INHSU 2017 Summary

We know DAAs for hepatitis C work for PWID, now what?

A/Professor Jason Grebely

Disclosures

- Funding and speaker fees from AbbVie, Bristol-Myers Squibb, Cepheid, Gilead Sciences and Merck

Key message #1:

It's not all about HCV! - Improvements in drug user health and social indicators will be essential to improve the lives of PWID

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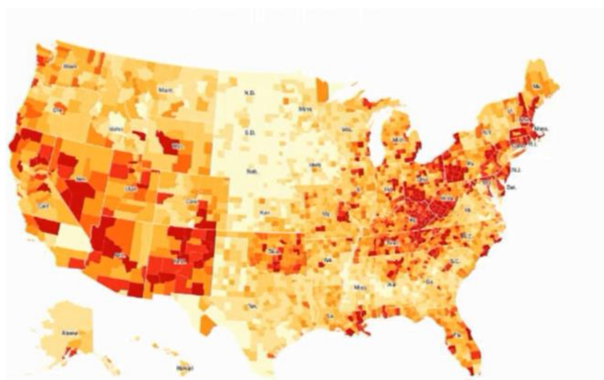
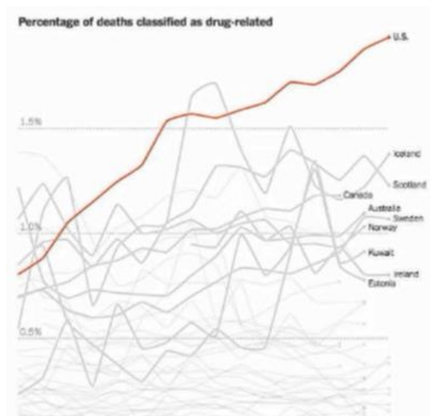
The impact of the opioid crisis has been staggering





Tyndall M. INHSU 2017, New York, United States, September 6-8, 2017

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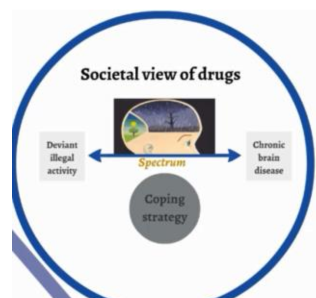
We must work to improve the lives of PWID

- We should have learned so much more from HIV how can we improve the lives of people who inject drugs
- Over medicalizing of drug treatment, must deal with trauma, poverty and other social indicators



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Barriers to an effective response

- Criminalization of drug use and the associated stigma
- Limited tools to disrupt a toxic drug supply
- Neglect of providing minimal services and support to people who use drugs

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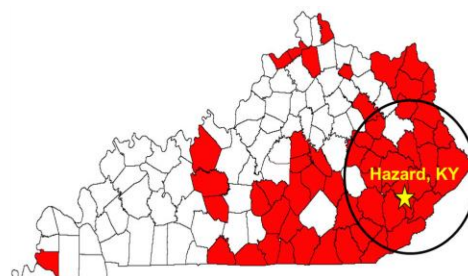
Opioid use and HCV in rural settings

Figure 2. Counties for which estimated vulnerability scores or their upper 90% confidence interval exceeded the 95th percentile.



Van Handel et al. *JAIDS*, 2016

- Persistence of HCV in in Rural Appalachia - Lack of access to evidence-based substance abuse treatments, few HCV treatment providers in area/lack of access to affordable treatment, no access to harm reduction, social networks

Havens J. INHSU 2017, New York, United States, September 6-8, 2017

Key message #2:

PWID must be at the center of our efforts to improve drug user health and HCV care

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Cascade of cracks…

- PWID often alienated from healthcare systems
- Cascade of Care for HCV treatment is a Cascade of Cracks to fall through

Crawford S, et al. INHSU 2017, New York, United States, September 6-8, 2017

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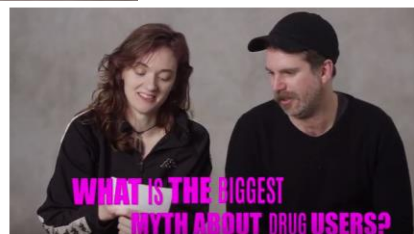
Working with PWID to build relevant models of care

- Build relationships to build trust – let them help you build models of care
- Peers must be valued and understood as a core component of a service
- Sustainable, independent representative organisations
- Sometimes services need to go more than the extra mile for people
- Need robust advocacy from service providers/clinicians and researchers
- Consider embedding peers at every place along the cascade of cracks and at every level of service provision – including treatment delivery

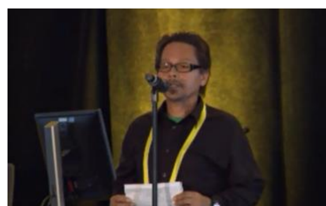
Crawford S, et al. INHSU 2017, New York, United States, September 6-8, 2017

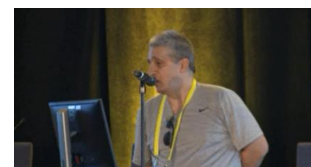
We must address stigma and discrimination



Straight Shooting Panel. INHSU 2017, New York, United States, September 6-8, 2017

Peer Stories: Living through the hepatitis C epidemic

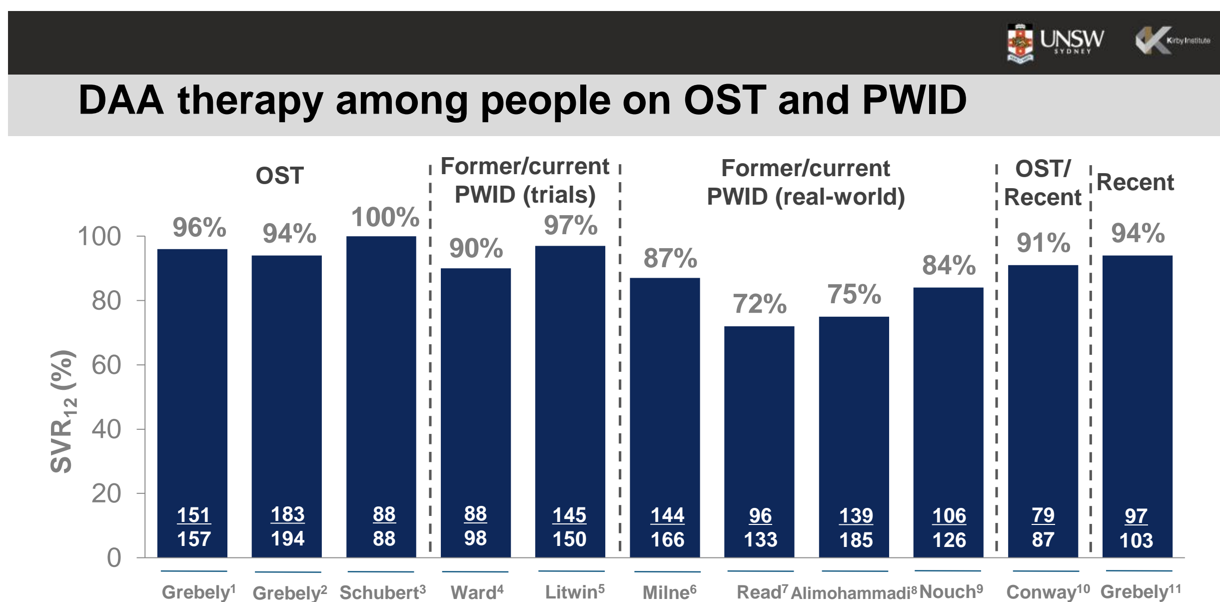




Peer Stories Panel. INHSU 2017, New York, United States, September 6-8, 2017

Key message #3:

We know that DAA therapies for PWID work, but there are still data gaps



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Key messages – DAA therapy in PWID

- Lost to follow-up between ETR and SVR is an issue in the "real-world"
- Although ITT responses are lower in the real-world, among people who present for SVR testing, responses to therapy are 95-100%
- The rate of HCV reinfection is low, but does this represent the reality?
- We must acknowledge that reinfection will occur and offer re-treatment without stigma and discrimination

1) Grebely J, et al. 2) Grebely J, et al. 3) Schubert, et al. 4) Ward, et al. 5) Litwin et al, 6) Milne, et al, 7) Read, et al. 8) Alimohammadi, et al. 9) Nouch, et al. 10) Conway, et al. 11) Grebely, et al 12) Midgard INHSU 2017, New York, United States, September 6-8, 2017

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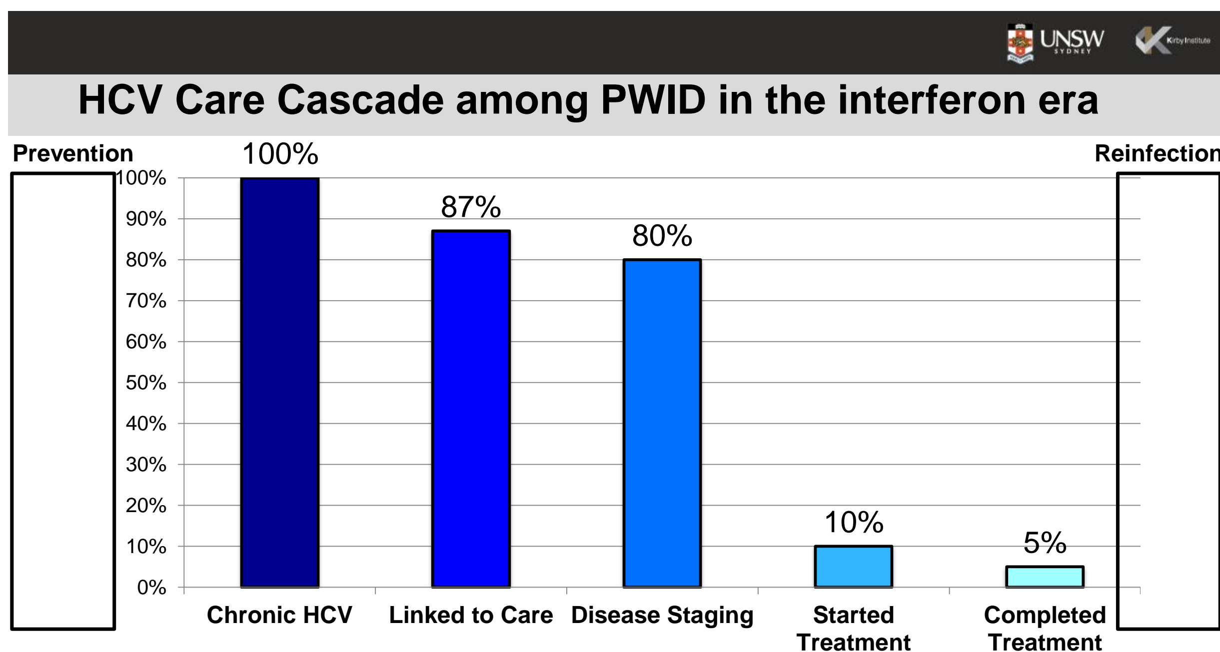
Data gaps moving forward – DAA therapy in PWID

- DAA therapy in more "current" PWID
- Transformative potential of treatment (Harris)
- Non-clinical outcomes (Treloar)
- Reinfection and strategies to prevent and address reinfection

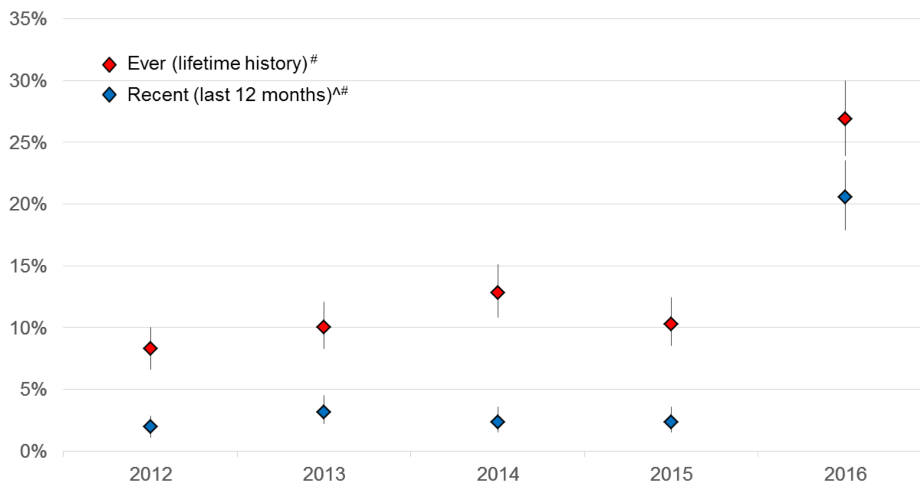
1) Grebely J, et al. 2) Grebely J, et al. 3) Schubert, et al. 4) Ward, et al. 5) Litwin et al, 6) Milne, et al, 7) Read, et al. 8) Alimohammadi, et al. 9) Nouch, et al. 10) Conway, et al. 11) Grebely, et al 12) Harris 13) Treloar INHSU 2017, New York, United States, September 6-8, 2017

Key message #4:

Testing, diagnosis, and linkage to care will be a major barrier moving forward

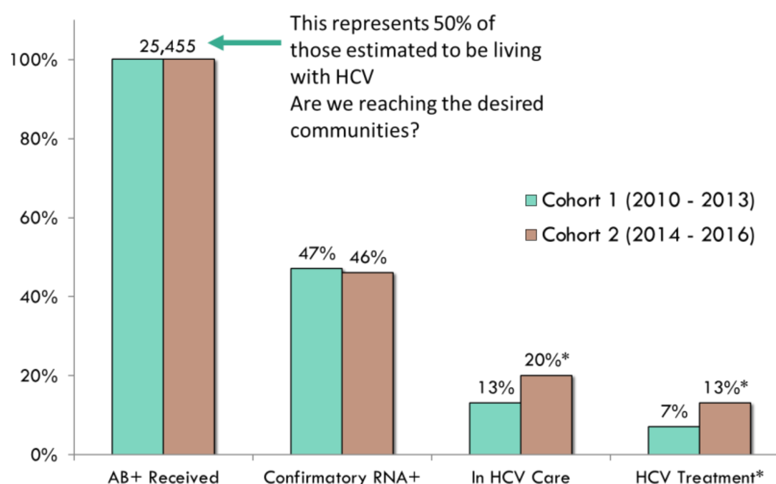


HCV Care Cascade among PWID in the DAA era



Iversen J, et al. INHSU 2017, New York, United States, September 6-8, 2017

HCV RNA testing remains a major barrier to care

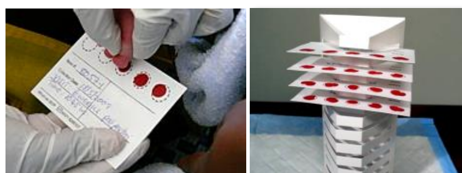


Trooskin S, et al. INHSU 2017, New York, United States, September 6-8, 2017

Advances in diagnostics and point-of-care testing

Rapid diagnostic tests

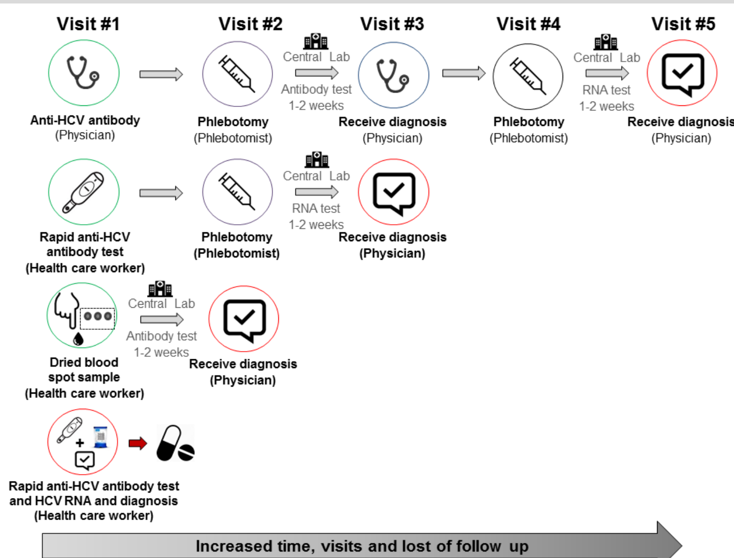
Dried blood spot testing



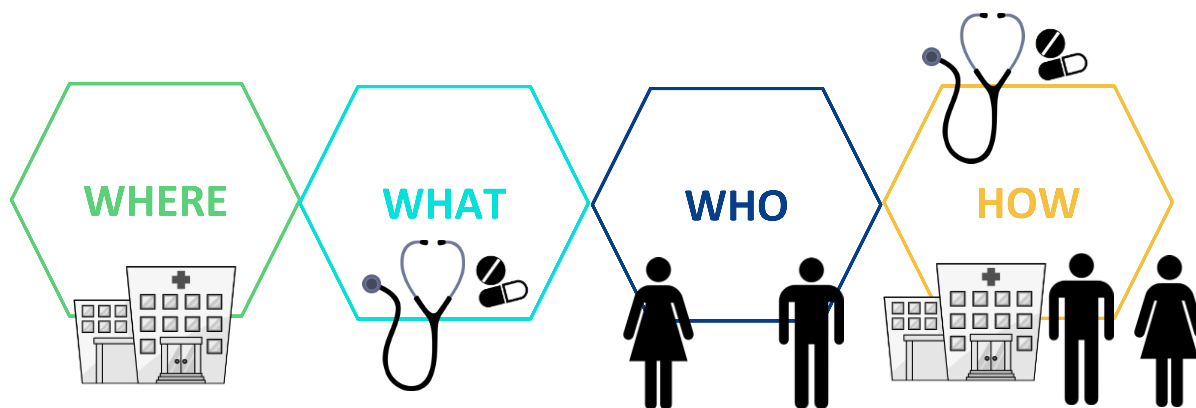
Point of care and random access HCV RNA testing

Fourati S, et al. INHSU 2017, New York, United States, September 6-8, 2017

Moving to a single-visit hepatitis C diagnosis



Grebely J and Applegate TA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What is a model of care?
WHERE
WHAT
WHO
HOW

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Settings, services, and providers
Settings
Sexual health
NSP services
Drug and alcohol clinics
Community health centres
Primary health care / GPs
Prisons
Services
Providers
• Specialists
• Primary care providers
• Drug and alcohol providers
• Nurses
• Peer support workers
• Others
1) Martró , et al. 2) O'Sullivan, et al. 3) Altice 4) Scherer 5) Avril, 6) MacDonald, INHSU 2017, New York, United States, September 6-8, 2017

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We have plenty of interventions to enhance the cascade

HCV testing

- Peer-delivered outreach HCV testing and counselling[1]
- Prison-based outreach testing and counselling[2]
- Patient referral contact tracing programme with monetary incentive for testing[3]
- Rapid HCV antibody testing at community pop-up/mobile clinics or low threshold settings[4-6]
- DBS testing[7,8]
- Integrated on-site testing, counselling and education[9,10]

HCV linkage to care

- Patient navigation and facilitated referral for HCV evaluation[11-13]
- Nurse-led pre-treatment assessment in prison with specialist support via telemedicine[14]
- Non-invasive liver disease assessment using transient elastography with facilitated referral to care[7,15-17]
- Integrated HCV care in drug & alcohol setting/primary care, including on-site HCV assessment with/without peer support[18-23]
- Community-based nurse-led HCV evaluation and liver disease assessment using transient elastography; and subsequent referral to specialist for treatment[24]
- HCV bridge counsellor employed to provide education, scheduling of specialist appointments, home visits to locate individuals, incentives and transportation[10]
- Multidisciplinary mobile clinic offering point of care testing, counselling and liver disease assessment using transient elastography[6]

HCV treatment uptake

- Integrated HCV care in drug & alcohol setting/primary care, including on-site HCV assessment with/without peer support[19,20,25]
- Integrated HCV care and drug use care in primary care, with/without onsite treatment[22,23,26,27]
- Community-based nurse-led HCV evaluation, including ordering of blood tests and disease assessment using transient elastography; and subsequent referral to specialist for treatment[24]
- Patient navigation including motivational interviewing and treatment readiness counselling[13]

1) Aitken CK, Drug and Alcohol Review 2002; 2) Skipper C, Gut 2003; 3) Brewer DD, Eurosurveillance 2009; 4) Conway B, J Hepatitis 2015; 5) Cosmaro ML, Infection 2011; 6) Remy AJ, U Euro Gastro J 2015; 7) O'Sullivan M, J Hepatology 2015; 8) Tait JM, J Hepatology 2013; 9) Pace CA, J Gen Int Med 2014; 10) Sena AC, Pub Health Rep 2016; 11) Trooskin SB, J Gen Int Med 2015; 12) Islam MM, J Sub Abuse Treat 2012; 13) Ford MM, Clin Inf Dis 2016; 14) Lloyd AR, Clin Inf Dis 2013; 15) Foucher J, J Viral Hep 2009; 16) Marshall A, Int J Drug Pol 2015; 17) Lambert JS, J Hepatology 2016; 18) Alavi M, Clin Infect Dis 2013; 19) Grebely J, Eur J Gastro Hep 2010; 20) Keats J, Int J Drug Pol 2015; 21) Martinez AD, J Viral Hep 2012; 22) Harris KA, J Addict Med 2010; 23) Malnick S, Israel J Psychiatry Rel Sci 2014; 24) Wade AJ, PLOS ONE 2015; 25) Newman AI, Can J Gastro 2013; 26) Seidenberg A, BMC Infect Dis 2013; 27) Woodrell C, J Addict Med2015; 28) Bajis S, et al. Int J of Drug Pol 2017.

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Need to move towards simplified models of HCV care

- Many programs for HCV treatment are built upon interferon-era
- Need to move towards simplification of existing models

- Not at the expense of strengthening foundation for drug user health

Modified from John Dillon

Key message #5:

DAA restrictions must be addressed for elimination to be a realistic goal

Success of Portugal

Health Outcomes (Feb 2017)

The Economist Intelligence Unit

pathtozero.eiu.com

Averted
3,477 premature liver related deaths

Gained
62,869 life years

Averted
339 liver transplants, 1,951 liver cancers, 5,417 cases of chirosis

Savings
271.4 million Euros on treatment costs related to hepatitis c complications

Must address reimbursement restrictions

94% (n=33) of countries required specialists to prescribe DAA therapy

Marshall A, et al. INHSU 2017, New York, United States, September 6-8, 2017, Lancet Gastroenterology and Hepatology 2017

Importance of education for providers and PWID

- INHSU education and training
- Collaborative model (Martinez)
- ECHO in Prisons (Sedillo)

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A number of settings will be crucial for HCV elimination

- Community (TAP, EC project)
- Indigenous Communities (Mera)
- Prisons (Hajarizadeh, Altice)
- Needle and syringe programs (Scherer)
- Drug consumption rooms (Schatz)
- Low and middle-income countries (Stanislau)

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INHSU 2017: Key messages

- Further work is needed to address drug user health for PWID
- The community of PWID will be central to these efforts
- DAA therapy is effective in people receiving OST and PWID (former/current) and multiple models of care are emerging (one size will not fit all)
- Testing, diagnosis, and linkage to care will be the major barriers moving forward
- DAA restrictions must be addressed for HCV elimination to be a realistic goal