

Harm Reduction during the Clinical Encounter

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DISCLOSURES

No financial disclosures to report

OBJECTIVES

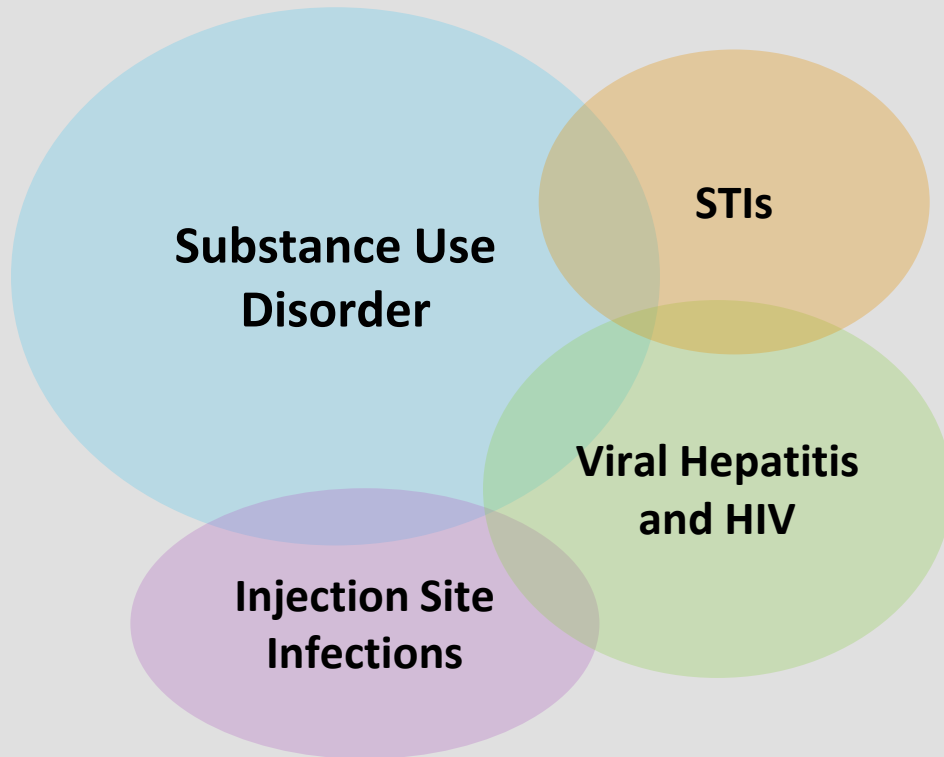
1. Appreciate the epidemiology of infectious complications in people who inject drugs
2. Implement harm reduction interventions in clinical encounters

WHAT IS HARM REDUCTION?

“Policies, programs and practices that aim to minimize negative health, social and legal impacts associated with drug use, drug policies and drug laws. Harm reduction is grounded in justice and human rights – it focuses on positive change and on working with people without judgement, coercion, discrimination, or requiring that they stop using drugs as a precondition of support.”



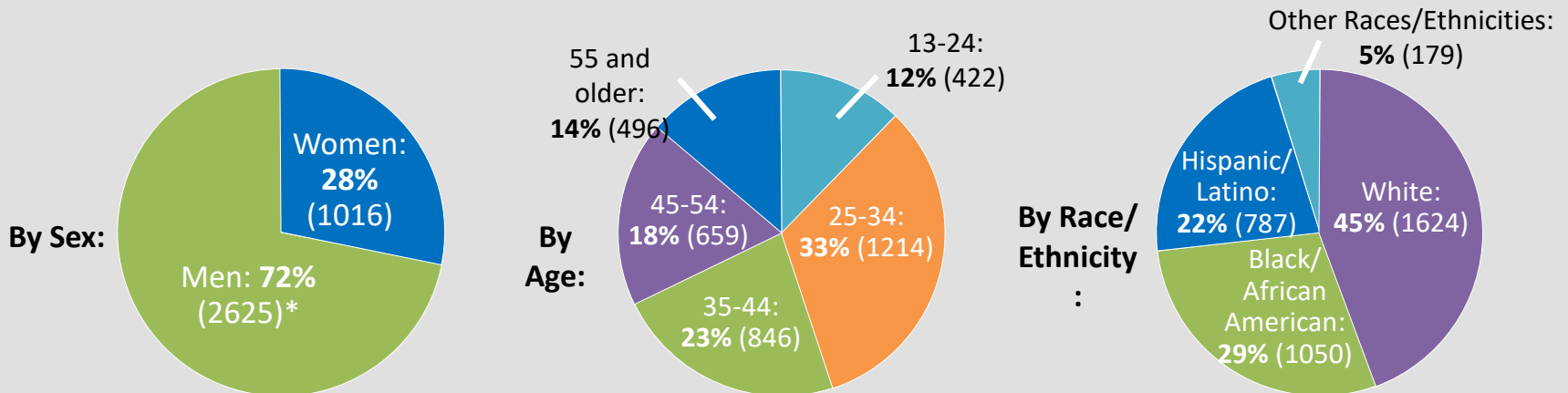
WHY HARM REDUCTION?



- Sexual/injecting networks
- Needle/syringe sharing
- Homelessness
- Criminal-justice involvement
- Race/ethnicity
- Gender
- Sexuality

HIV RISK/EPIDEMIOLOGY AMONG PWIDS

New HIV Diagnoses Among PWID in US and Dependent Areas, 2017



- HIV risks among PWIDs:

- Sharing needles, syringes, other drug injection/preparation equipment
- High risk sexual behaviors: unprotected sex, multiple partners, trading sex for money or drugs
- Social and economic factors limiting access to HIV and harm reduction services
- Stigma and discrimination, criminalization of addiction and other mental health issues

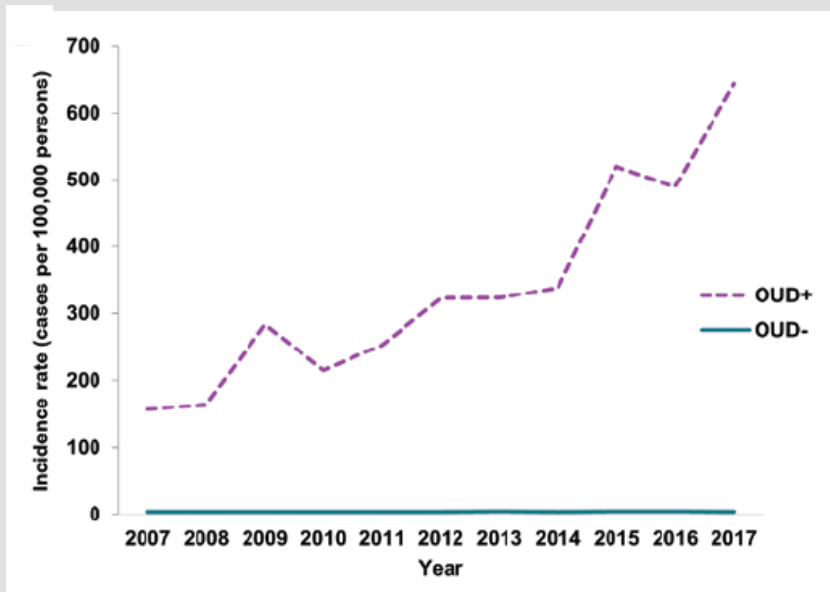
GLOBAL HEPATITIS C PREVALENCE ESTIMATES AND FUTURE PROJECTIONS

Country	Fitted demographic data values				tPAF of HCV infections due to IDU	
	% of Adults that are PWID	Chronic HCV prevalence (%) among PWID	Chronic HCV prevalence (%) among general population	Percentage of the setting's prevalent infections that are among PWID	2018–2019	2018–2030
Global	0.32 (0.23, 0.42)	34.5 (25.8, 42.0)	1.0 (0.7, 1.4)	8 (5, 12)	39% (21%, 64%)	43% (25%, 67%)
Central Asia	0.61 (0.44, 0.81)	26.4 (21, 29.8)	2.4 (1.5, 3.3)	4 (3, 6)	32% (16%, 69%)	37% (19%, 73%)
Eastern Europe	1.13 (0.71, 1.61)	45.8 (34.0, 53.6)	2.0 (1.2, 2.6)	21 (12, 31)	95% (64%, 99%)	96% (69%, 99%)
Australasia	0.60 (0.46, 0.73)	35.7 (32.0, 39.3)	0.8 (0.7, 1.1)	19 (13, 24)	58% (34%, 94%)	66% (43%, 96%)
East & Southeast Asia	0.23 (0.19, 0.28)	31.5 (23.8, 38.2)	0.7 (0.5, 1.0)	7 (5, 10)	53% (26%, 98%)	58% (32%, 98%)
South Asia	0.09 (0.07, 0.11)	30.3 (16.2, 44.0)	0.9 (0.6, 1.3)	2 (1, 3)	10% (3%, 25%)	14% (4%, 31%)
North America	1.08 (0.63, 1.51)	30.7 (22.2, 40.7)	0.9 (0.6, 1.2)	30 (16, 47)	67% (43%, 100%)	77% (56%, 100%)
Western Europe	0.32 (0.23, 0.40)	37.9 (27.3, 44.7)	0.6 (0.3, 1.0)	15 (10, 20)	80% (45%, 93%)	83% (53%, 94%)
Sub Saharan Africa	0.40 (0.26, 0.55)	14.2 (10.5, 17.7)	1.4 (0.9, 2.2)	3 (1, 4)	11% (2%, 39%)	14% (2%, 43%)
Latin America	0.44 (0.35, 0.53)	49.7 (44.1, 52.8)	0.8 (0.7, 1.0)	18 (14, 23)	66% (41%, 98%)	71% (49%, 98%)
Middle East & North Africa	0.24 (0.17, 0.30)	31.7 (23.6, 36.8)	2.5 (2.0, 3.1)	2 (1, 3)	13% (6%, 25%)	16% (8%, 28%)

Trickey A, et al. Lancet Gastroenterol Hepatol. 2019 June; 4(6): 435-444

OTHER INFECTIONS

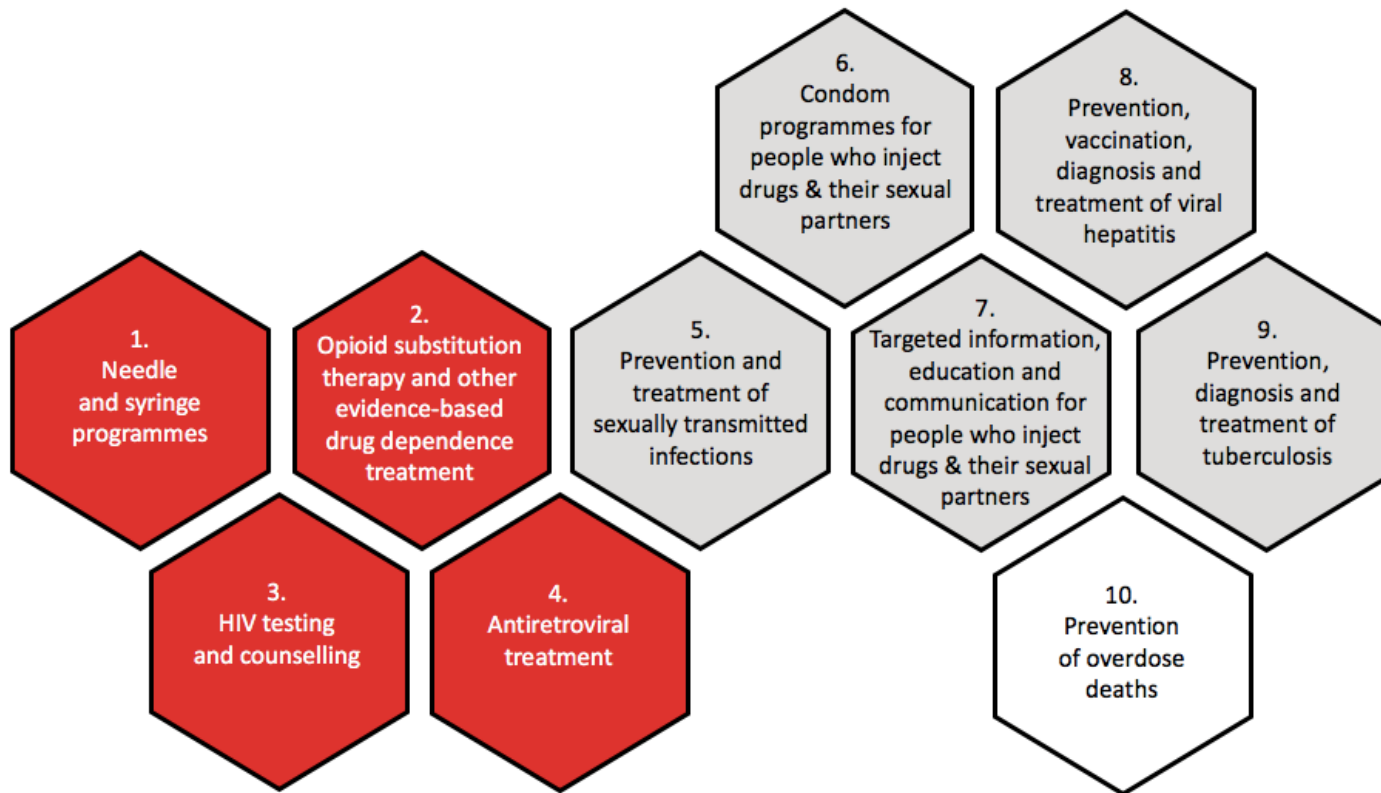
Incidence rate of infective endocarditis among commercially insured persons 18-29



Changes in Healthcare Utilization for opioid use disorder related bacterial infections, 2002 vs 2012

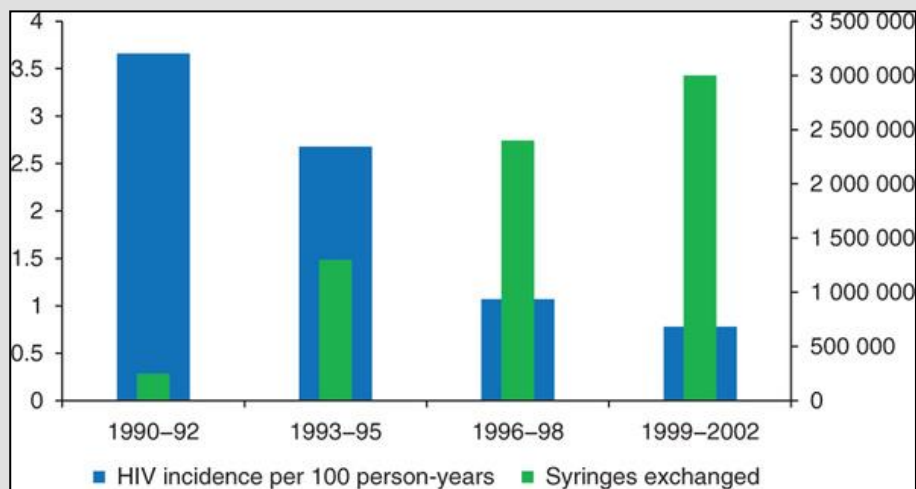
	2002	2012
ODD	301,707	520,275
ODD + endocarditis	2077	3035
ODD + osteomyelitis	458	985
ODD + septic arthritis	729	1940
ODD + epidural abscess	411	1085

COMPREHENSIVE PACKAGE OF HARM REDUCTION INTERVENTIONS

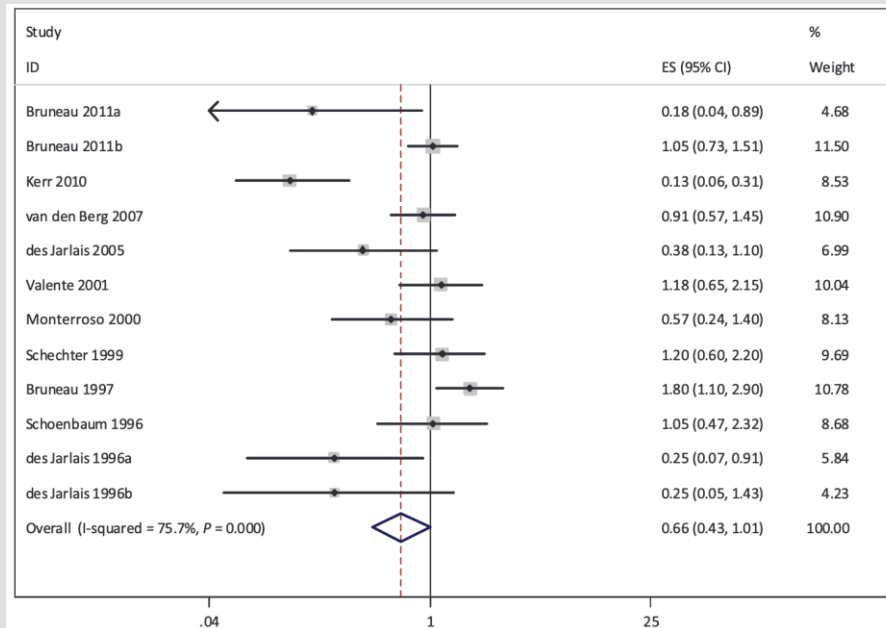


THE EVIDENCE FOR NEEDLE AND SYRINGE PROGRAMS

Annual number of syringes exchanged and HIV incidence among PWIDs in NYC, 1990-2002



The association between needle syringe program exposure and HIV incidence



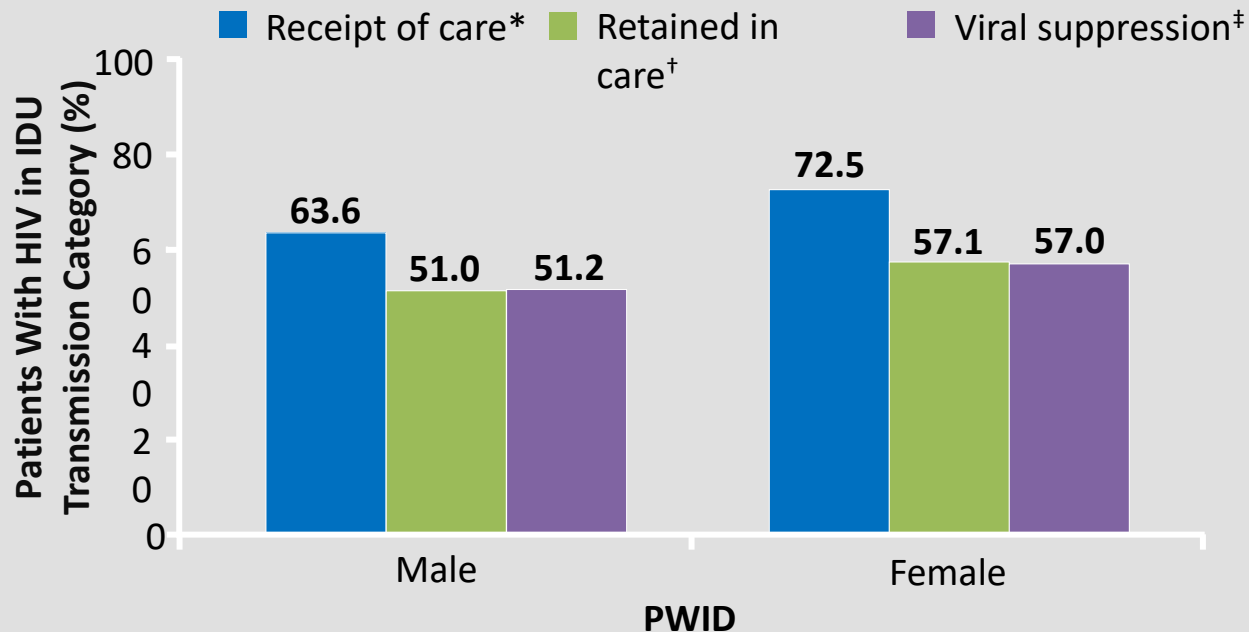
TALKING ABOUT SAFER INJECTION PRACTICES

- Drug preparation
- Prepping the injection site
- Needle/syringe re-use
- Injection site care



Image Credit: National Harm Reduction Coalition

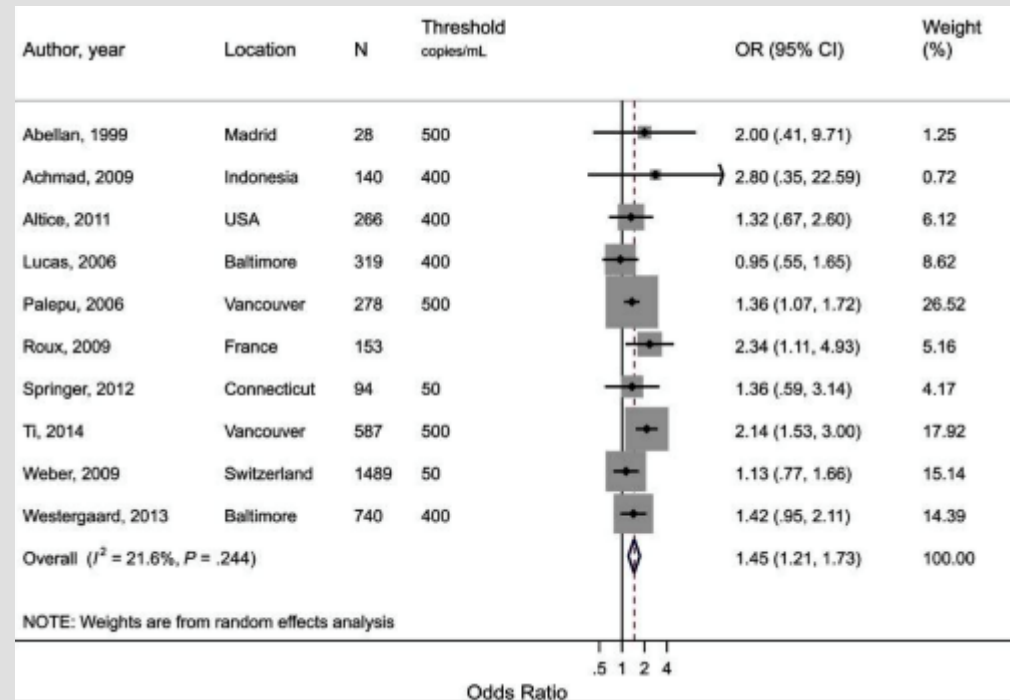
HIV CARE COVERAGE AMONG PWID, 2016



*Receipt of care defined as ≥ 1 test (CD4+ cell count or HIV-1 RNA) in 2016. †Retained in care defined as ≥ 2 tests (CD4+ cell count or HIV-1 RNA) ≥ 3 mos apart in 2016. ‡Viral suppression defined as HIV-1 RNA < 200 copies/mL on most recent test in 2016.

MOUD ON HIV OUTCOMES

- Improves access and retention
- Increases ART prescription (+54%)
- Increases ART adherence (+2-fold)
- Decreases ART discontinuation (-23%)
- Increases viral suppression (+45%)



HIV TREATMENT-AS-PREVENTION: U = U

U = U
Undetectable
=
Untransmittable

A person living with HIV who has an undetectable viral load does not transmit the virus to their partners

- Many patients experience/feel stigma related to the idea that they have an infectious disease
- U = U can be very comforting knowledge for them and is an important part of counseling



Slide credit: clinicaloptions.com

HCV TREATMENT-AS-PREVENTION IN PWID

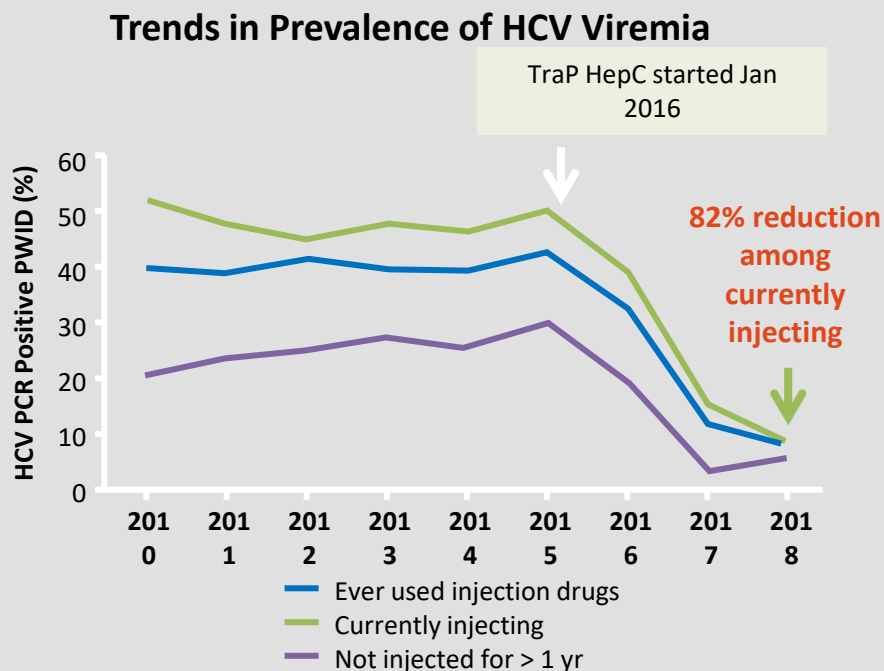
“A combination of prevention strategies, including HCV treatment as prevention, are critical to substantially reduce HCV transmission and prevalence in these populations, especially in settings with high existing harm reduction coverage”

DRUG AND ALCOHOL USE ARE NOT CONTRAINDICATIONS TO HCV THERAPY

- “PWIDs who are infected with HCV have an indication for antiviral therapy”
 - “DAA-based therapies are safe and effective in HCV-infected patients receiving OST, those with a history of injecting drug use, and those who recently injected drugs”
- “Excess alcohol should not preclude treatment”
 - “Patients with harmful alcohol consumption during treatment should receive additional support during antiviral therapy”

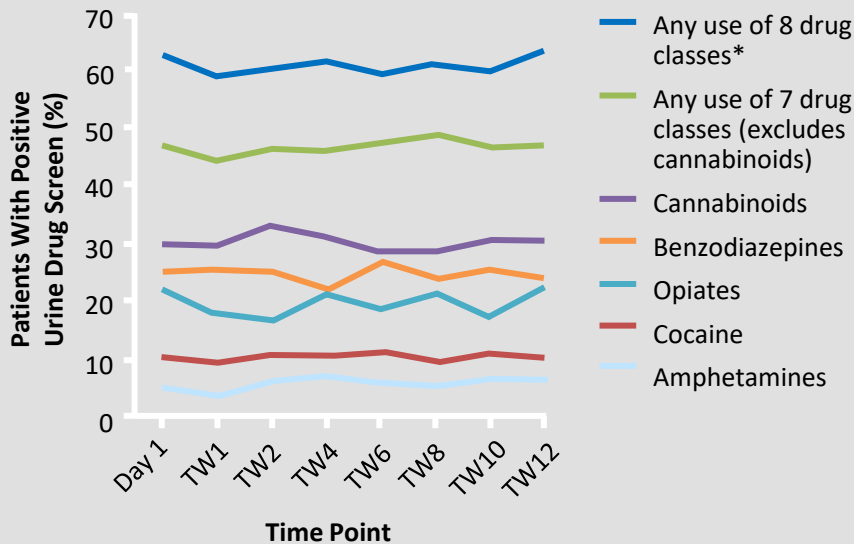
TRAP HEPC: OUTCOMES AT VOGUR ADDICTION HOSPITAL

- Dramatic reduction in community viral load and HCV incidence in only 2 yrs
- Between 2015 and 2017:
 - **55% reduction** in incidence of total new HCV infections
 - **73% reduction** in HCV PCR positive (ie, viremic) PWID
- Successful real-world example of treatment as prevention



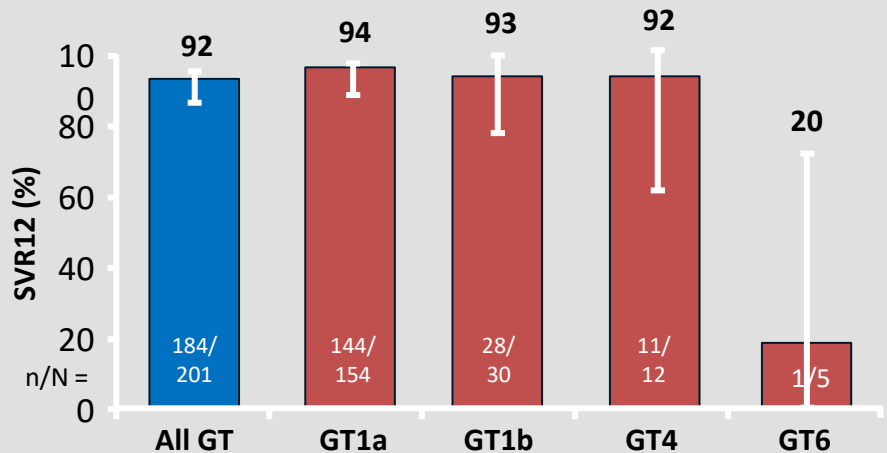
C-EDGE CO-STAR: EBR/GZR IN PERSONS WITH HCV RECEIVING MOUD

Urine Drug Screen Results During Therapy



*Includes amphetamines, barbiturates, benzodiazepines, cannabinoids, cocaine, opiates, phencyclidine, propoxyphene.

SVR12 in Immediate Treatment Group



High DAA medication adherence:
97% of patients with > 95% adherence

HCV REINFECTION AS A BARRIER TO HCV TREATMENT/RETREATMENT

- Risk of reinfection should **NOT** be a barrier to HCV linkage to care and treatment
- Reinfection is a sign that you are treating a high-risk population, immediate retreatment is key to elimination and effective retreatment regimens are available
- **Continue screening after SVR** if infection risk persists
- Meta-analysis of 36 studies (6311 PY of follow-up) showed ~ 6% reinfection rate

HCV Reinfection Among People With Recent Drug Use	Rate/100 PY (95% CI)
Overall (injecting or noninjecting drug use)	5.9 (4.1-8.5)
Recent injection drug use	6.2 (4.3-9.0)
Receiving medication for opioid use disorder	3.8 (2.5-5.8)
Receiving medication for opioid use disorder and no recent drug use	1.4 (0.8-2.6)
Receiving medication for opioid use disorder and recent drug use	5.9 (4.0-8.6)
Not receiving medication for opioid use disorder and recent drug use	6.6 (3.4-12.7)



Slide credit: clinicaloptions.com

FINAL THOUGHTS

- Harm reduction is grounded in social justice and holistic care
- Comprehensive harm reduction services emphasize efforts to reduce the acquisition and/or complications associated with HIV, HCV, and overdose
- Treatment of HIV and HCV have significant positive consequences for the patients as well as for public health
- The provider-patient encounter is a critical component of effective implementation of harm reduction interventions

1. <https://www.hri.global/what-is-harm-reduction>
2. https://www.unaids.org/en/resources/documents/2019/JC2954_UNAIDS_drugs_report_2019
3. CDC. HIV and people who inject drugs. <https://www.cdc.gov/hiv/group/hiv-idu.html>.
4. Consolidated Guidelines on HIV Prevention, Diagnosis, Treatment and Care for Key Populations, WHO 2016
5. <https://www.cdc.gov/hiv/pdf/library/factsheets/cdc-hiv-clean-your-syringes.pdf>
6. <https://www.preventionaccess.org/resources>

RESOURCES

You can access this didactic on the ECHO Resource Library for later reference

Thank you!

Questions & Discussion

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