

Integrated Substance Use Disorder & HIV Treatment Interventions for Persons Involved in the Criminal Legal System

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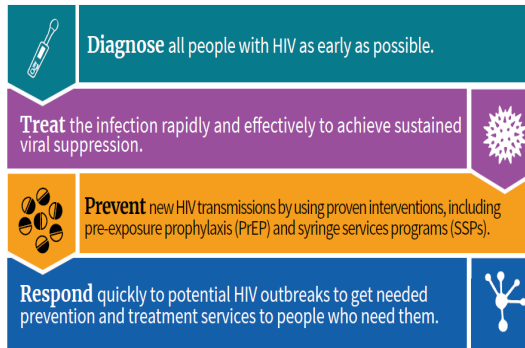
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Ending the HIV Epidemic (EHE) Goals in the United States

GOAL:

HHS will work with each community to establish local teams on the ground to tailor and implement strategies to:

75% reduction in new HIV infections in 5 years and at least 90% reduction in 10 years.

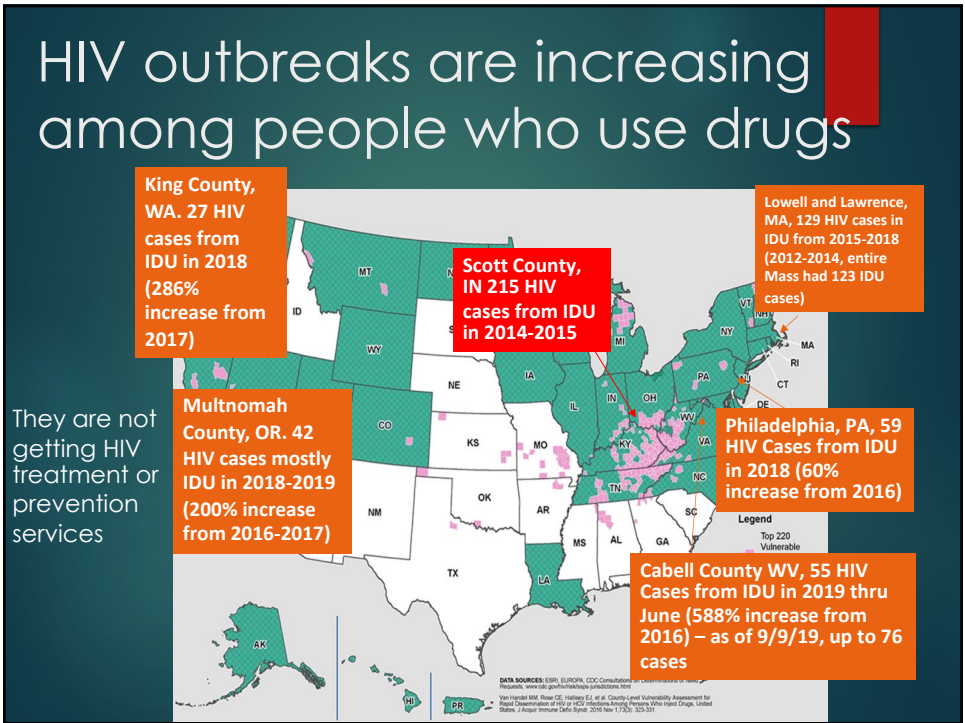


TEST

Treat & VS

PrEP

2



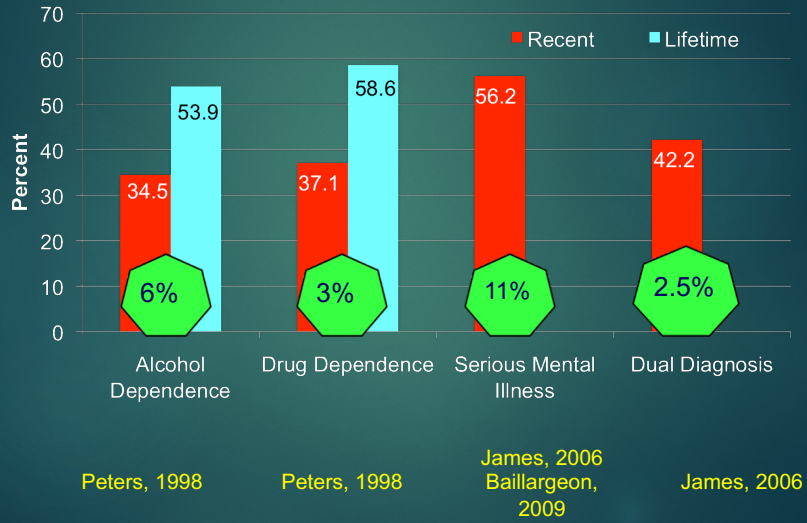
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U.S. Prisons and Jails

HIV AND SUBSTANCE USE DISORDERS

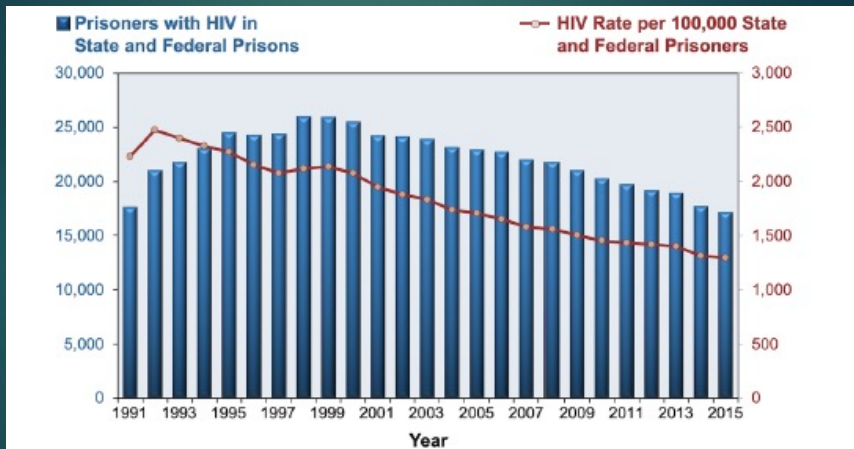
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Prevalence of SUDs & Mental Illness Among Persons in U.S. Prisons is 10x Greater than the General Population



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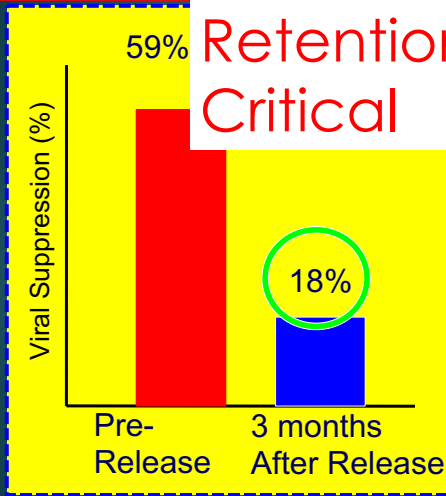
HIV Prevalence is 4x greater in the State and Federal Prison System than the General Community



Source: Maruschak LM, Bronson J. HIV in Prisons, 2015—Statistical Tables. Bureau of Justice Statistics: Office of Justice Programs, U.S. Department of Justice. August 24, 2017.

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HIV Viral Suppression Lost Quickly after Release from Prison to the Community & Public Health Importance



Retention on ART is Critical

with loss of Viral Suppression (VS).^{1,2,5}

- Loss of VS is associated with:
 - ↑ morbidity
 - ↑ transmission to the uninfected.^{3,4}

5. Springer et al, *Clin Infect Dis*. 2004.

1. Kinlock, JSAT 2002.; 2. Springer et al CID , 2011.
3. Anderson, Nature, 1988; 4.Hollingsworth, JID, 2008

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Treatment of Substance use Disorders among PWH improves HIV outcomes!

OPEN ACCESS freely available online

Retention on Buprenorphine Is Associated with High Levels of Maximal Viral Suppression among HIV-Infected Opioid Dependent Released Prisoners

Sandra A. Springer^{1,2}, Jingjun Qiu¹, Ali Shahabang Saben-Tehrani¹, Frederick L. Altice^{1,3,4}

Journal of Urban Health: Bulletin of the New York Academy of Medicine, Vol. 87, No. 4
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Improved HIV and Substance Abuse Treatment Outcomes for Released HIV-Infected Prisoners: The Impact of Buprenorphine Treatment

Sandra Ann Springer, Shu Chen, and Frederick L. Altice

Extended-Release Naltrexone Improves Viral Suppression Among Incarcerated Persons Living With HIV With Opioid Use Disorders Transitioning to the Community: Results of a Double-Blind, Placebo-Controlled Randomized Trial

Sandra A. Springer, MD,*† Angela Di Paola, MS,‡ Marwan M. Azar, MD,* Russell Barbour, PhD,† Breanne E. Biordi, MPH,* Maureen Desbrats, MEd,§ Thomas Lincoln, MD,§ Daniel J. Stone, MD,§ and Frederick L. Altice, MD,*†¶

CLINICAL SCIENCE

Extended-release Naltrexone Improves Viral Suppression Among Incarcerated Persons Living with HIV and Alcohol use Disorders Transitioning to the Community: Results From a Double-Blind, Placebo-Controlled Trial

Sandra A. Springer, MD,*† Angela Di Paola, MS,‡ Russell Barbour, PhD,† Marwan M. Azar, MD,* and Frederick L. Altice, MD,*†§



Medication Treatment for Substance use Disorder = Treatment as Prevention

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FDA-Approved Medications for Treatment of Opioid Use Disorders (MOUD)

	Methadone	Buprenorphine	Extended-release Naltrexone
Mechanism of Action	Full μ agonist	Partial μ agonist, Partial κ antagonist	Full μ antagonist
Delivery	Oral	Sublingual, film, implant, injection*	Injection
Frequency	Daily	Daily oral; monthly injection; implant 6 months	monthly
Setting	Licensed drug treatment program	PCC/HIV care setting	PCC/HIV care setting (no special licensing)
Other	<ol style="list-style-type: none"> Highly structured due to safety concerns. OD potential Interacts with some ARVs Reduces HIV Risk Behaviors Reduces Overdose (OD) 	<ol style="list-style-type: none"> Safer than methadone, without major OD potential Less interactions with ARVs Reduces HIV Risk Behaviors Reduces OD Improves HIV Viral Suppression (VS) 	<ol style="list-style-type: none"> Also treats Alcohol Use disorders Adherence advantage NO overdose or diversion concerns Reduces HIV Risk Behaviors Reduces Overdose Improves VS*^{2,3}

1. Springer et al. Plos One 2012. ; 2. Springer S. JAIDS 2018; 3. Springer JAIDS 2018

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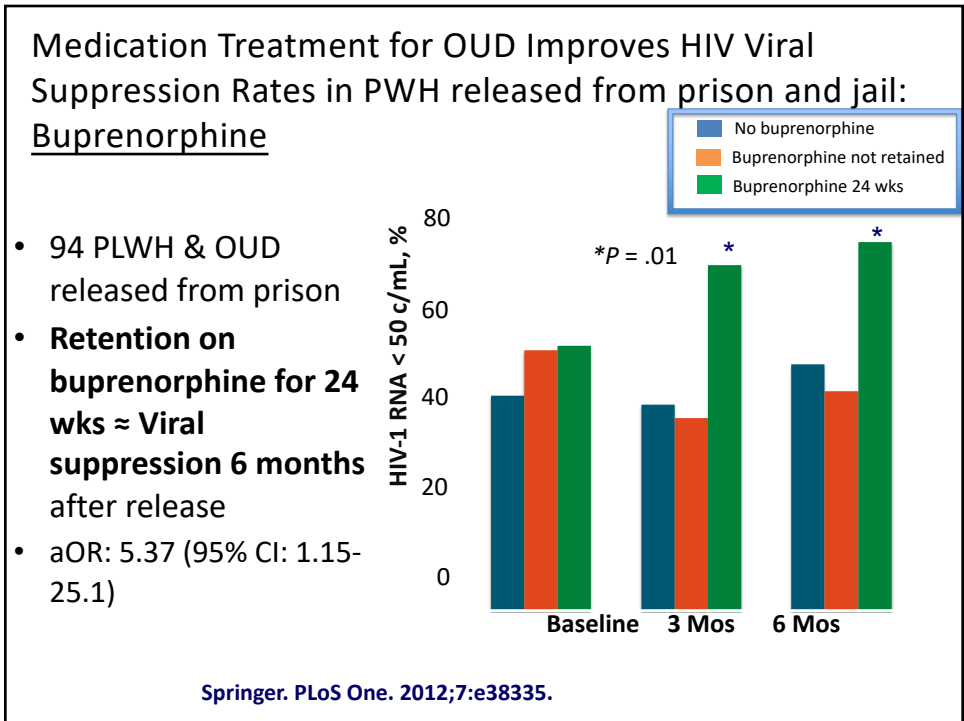
Improved HIV and Substance Abuse Treatment Outcomes for Released HIV-Infected Prisoners: The Impact of Buprenorphine Treatment

Sandra Ann Springer, Shu Chen, and Frederick L. Altice

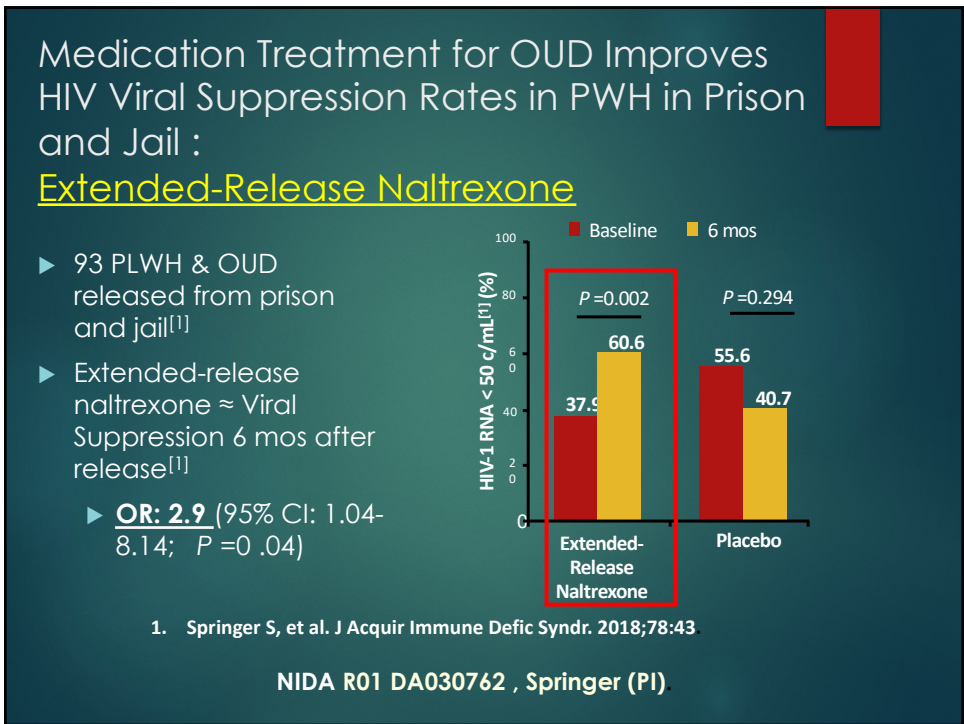
Buprenorphine was highly accepted and decreased craving and opioid use post-release

Springer et al. Journal of Urban Health. 2010.
 NIDA K23 DA 019381, Springer, PI

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XR-NTX improves Viral Suppression among PWH in Prison and Jail with Alcohol Use Disorders

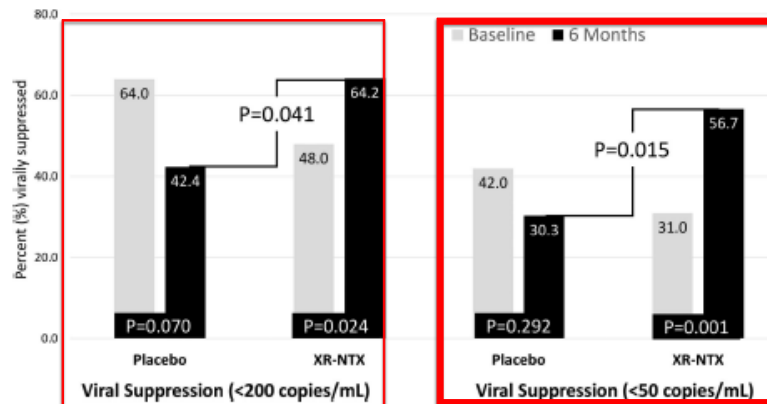


FIGURE 2. ITT analysis: comparison of VS levels at <200 and <50 copies per milliliter for participants receiving XR-NTX or placebo (N = 100).

Springer et al. JAIDS 2018

NIAAA R01 AA018944, Springer & Altice (PIs)

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EXIT CJS

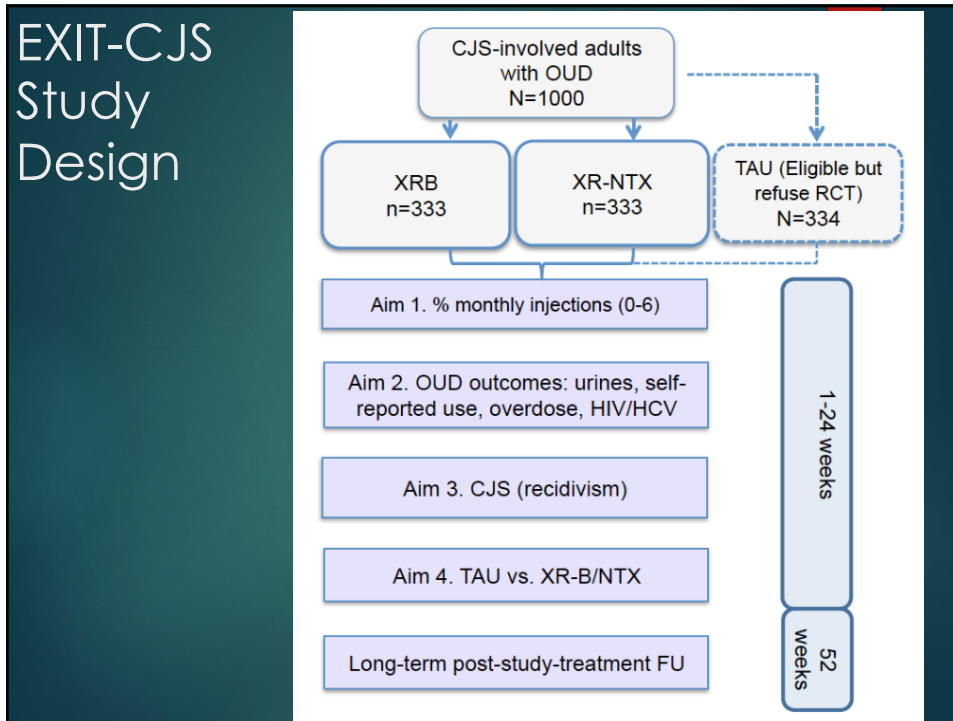
Long-acting buprenorphine vs. long-acting naltrexone opioid treatments in CJS- involved adults

NIDA U01DA047982 (JCOIN HEALing award)

Multiple Principal Investigators:

- Joshua D Lee, MD MSc – NYU School of Medicine (contact)
- David Farabee, PhD – NYU School of Medicine
- Lisa Marsch, MD – Dartmouth College
- **Sandra A. Springer, MD – Yale School of Medicine**
- Robert P. Schwartz, MD – Friends Research Institute
- Elizabeth Waddell, MD – Oregon Health & Science U.

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Implementation research and real-world effectiveness studies are needed for persons as they reenter the community!

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Research Paper

Linking criminal justice-involved individuals to HIV, Hepatitis C, and opioid use disorder prevention and treatment services upon release to the community: Progress, gaps, and future directions

Noor Taweh^{a,b}, Esther Schlossberg^a, Cynthia Frank^a, [Ank Nijhawan^c](#), Irene Kuo^d, [Kevin Knight^e](#), [Sandra A. Springer^{a,*}](#)

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Addressing risk through Community Treatment for Infectious disease and Opioid use disorder Now (ACTION) among justice-involved populations

NIDA U01DA053039

MULTIPLE PRINCIPAL INVESTIGATORS

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- ANK NIJHAWAN, MD, UT SOUTHWESTERN MEDICAL CENTER
- KEVIN KNIGHT, PHD, TEXAS CHRISTIAN UNIVERSITY

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ACTION Protocol Paper

Springer et al. *BMC Infectious Diseases* (2022) 22:380
<https://doi.org/10.1186/s12879-022-07354-x>

BMC Infectious Diseases

STUDY PROTOCOL

Open Access

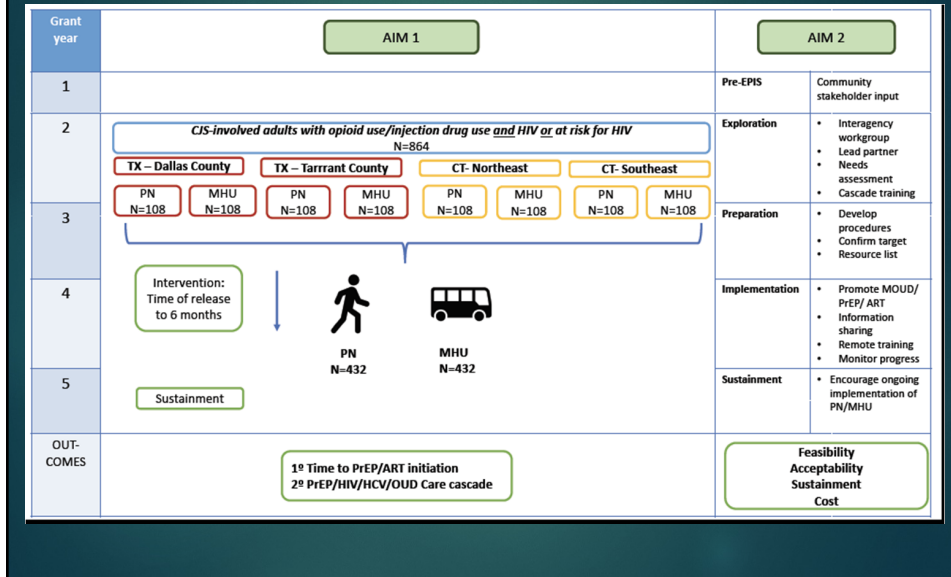
Study protocol of a randomized controlled trial comparing two linkage models for HIV prevention and treatment in justice-involved persons



Sandra A. Springer^{1,2*}, Ank E. Nijhawan³, Kevin Knight⁴, Irene Kuo⁵, Angela Di Paola¹, Esther Schlossberg¹, Cynthia A. Frank¹, Mark Sanchez¹, Jennifer Pankow⁴, Randi P. Proffitt⁴, Wayne Lehman⁴, Zoe Pullitzer³, Kelly Thompson⁶, Sandra Violette⁷, Kathleen K. Harding⁸ and ACTION Cooperative Group

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Study Design: Hybrid Type 1 Effectiveness-Implementation RCT



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Mobile Health Units



TCU's Mobile Health Unit in Fort Worth, TX



Yale's Mobile Health Unit in Northeast, CT



Yale's Mobile Health Unit with Alliance for Living in Southeast, CT
(Logo wrapping pending)



The HOMES Mobile Health Unit UTSW will be using in Dallas, TX

The Homeless Outreach Medical Services (HOMES) program at Parkland Health and Hospital System in Dallas consists of five medical mobile units and has provided medical, dental and behavioral health services to children and adults who are homeless for 30 years.

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BUT... R01s/ U01s are Not Enough and Mobile Health Units are Not Enough..

The reality is that the Barriers are endless for PWUD, especially those involved in the criminal legal system :

- ▶ Transportation - rural -no public transportation to get to clinic/ or a fixed Mobile health unit
- ▶ Stigma- in community, healthcare, criminal justice: due to drug use, HIV, criminal legal
- ▶ Lack of Insurance
- ▶ Literacy
- ▶ Racism
- ▶ Homelessness
- ▶ Food insecurity
- ▶ Poverty
- ▶ Lack of MOUD providers
- ▶ Pharmacies not stocking all meds and may be far from where people live
- ▶ PrEP /ART immediate access non-existent
- ▶ Long-acting PREP and ART – no thoughts on how to get this to people
- ▶ Long-acting forms of MOUD- (injectable buprenorphine) restrictions on where to get / who can administer (REMS procedures etc)

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We need to think about how to **BRING** integrated services to people **where people live**

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Avant Garde Award (NIDA DP1DA056106, Springer, PI)

Develop **mobile rapid response multidisciplinary teams** of community health workers, pharmacists & healthcare providers that literally go to where PWUD live and provide integrated HIV & SUD treatment.



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FIRST : Train people who live in the communities affected by overdose to be Community Health Workers

- ▶ Train people who :
 - ▶ mirror the affected communities
 - ▶ Will travel to **where people live** and be first touch point in care delivery system
 - ▶ Will do rapid HIV testing and give immediate results **where they live**
 - ▶ Will screen for substance use **where they live**
 - ▶ Will access online clinician who meets with patient to address ART/ PrEP, SUD needs
 - ▶ Will assess for other social and economic and health needs

Rapid HIV testing works in resource limited countries and where I do my own research

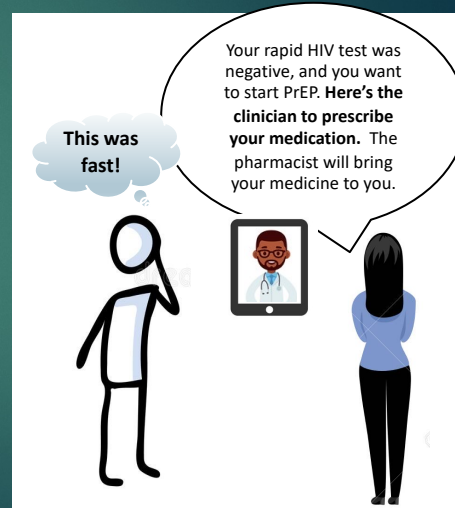
Non-clinicians Rapid Diagnosis of Opioid Use disorder (RODS) & screen for other Substance use



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Second: Provide immediate access to online clinician where they live to prescribe treatment

- ▶ PrEP/ ART and medication treatment for opioid Use disorder
- ▶ Can partner with Telehealth clinicians 24/7
- ▶ Collaborative care model with pharmacists to deploy meds they prescribe



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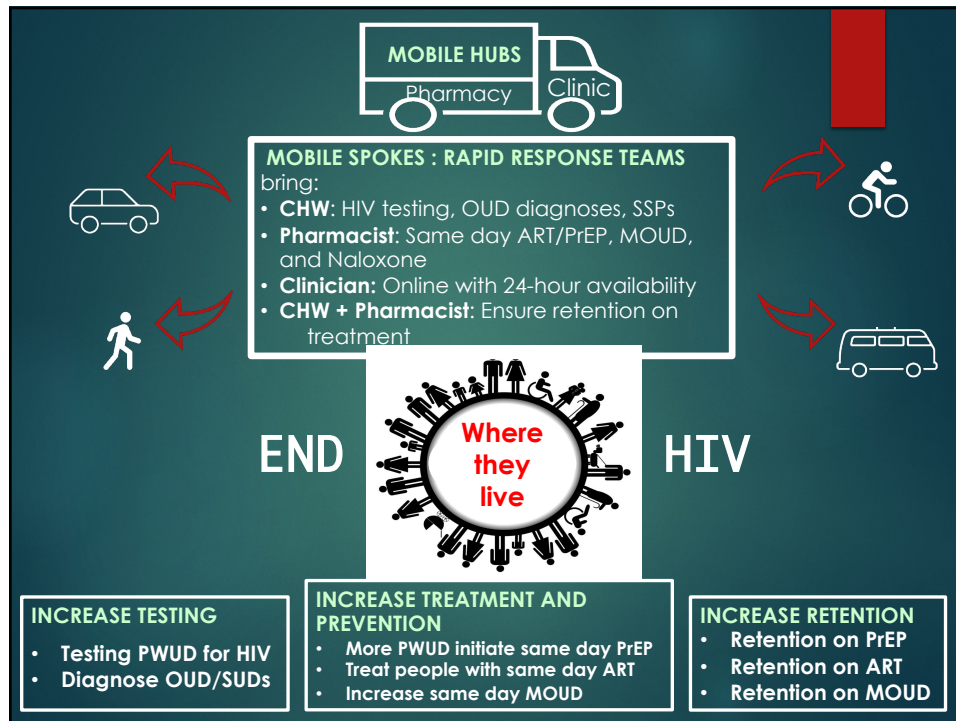
THIRD: Provide rapid medication dispensing via mobile pharmacists & mobile pharmacies

- ▶ Pharmacist brings medication to **where people live** immediately
- ▶ Nurse available to draw blood & administer injectable meds **where they live**
- ▶ Pharmacist and CHW will follow patient **where they live** to **foster retention**



Overcomes transportation barriers and lack of providers and pharmacies in their areas **where they live**

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Ending the HIV Epidemic for Persons Who Use Drugs: the Practical Challenges of Meeting People Where They Are

Sandra A. Springer, MD^{1,2}

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Check for updates

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- ▶ Multiple collaborators : Kevin Knight, Ank Nijhawan, Irene Kuo, Sheela Shenoi, Josh Lee, David Farabee, Lisa Marsch, Liz Waddell, Jan Gryczynski, Ned Nunes, Frances Levin, Alain Litwin, Kathleen Brady, and many more!

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Thank you! Questions?



InSTRIDE

Integrating Substance use Treatment Research with Infectious Diseases for Everyone

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