

**New England HIV Implementation Science Network Symposium**  
**June 3, 2015 - Afternoon Breakout Session Project Briefs**

**#1: “Estimating Costs and Health Effects of Alternative Modes of Syringe Exchange and Naloxone Provision on HIV cases averted and other Health Options”** Scott Braithwaite, MD, MSc, FACP

This proposal addresses the problem of not knowing the best way to provide naloxone in the manner that generates the greatest health benefit subject to resource limitations, in particular the health benefit attributable to HIV infections averted. There are large numbers of potentially avoidable overdose deaths in Connecticut, and interventions exist to mitigate their morbidity and mortality. But the optimal strategy is not known for deploying interventions so that the greatest morbidity and mortality is prevented within budget limitations. The goal of this project is to develop a Connecticut-specific mathematical model of the costs and health effects of injection drug use, and to estimate impacts on costs and health effects of alternative policy options, in particular different modes of syringe exchange and different modes of providing naloxone. Results are expected to inform decisions regarding how to construct packages of syringe exchange and naloxone.

**#2: “Implementation of Integrated HIV and STI Partner Notification Services for MSM in New England”**

Don Operario, PhD, MS, Thomas Bertrand, MPH, Jacob van den Berg, PhD, MS

HIV and sexually transmitted infections (STIs) disproportionately impact specific populations particularly men who have sex with men (MSM). Partner notification (PN) is a vital public health strategy to identify and test high-risk people, treat newly diagnosed HIV and STI cases, and prevent future infections. In many health jurisdictions, including those in New England, PN services for HIV and STI index cases operate under separate protocols and information tracking systems, despite evidence that HIV and STI infections are frequently linked. Moreover, PN protocols typically focus on identifying *sexual* contacts of newly-diagnosed HIV or STI index cases, and often do not include *peer* contacts who share the similar demographic and risk characteristics as newly diagnosed index cases. We hypothesize that PN systems can more effectively and efficiently reach high-risk networks through integrating HIV and STI notification systems and adapting protocols to include peer and sexual contacts of newly diagnosed MSM. Implementation of enhanced PN delivery models at the system level can allow us to examine improvements in both the *process* and *outcomes* of this intervention.

**#3: “Implementing an mHealth Intervention Supporting HIV Treatment Adherence and Retention”** Aadia Rana, MD, Michael Barton Laws PhD

It has been shown that computer-based psycho-educational interventions can improve adherence to anti-retroviral medications, and work is in progress to translate these results to mobile applications. At the same time, electronic “portals” through which patients can obtain test results, schedule appointments, request refills and otherwise interact with their providers are increasingly common and various initiatives are underway to expand their functionality. This proposal concept entails developing, implementing and evaluating a mobile app or suite of apps that interact with the patient’s electronic health record (EHR) which include standard portal features and additional support for adherence and other self-management behaviors.

**#4: “e-Connect: A peer Driven Social Media Intervention to Improve Outcomes for HIV+ Youth along the HIV Care Continuum”** Elaine O’Keefe, MS, Nancy Kingwood-Small, MS

This proposal focuses on improving engagement, retention, and health outcomes for HIV+ youth in Bridgeport, Hartford and New Haven and particularly gay, bisexual, transgender youth and youth of color. Specific aims are to: 1) Build on the **e-Connect** project that was piloted in Bridgeport, CT to develop a novel intervention for youth, utilizing peer advocates, social networks and social media applications, and components of the Community Promise evidence based model; 2) Implement the **e-Connect** intervention in Bridgeport, Hartford and New Haven in collaboration with principal partner organizations and HIV care continuum providers, and 3) Assess whether **e-Connect** results in increased HIV diagnoses and more efficient and timely engagement in care, improved overall retention, and reduced risk of onward transmission of HIV.

**#5: “Harm Reduction Needs Assessment: Suggested Approaches to Identify Areas of Injection Drug Use in Suburban and Small New England Cities”** Robert Heimer, PhD, MS, Lauretta Grau, PhD, Russell Barbour, PhD

Research by the Robert Heimer team suggests, that a large number of injection drug users in CT live in suburban and small city environments and have poor access to harm reduction services. Very high (40%) prevalence of Hepatitis C among injectors who participated in this study further suggests unsafe injection

practices and elevated HIV risk. The spatial distribution of these injectors closely followed recent and historic data from the CT Medical Examiner's office for heroin related overdose deaths. Such data in combination with HIV prevalence, hepatitis C reporting, data from existing Harm Reduction Programs, hospital emergency department admissions and to a much lesser extent heroin related drug arrests, could help to identify areas of New England with injections drug populations that are not concentrated in the larger cities, and by doing so develop a methodology with wider application.

**#6: “Reporting of Syphilis Cases and Other Sexually Transmitted Infections: Entry to HIV Pre-Exposure Prophylaxis”** Krystn Wagner, MD, PhD, Marianne Buchelli, MPH, MBA

Despite the known benefits of PrEP, many individuals at high risk of HIV infection remain unaware of this prevention option and have not received appropriate counseling regarding its potential use. Primary care physicians are often unfamiliar with PrEP or unsure regarding its appropriate use and the prescription protocol. HIV specialists who are knowledgeable about Truvada and more likely to prescribe PrEP do not typically have direct contact with patients who would benefit. There are missing links in the current HIV prevention and care system to identify and link at risk individuals with clinicians who are willing and able to prescribe and monitor PrEP use. The main goal of this pilot project is to determine whether newly reported cases of syphilis and other STIs can be an entry for PrEP education, referral and utilization among high-risk, hard to reach populations.

**#7: “Understanding, Promoting, and Sustaining Adherence across the Continuum of HIV Care: An Implementation Science Guided Trial”** Nancy Reynolds, PhD, Elijah Paintsil, MD

Continued deficits in ART adherence impede optimal prevention and treatment outcomes. A portfolio of ART adherence interventions have shown efficacy in improving adherence in high-quality trials in specific settings, yet they have typically not been broadly diffused. Health policy makers and program planners must carefully consider which intervention to choose for routine implementation in a particular setting based on socio-cultural context, feasibility, acceptability, and health systems organization. There is, however, a critical lack of evidence about the effectiveness of antiretroviral (ART) adherence interventions in different “real-world” settings. This project aims to provide information that will promote the implementation of feasible and acceptable evidence-based adherence interventions and improve the adherence behavior and treatment outcomes of persons accessing care in HIV clinics and drug treatment centers in New England.

**#8: “Implementation of Risk Avoidance Partnership (RAP) in Treatment Clinics for HIV Prevention in Drug User Networks”** Margaret Weeks, PhD, Jianghong Li, MD, MSc

The authors propose a 5-year implementation trial. The Risk Avoidance Partnership (RAP) project is a successful peer-delivered intervention originally designed to promote health and diffuse HIV/STI hepatitis risk and harm reduction peer intervention among community networks of not-in-treatment drug users. The original trial trained active drug users to become Peer Health Advocates (PHAs) to promote HIV/hepatitis/STI risk/harm reduction and increase treatment seeking. PHAs implemented the intervention with their drug-using network members, sex partners, and others in their networks and neighborhoods. RAP was then altered through a translational pilot (R34DA030248) to make it feasible and appropriate for patients in drug treatment clinics, who became peer interventionists with their not-in-treatment drug using network members and others at risk in their networks and communities. The RAP pilot established proof of concept and fit for implementation with clinic patients. The proposed study is designed to conduct a real-world trial of RAP in clinics to test it for expected outcomes in the new settings and to understand implementation process, quality, and potential for scalability in other drug treatment clinics.

**# 9: “At Risk Youth LGBQ and Transgender Sexual Health and Pre-Exposure Prophylaxis for HIV (PrEP)”** A.C. Demidont, M.D., T.J. Kidder, ABD PhD, LCSW

Youth between the ages of 13 and 24 are at high risk for co-occurring STIs, HIV infection, chronic mental health and substance abuse. This project seeks to identify LGBTQ youth at risk for HIV through STI screening/reporting, outreach engagement and linkage to LGBTQ sensitive treatment centers for HIV screening, and PrEP education, protocol administration and, prescription when applicable. In cooperation with the CT Department of Children and Families, at risk youth will be identified and referred to healthcare providers with understanding of LGBQ and Transgender youth. Cooperative referral and treatment will be facilitated between clinics and DCF and training provided for healthcare providers in the specific sexual health development, counseling and testing needs of “at risk” LGBQ and Transgender youth, including utilizing PrEP.