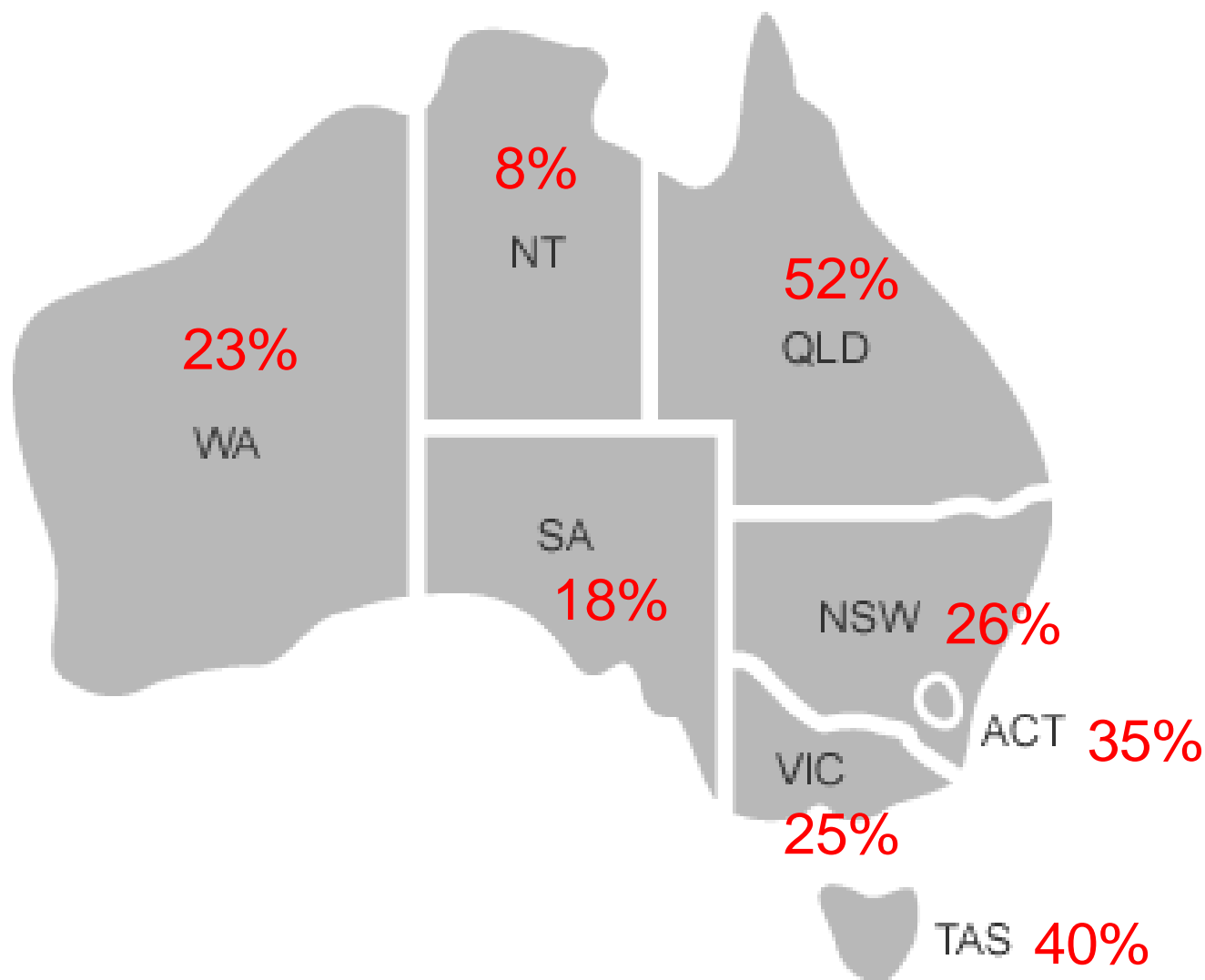**Hepatitis C Incidence and Transmission Study in prisons (HITS-p)**
49% reported injecting drug use in follow-up
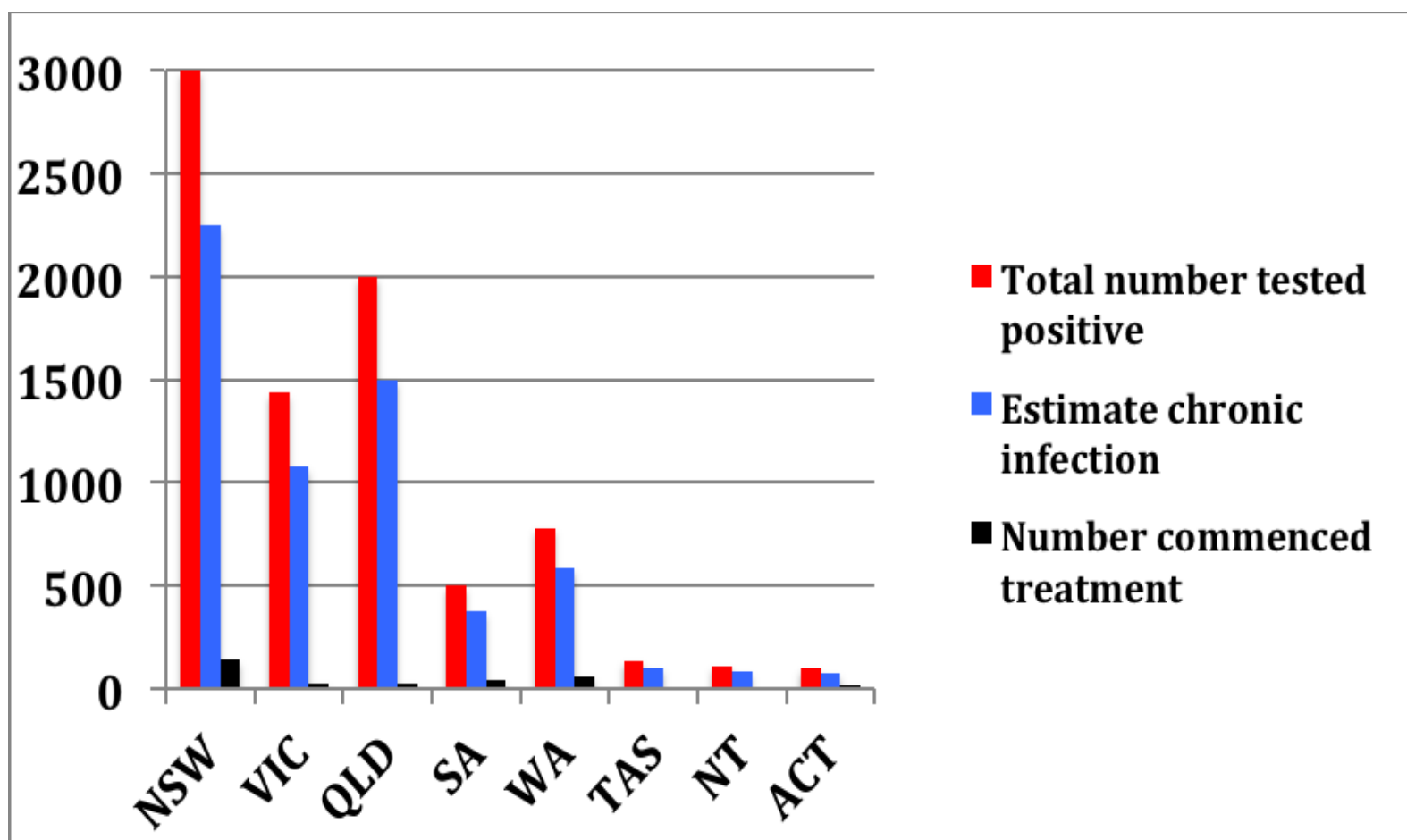31% reported sharing apparatus
HCV incidence – 14% per annum

No needle and syringe programs
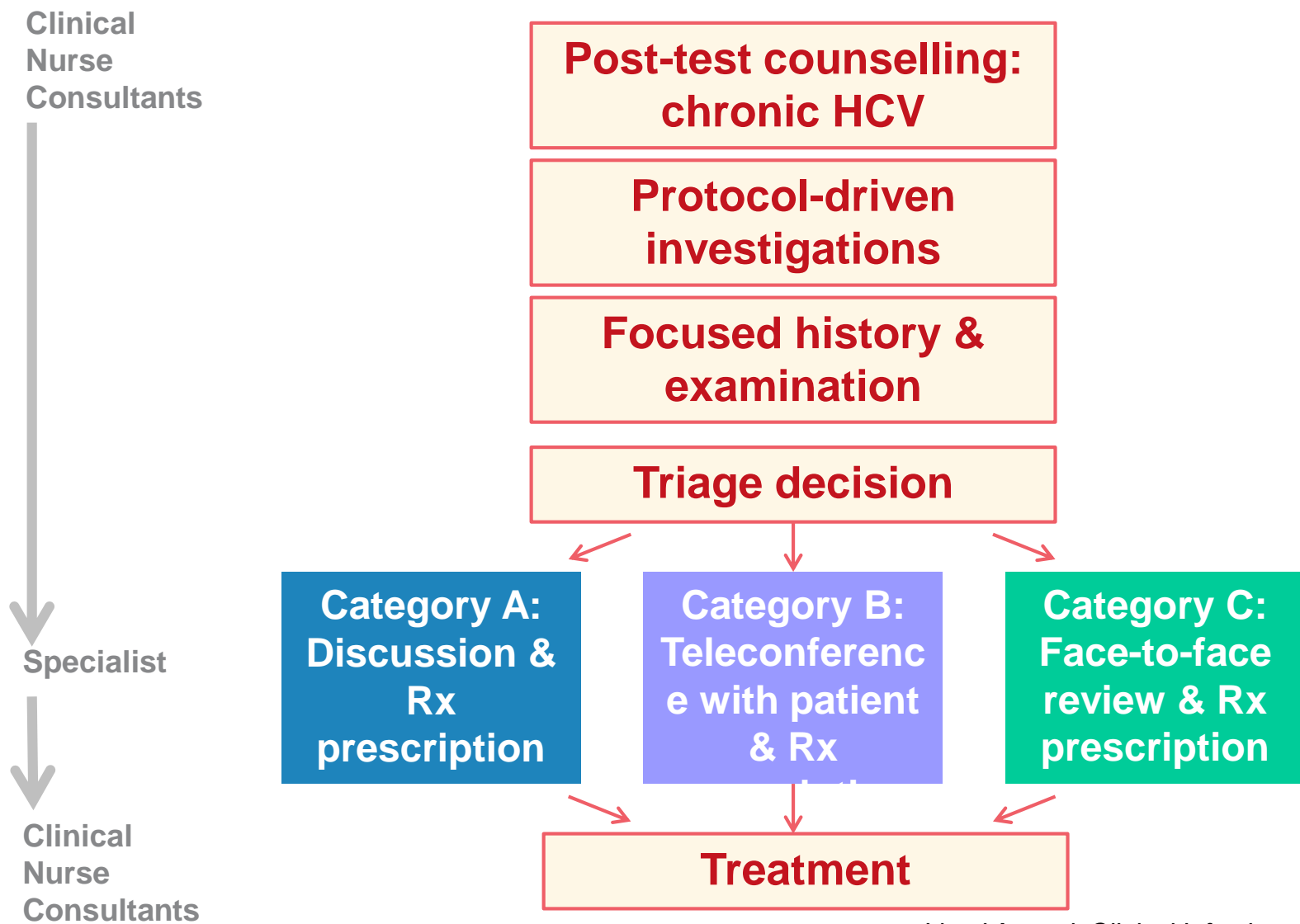
Harm reduction has limited effectiveness

Luciani F. et al. Addiction 2014

HCV antibody prevalence in prisoners

2013 National Prison Entrants' BBV and Risk Behaviour Survey

HCV testing & treatment in Australian prisons

Legend:
- **Total number tested positive** (red)
- **Estimate chronic infection** (blue)
- **Number commenced treatment** (black)

Mina M. et al. International Journal of Prisoner Health 2015 (in press)

NSW Nurse-led model of care (NLMC)

Clinical Nurse Consultants

Specialist

Clinical Nurse Consultants

Post-test counselling: chronic HCV

Protocol-driven investigations

Focused history & examination

Triage decision

Category A: Discussion & Rx prescription

Category B: Teleconference with patient & Rx

Category C: Face-to-face review & Rx prescription

Treatment

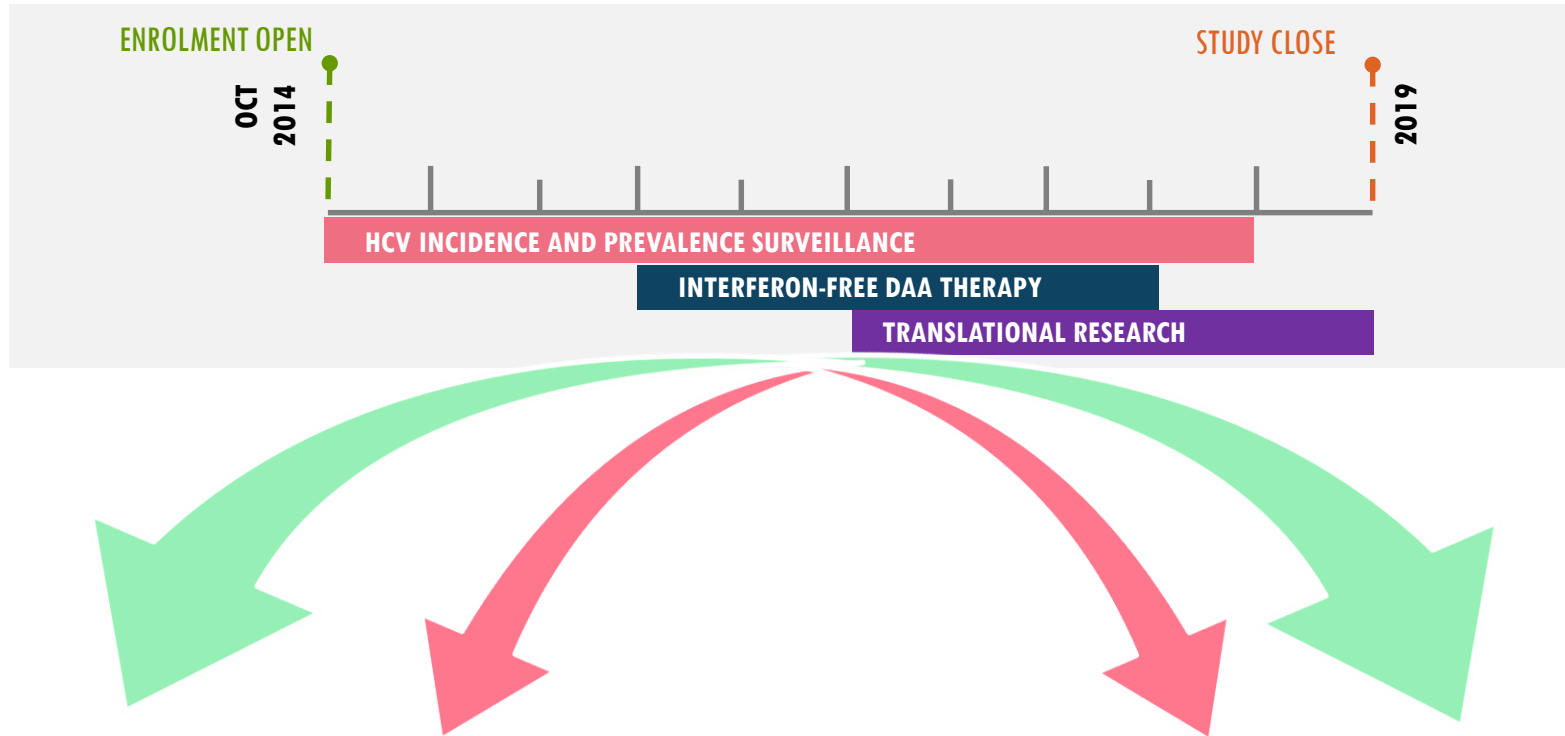*Lloyd A, et al. Clinical Infectious Diseases 2013*

SToP-C Goals

- To evaluate the impact of rapid scale-up of DAA treatment on incidence and prevalence of HCV infection in the prison setting

- To develop a translational framework for subsequent establishment of treatment-as-prevention programs in the prison sector

Study design

Primary end-point:
Reduction in HCV incidence in cohort across network of 4 SToP-C prisons
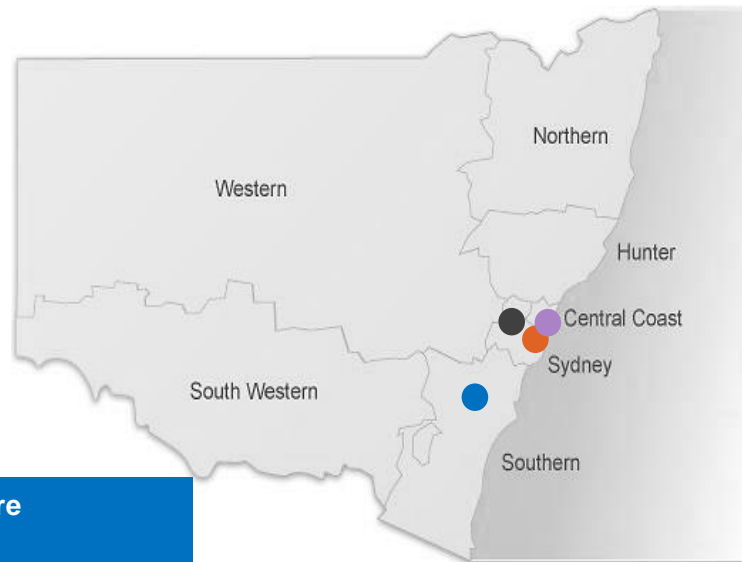
SToP-C network

Lithgow Correctional Centre
Lithgow

Outer Metropolitan Multipurpose Correctional Centre
Sydney

Goulburn Correctional Centre
Goulburn

Dillwynia (Womens) Correctional Centre
Sydney

Study components

HCV incidence and prevalence phase

- 6-monthly testing and risk behaviour interview

Treatment phase

- DAA therapy for all infected prisoners

Modelling

- Treatment sample size and epidemiological impact

Cost-effectiveness and budget impact

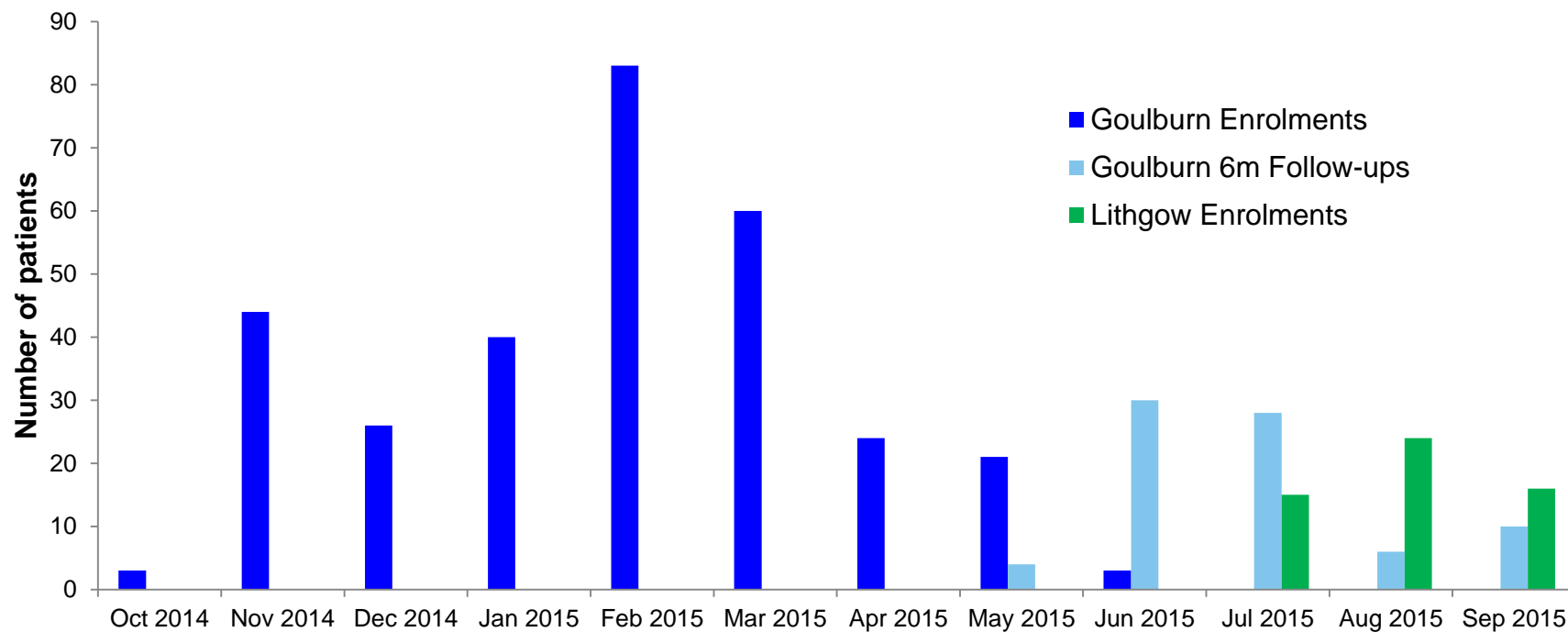- Is DAA therapy in prisons good value for money and can we afford it?

Qualitative research

- Patient & provider attitudes & barriers towards DAA therapy in prisons

Implementation toolkit

- How can DAA therapy be scaled up across NSW and nationally?

Current status - surveillance Phase (at 10 Sep 2015)

Site	Enrolment (n)	Follow-up (n)
Goulburn Correctional Centre	304	78
Lithgow Correctional Centre	55	0
TOTAL	**359**	**78**

Treatment phase - 2016

- *All* prisoners with HCV infection eligible

- 12-week directly acting antiviral (DAA) therapy (sofosbuvir/velpatasvir)

- One fixed-dose tablet once daily

- >90% cure rate

- Minimal side-effects

- Monitor re-infection rates and re-treat

Education and promotion

- Prison staff (custodial & health) information sessions

- Resources for prisoners and family
  - Video
  - Posters
  - Booklet

Project partners and stakeholders

Acknowledgements

SToP-C Protocol Steering Committee

Stuart Loveday (Chair)	Hepatitis NSW
Greg Dore	Kirby Institute, University of New South Wales
Andrew Lloyd	School of Medical Sciences, University of New South Wales
Jason Grebely	Kirby Institute, University of New South Wales
Tony Butler	Kirby Institute, University of New South Wales
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Terry Murrell	Corrective Services NSW
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Peter Vickerman	University of Bristol, UK
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