



Specialist

HIV and the Opioid Crisis

Intersection of Hepatitis,
HIV and Opioids

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Integrating Care

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Supervised
Injection Facilities

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The Epicenter
of the Epidemic

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BY JAMES M. FRIEDMAN, MHA
Executive Director, AAHIVM

A Look Back

A **S I STEP DOWN** from the position of executive director of AAHIVM in early 2019, it gives me pause to reflect on my career. I have worked in public health for over 45 years. While the last 11 years at AAHIVM has truly been the most rewarding, I was honored to have had a chair at the table for many of the most important public health issues of the day—including HIV.

While never the ultimate decision maker, I privately let the Assistant Secretary of Health know my views on many issues, including infant mortality and the reuse of dialyzers in kidney dialysis. I formed and chaired HHS department-wide committees to address these issues. After several iterations, the infant mortality report released by our committee became the Healthy Start Initiative that helped reduce the U.S. infant mortality rate from 9.3/1000 live births to 7.3/1000.

After leaving government, I became the director of the healthcare team at Hill and Knowlton Public Affairs. I had the opportunity to do public health at the grass roots level leading initiatives such as hepatitis B vaccinations for adolescents, support for pharmaceutical THC, hepatitis B testing and treatment in the Asian-American communities throughout the U.S., and a lead-based paint education program in elementary schools in the Northeast.

But at the Academy, I had the opportunity to be responsible for continuing the long term excellence and growth of this organization, which included the stabilization of our financial position, the expansion

of the credentialing program, and the creation of the *HIV Specialist* magazine.

Much of my success at the Academy is due to the support, guidance and friendship of our current and past Board chairs: Dr. Jeff Schouten, Dr. Donna Sweet, Dr. Zami Temegsen, and Dr. Maggie Hoffman-Terry. I was also surrounded by an excellent staff that I praised in the October issue of *HIV Specialist*.

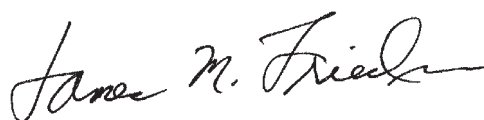
I'm especially grateful to our almost 1600 members—the most thoughtful and committed practitioners I have had the privilege to work with. I will forever be in your debt.

My staff recently surprised me with a celebratory reception after our December board meeting. Staff,

board members, AAHIVM members, friends and family were in attendance. My son made a lovely speech and recalled some advice I gave him years ago as he struggled to determine his career path. I said to him "It doesn't matter what you do, just do it as well as you can and help people." I'd like to think I've followed that advice myself over the past 45 years. I know I've tried my best and I hope I've helped many along the way. **HIV**



James M. Friedman



In the NEWS

CDC Publishes 2017 HIV Surveillance Report

THE CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC) recently published the *2017 HIV Surveillance Report*. The report presents data on numbers and rates of diagnoses of HIV infection that occurred through December 31, 2017. All data were reported to CDC through June 2018.

In summary, annual diagnosis rates continue to be highest among Blacks/African Americans compared to other racial/ethnic groups and higher in the South compared to other regions. Annual diagnoses among MSM remain stable overall and are continuing to decline among women.

Key findings that require ongoing attention include populations with increasing rates, such as persons aged 25–34 years overall, as well as American Indians/Alaska Natives and Asians, for whom there continue to be increases. Annual diagnoses also continue to increase among MSM, specifically persons aged 25–34 years and among Hispanics/Latinos, and white persons who inject drugs.

This report shows HIV is still a threat to Americans' health. Despite ongoing prevention efforts, the data show limited progress among at-risk populations and communities. The national goal of "no new infections" cannot be reached until these disparities are addressed. View the report at cdc.gov.



Hepatitis C: The State of Medicaid Access Update

THE CENTER FOR HEALTH LAW AND POLICY INNOVATION (CHLPI) and National Viral Hepatitis Roundtable (NVHR) have released an update of the *Hepatitis C: The State of Medicaid Access* report. The report shows that great progress has been made in reducing HCV treatment access restrictions in the past year, with Illinois the latest state to remove all discriminatory restrictions in their Medicaid program. Overall, since October 2017, 21 states have either eliminated or reduced their fibrosis restrictions, nine have loosened their sobriety restrictions, and six have scaled back their prescriber restrictions.

However, there are still far too many restrictions in place in Medicaid, private health insurance and correctional settings. Advocacy efforts continue as the fight in eliminating all HCV treatment access restrictions carries on. More information on the state of Medicaid HCV treatment access is available at www.stateofhepc.org.

Study Explores Pain Rates Among People With and Without HIV

YOUNGER (< 50 years) PLWH reported pain at similar rates as older (≥ 50 years) people not living with the virus (62.7% versus 63.7%), a British study published in *AIDS* showed. The highest rates of pain in the study (70%) were reported by older PLWH.

In the study, 882 of 1,325 participants reported pain during the last month, and 580 said they were currently in pain. Fifty-nine percent of the 882 people reporting pain said they had consulted a doctor about it, and 15.3% used analgesics to manage it. In all three arms, current pain was associated with lower likelihood of full-time employment, and 13.6% had missed work or study because of pain. PLWH who experienced pain were more likely to have depressive symptoms and a poorer quality of life than those without pain.

"Interventions are required to assist clinicians to proactively manage pain in their patients, and to assist PLWH to communicate their pain to clinicians and to self-manage pain and related symptoms," study authors concluded.

Speed of Viral Suppression Should Be Key Indicator, NYC HIV Officials Say

THE U.S. NATIONAL HIV/AIDS STRATEGY (NHAS) should include an additional metric, the percentage of people whose viral load drops below 200 copies/mL within three months of starting treatment, officials within the Division of Disease Control in the New York City Department of Health and Mental Hygiene proposed in *The Journal of Infectious Diseases*.

The officials, including New York City Deputy Commissioner for Disease Control Demetre C. Daskalakis, M.D., M.P.H., argue that such an outcome indicator would help health agencies and the U.S. Centers for Disease Control and Prevention monitor HIV care progress for those newly diagnosed. Data from New York City's HIV surveillance registry, for example, shows that this measurement rose from 9% in 2007 to 37% in 2016, although progress was uneven among racial and ethnic groups.

The new indicator measures a health system's effectiveness, Julia C. Dombrowski and Jared M. Baeten of the University of Washington noted in a related commentary. While the status of NHAS—and thus the utility of including a new metric—is unclear under the current U.S. presidential administration, the proposed measurement could help drive improvements in the systems of care for the newly diagnosed, they argued.

In the NEWS

High HIV Prevalence Rates Found Among African-American MSM Using PrEP

ONE IN THREE AFRICAN-AMERICAN MSM who reported that they currently use PrEP was found to be living with HIV, a study published in the *Journal of Acquired Immune Deficiency Syndromes* showed.

Participants—who were recruited at Black Gay Pride events in the U.S. between 2014 and 2017—filled out a questionnaire and were offered on-site HIV testing. Of the 3,512 men who accepted, 32% of current PrEP users turned out to be HIV positive; by comparison, HIV prevalence was found to be 20% among men who reported no current PrEP use.

Inability to afford health care coverage was reported more frequently among PrEP users who tested positive. In addition, among a subset of participants who were asked questions about PrEP access, only 76% reported getting their PrEP from a health care provider; this suggests many PrEP users may not be getting routinely tested for HIV and sexually transmitted infections, and that side effects are not monitored, study authors wrote. They stressed that the relatively high rate of seroconversions was likely due to inadequate adherence rather than medication failure.

Real-World Treatment Efficacy High, But Falls Well Short of Clinical Trials

THE EFFICACY OF INITIAL ANTIRETROVIRAL THERAPY REGIMENS in real life is lower than that shown in phase 3 trials, with post-2010 regimens failing in >20% of people over three years, a systematic review published in *AIDS* showed.

Researchers compared data from 181 studies published between 1994 and mid-2017 comprising a total of 77,999 participants. Mean intention-to-treat efficacy increased with newer regimens; for instance, looking at 144-week results, efficacy averaged 77.1% among studies published after 2010, compared to 61.8% overall. The corresponding numbers for week-48 results were 83.8% among studies published after 2010 compared to 71.3% overall.

Integrase inhibitor- and tenofovir-based regimens predicted greater efficacy at all time points. Resistance genotyping before treatment and once-daily antiretroviral treatment also predicted viral control at week 48.

To further increase real-world regimen efficacy, study authors recommended that initial regimens not based on integrase inhibitors be listed as non-preferred in guidelines, access to pre-antiretroviral genotyping be improved, and early start of once-daily treatment be increased. They also called for collecting socioeconomic data during clinical trials, conducting longer post-approval studies, and incorporating real-world data into guideline development, among other recommendations.



Smartphone Intervention Found Helpful for Young Men Taking PrEP

CLINICAL TRIALS HAVE DEMONSTRATED that pre-exposure prophylaxis (PrEP) can significantly reduce the risk of HIV infection. A key aspect of PrEP involves taking a fixed-dose combination of two drugs—tenofovir DF and FTC—sold under the brand name Truvada. It is also available in generic formulations. In Canada, regulatory authorities have approved taking daily PrEP for people at high risk of HIV infection.

However, some doctors prescribe intermittent PrEP (so-called “on-demand”) to gay, bisexual and other men who have sex with men (MSM), as clinical trials have found that this schedule also reduces the risk of HIV infection in this group. PrEP also involves regular screening for HIV and other sexually transmitted infections (STIs), as well as other assessments, done prior to starting PrEP and usually every three months thereafter.

A problem that has emerged both in clinical trials and in clinics is that some people have difficulty remembering to take PrEP exactly as directed, maintaining regular visits to their healthcare providers and going for lab tests. In an attempt to find ways to improve the ability of youth to take PrEP exactly as directed (and thereby maintain protection from HIV), researchers in San Francisco and Chicago have developed an intervention that works on mobile telephones. The intervention, code-named PrEPmate, centers on text messages that can be sent between healthcare professionals and PrEP users. Researchers tested it in a randomized clinical trial with young men living in Chicago. They found that PrEPmate users were significantly more likely to maintain timely medical appointments and have high levels of tenofovir DF in their blood than participants who did not use PrEPmate.

Reducing Substance Use Also Lowers Depressive Symptoms in People With HIV

AMONG PEOPLE LIVING WITH HIV (PLWH), less use of illicit substances is associated with improvements in depressive symptoms, even among people who do not stop using substances altogether, a study published in the *Journal of Acquired Immune Deficiency Syndromes* showed. This was especially true for amphetamine-type substances (ATS), mainly methamphetamine.

At baseline, 40% of 9,905 PLWH enrolled in the Centers for AIDS Research Network of Integrated Clinical Sites cohort reported using one or more substances. Most (3,277) used marijuana, followed by ATS (1,016), crack/cocaine (728) and illicit opioids (290). Depressive symptoms were measured using the self-administered PHQ-9 questionnaire—higher scores mean more severe depression, with a maximum score of 27. PHQ-9 scores dropped by a mean of 2.2 points for those who stopped ATS and by 1.7 points for those who used ATS less frequently. Improvements were also seen in those who stopped or reduced marijuana use or stopped using cocaine/crack. “These results suggest that there may also be a role for treating depression in parallel with efforts to treat substance use disorders,” study authors concluded.

Undiagnosed HIV Seroconversions Still Common Among Black Trans Women

MANY AFRICAN-AMERICAN TRANSGENDER WOMEN living with HIV are unaware of their status, according to survey results reported in *Journal of Acquired Immune Deficiency Syndromes*.

Researchers analyzed data provided by 422 black trans women (BTW) who had been recruited at Black Pride events in six U.S. cities. Participants answered survey questions and agreed to on-site HIV testing. Forty-five percent of participants were found to be living with HIV; 51% of those women reported in their survey that they were not HIV positive. Only 25% of participants who tested HIV positive reported that they were virally suppressed. Homelessness, physical assault, intimate partner violence, and current hormone use were associated with a detectable viral load.

While 78% of participants reported having health insurance, only 44.3% said they could access health care. Lack of health care access and having been in jail during the previous two years were associated with undiagnosed HIV. Once diagnosed, 96% were linked to care, and the same percentage were retained in care.

Data underscore the need for trauma-informed care that considers the multiple health challenges faced by BTW, study authors concluded. They called for targeted interventions to advance test-and-treat strategies in this population.

Long-Term HIV Pre-Exposure Prophylaxis May Induce Significant Microbiome Shifts

LONG-TERM PRE-EXPOSURE PROPHYLAXIS (PREP) is associated with enteric microbiome dysbiosis, in which levels of the bacterial genus *Streptococcus* decrease while levels of the bacterial family *Erysipelotrichaceae* increase, according to a study published in *Scientific Reports*.

The investigators of this study sought to examine the effect of daily HIV PrEP with tenofovir disoproxil fumarate plus emtricitabine (TDF-FTC) on the enteric microbiome profiles of healthy individuals absent of HIV infection.

The study investigators analyzed serial specimens from 8 healthy individuals with long-term PrEP adherence who participated in the California Collaborative Treatment Group study 595, a randomized controlled trial involving high-risk transgender women and men who have sex with men (MSM). Microbiota specimens were collected through rectal swab prior to initiating PrEP

and 48 to 72 weeks after adherent PrEP.

To identify microbiome shifts, researchers assessed the relative abundance of each bacterial family and genus using next-generation gene sequencing of the 16S ribosomal RNA both before and after daily PrEP administration. The overall microbial diversity of each participant was comparable both before and after 48 to 72 weeks of daily PrEP. Gene sequencing of the V4 region of the 16S ribosomal RNA revealed that the presence of *Streptococcus* significantly reduced, from 12% to 1.2% ($P = .036$), and at the family level, *Erysipelotrichaceae* significantly increased, from 0.79% to 3.3% ($P = .028$).

Study investigators performed long-read sequencing in order to pinpoint which species of *Streptococcus* and *Erysipelotrichaceae* were significantly affected by long-term PrEP: The results showed *Streptococcus agalactiae*, *Streptococcus*

oralis, *Streptococcus mitis* were reduced, but *Catenibacterium mitsuokai*, *Holdemanella biformis*, and *Turicibacter sanguinis* of the *Erysipelotrichaceae* family increased.

Changes in microbiome balance were not associated with variable factors such as age, race, PrEP duration, tenofovir diphosphate blood level, and drug use. These results suggested that microbiome shifts were likely induced by daily PrEP. This study was limited by a small population size, and future studies should examine microbiome shifts in a large cohort with long-term outcomes.

The study investigators concluded that long-term PrEP contributed to significant shifts at both the family and genus levels of the enteric microbiome; *Streptococcus* levels decreased and *Erysipelotrichaceae* increased following a daily TDF-FTC regimen. By characterizing the microbiota signatures and side effects of PrEP, adherence may be improved, thus helping prevent HIV infection.

In the NEWS

Untreated HIV-2 Does Lead to AIDS, Just More Slowly Than Untreated HIV-1

THE SURVIVAL CURVE OF PEOPLE living with HIV-2 is similar to that of people living with HIV-1, but is spread out over a longer period of time, a long-term open cohort study published in *The Lancet HIV* showed.

The HIV-2 variant of the virus occurs mainly in West Africa, while HIV-1 is distributed across the globe. HIV-2 had been thought to rarely progress to the clinical definition of AIDS or death, even in the absence of treatment. However, the current study shows that not to be the case.

Researchers analyzed data on nearly all of Guinea-Bissau's police force over the course of 23 years. Of the 4,817 total participants, 919 were either found to be HIV positive at study entry or were diagnosed after enrollment, and 464 of those 919 had HIV-2. While it took participants living with HIV-2 longer to progress to AIDS, 43% of them did so (in a median 14.3 years). Among those with HIV-1, 54% developed AIDS after a median of 6.2 years.

In a related press release, Fredrik Månsson, one of the study's authors, noted the lack of commercial interest in HIV-2 research, in part because of West Africa's poverty and consequently low investment levels. He and his colleagues called for a long-term treatment study to determine the usefulness of early antiretroviral treatment for those living with HIV-2.



CD4 Count Dip May Signal Incident Hepatitis C Coinfection

THE CD4 CELL COUNTS OF PEOPLE LIVING WITH HIV dropped temporarily when they acquired hepatitis C (HCV), independent of how long they had been living with HIV and of whether they were on antiretroviral treatment, a study published in *AIDS* found.

Researchers matched 214 treatment-naïve and 147 on-treatment men who have sex with men (MSM) who were co-infected with HCV to controls living with HIV only (5,384 not on antiretrovirals, 3,954 on antiretrovirals). For the first two to three years after acquiring HCV, CD4 cell counts in both coinfecting groups were lower than in the controls, but later returned to control group levels.

It is unclear whether such a drop could influence the effectiveness of HCV treatment or contribute to faster HIV disease progression, study authors noted. However, they recommended that health care providers test for HCV if their patient's CD4 cell count drops despite antiretroviral treatment. Further clinical implications of the study results have yet to be determined, they conceded.

Parental Communication Associated With PrEP Awareness Among Adolescent MSM

ADOLESCENT MEN WHO HAVE SEX WITH MEN (AMSM) in the U.S. are more likely to know about PrEP when their parents often talk to them about HIV, a 2015 survey published in *Journal of Acquired Immune Deficiency Syndrome* found.

Sixteen percent of the 636 AMSM who participated in the survey said they were aware of PrEP, and 0.5% reported taking it. More frequent parent communication about HIV was associated with greater odds of knowing about PrEP (odds ratio = 1.45). Among the 104 participants who were already familiar with this biomedical prevention method, those who thought their parents were open, honest, knowledgeable, and trustworthy felt more positively toward PrEP and reported higher perceived behavioral control for its use.

While parental communication improved both knowledge of and readiness to take PrEP, such engagement may not be feasible for all AMSM, study authors acknowledged. They called for further research into where children get their information and how exactly parents influence the way in which their sons learn about and form opinions on sexual health innovations.

UnitedHealthcare Responds to HIV Provider Concerns Over Controversial Incentive Program

MANY HIV PROVIDERS may have been alerted to a new pilot program offered by UnitedHealthcare (UHC) to clients of its small and large group plans (but not its individual plans). Called “MyScript Rewards,” the program offers zero cost share plus cash-back incentives (up to \$500 every year for medical expenses) to HIV patients to choose a lower-cost regimen, specifically lamivudine/TDF (“Cimduo”) + raltegravir or dolutegravir.

AAHIVM’s board of directors and members voiced their concerns to UHC (through the policy and executive staff of the Academy) over incentivizing a potentially inferior multi-pill, TDF based-regimen with possible associated kidney, bone and adherence issues, as well as potentially disproportionate influence on poorer patients. Also troubling to many clinicians and pharmacists was the proposed claim edit that would require a “soft rejection” when the client attempted to fill new prescriptions for “tiered” drugs (Biktarvy, Stribild or Genvoya) at their pharmacy. The client would then be required to contact a special UHC customer service line to hear more information about the zero-cost, cash-back incentivized ARV options, before being able to fill the provider-prescribed tiered regimen.

Following conversations with AAHIVM, HIVMA and NASTAD, UHC representatives announced this week that they were – at least for the present – dropping the “soft rejection” component of the program, beginning January 1. Patients will now be able to fill their prescriptions, including the tiered regimens, as per normal at their pharmacy, with no prior authorization or utilization management measures. UHC will continue to promote the “MyScript Rewards” program separately to plan enrollees and prescribers. It’s unknown at this point whether UHC will endeavor to re-implement utilization management or prior authorization in support of the program at some point in the future. AAHIVM and other groups will continue to stay engaged and in dialogue with UHC on the issue into 2019.

Additionally, UHC has announced that it will remove Atripla from its commercial formularies, beginning in April 2019. For questions about ongoing conversations with UHC, or for more information, please contact Bruce Packett bruce@aahivm.org or Anna Forbes at anna@aahivm.org.

Risk Behaviors Drop After Seroconversion, Especially in More Recent HIV Treatment Era

HISTORICALLY, MSM engaged in fewer risk behaviors after HIV seroconversion, and the rate of such behaviors dropped even further after highly active antiretroviral therapy (HAART) became available, according to data from a large prospective cohort study published in *AIDS*.

Researchers compared the self-reported behaviors of 558 MSM who enrolled at various time points between 1984 and 2008 in the Multicenter AIDS Cohort Study. After acquiring HIV, participants were less likely to have ≥2 partners (adjusted odds ratio [aOR] for any sex was 0.371, and for insertive anal sex was 0.360), or to drink heavily (aOR: 0.704). After the advent of HAART, a term commonly used in the late 1990s and 2000s to describe HIV treatment regimens consisting of multiple drug classes, the aOR for multiple partners declined further, to 0.219.

The fixed-effects model used in the study controlled for individual levels of propensity for risk but did not account for changes in such propensity over the course of a person’s life. Nonetheless, results imply a need for continuing investment in the HIV care continuum to expand on positive behavioral changes after HIV testing, study authors concluded.

EDITOR’S NOTE:

In the 2018 October issue of *HIV Specialist*, a heading for a chart included with the article “Immunization Update 2018–2019” was incorrect. The chart entitled “Recommended Immunization Schedule for Adults Ages 19 years or older—2018–19” is reprinted below with the correct heading of **HIV Infection with CD4 ≥ 200 (15% or greater)**. Our apology for any inconvenience.

Recommended Immunization Schedule for Adults Ages 19 years or older—2018–19 ³					
Vaccine	HIV infection with CD4 ≥ 200 (15% or greater)				
Influenza ¹	1 dose annually				
Tdap ² or Td ²	1 dose Tdap each pregnancy	1 dose Tdap, then Td booster every 10 years			
MMR ³	contraindicated		1 or 2 doses depending on indication		
VAR ⁴	contraindicated		2 doses		
RZV ⁵ (preferred)					2 doses RZV at age ≥ 50 years (preferred)
ZVL ⁵	contraindicated			1 dose ZVL at age ≥ 60 years	
HPV—Female ⁶		3 doses through age 26 years		2 or 3 doses through age 26 years	
HPV—Male ⁶		3 doses through age 26 years		2 or 3 doses through age 21 years	
PCV13 ⁷		1 dose			
PPSV23 ⁷		1, 2, or 3 doses depending on indication			
HepA ⁸	2 or 3 doses depending on vaccine				
HepB ⁹			3 doses		
MenACWY ¹⁰	1 or 2 doses depending on indication, then booster every 5 years if risk remains				
MenB ¹⁰		2 or 3 doses depending on indication, then booster every 5 years if risk remains			
Hib ¹¹		3 doses HSCT recipients only		1 dose	

The INTERSECTION of Hepatitis, HIV, and the Opioid Crisis

A Complex Issue in Need of a Comprehensive Response

By LAURA PEGRAM, MSW, MPH

DRASTIC INCREASES IN OPIOID USE, TRANSMISSION OF HEPATITIS AND HIV, AND OVERDOSE deaths across the country highlight the need for an urgent, unified, and comprehensive response from all health sectors, ranging from governmental public health to frontline infectious disease service providers. As the entities, agencies, and individuals responsible for assuring that healthcare services are available for impacted communities, it is integral that all stakeholders respond to these intersecting crises with compassionate and scientifically-based approaches.

Currently, 9% of all new HIV infections in the United States are attributed to injection drug use (IDU), while the incidence of hepatitis C (HCV) among people who inject drugs has quadrupled from 2004 to 2014. The social and economic costs of these combined epidemics is substantial, with the lifetime cost of each HIV infection estimated to be more than \$380,000, and more than \$205,000 for each case of chronic HCV. Given current drug pricing, the combined cost of treatment for all current HCV-infected patients is projected to exceed \$100 billion—this would save over \$78 billion dollars in healthcare costs over time.

According to the Centers for Disease Control (CDC), more than 60% of HCV cases in the U.S. are directly or indirectly related to IDU. Additionally, HCV prevalence among persons who inject drugs is as high as 80% and between 20-30% of uninfected people who inject drugs [PWID] acquire HCV each year. According to the CDC's 2017 surveillance report, which cited data from 2015, among people living with HIV or inject drugs, 80% also have, or have had, HCV. While this number may have come down in recent years, comorbidity rates between HCV and HIV remain high.

Hepatitis B (HBV) infections are also increasing because of the opioid crisis, particularly in rural areas with minimal access to syringe service programs (SSPs). West Virginia, Kentucky, and Tennessee have collectively seen a 114% increase in hepatitis B cases from 2006 to 2013. From 2004 to 2014, there was a national 133% increase in acute hepatitis C, a 400% increase in acute HCV and a 622% increase for opioid admissions among 18-29-year-olds.¹ These staggering increases demonstrate the need to prioritize HIV, HCV, and HBV prevention, linkage to care, and treatment among PWID. Furthermore, these efforts need to be planned and implemented using coordinated, strategies among multisectoral partners and stakeholders.

To end the hepatitis, HIV, and overdose crises, we must prioritize and advocate for effective public health programs that address the continuum of prevention and treatment for PWID. In addition to hepatitis and HIV prevention, testing, and linkage to care, we must also move to incorporate proven public health interventions such as SSPs, access to naloxone, reduce barriers for entry to inpatient treatment, and improve prescription coverage for medication-assisted treatment (MAT).



These are all critical components of a comprehensive response that promotes community and individual health and aims to end these intersecting crises. While numerous states and jurisdictions are working to create programs in response to these complex issues, the task is not simple. This is largely due to stigma around drug use and providing services to PWID, siloed state and federal mental health programs, and a lack of unified strategy at nearly every level.

While progress has been made in recent years, there is still

a clear need for programs that both improve health outcomes for PWID and prevent the transmission of hepatitis and HIV. While HIV rates among PWIDs have been declining overall, new cases of hepatitis and overdose are occurring at epidemic levels among a younger generation. There were 70,237 drug-overdose deaths in 2017 according to the CDC.² The urgency with which community advocates and public health programs once responded to the HIV epidemic must be employed in response to today's opioid crisis. Herein, we will examine evidence-based and promising practices that would impact the opioid crisis and are components of a comprehensive response.

HIV transmission among PWID, as well as cost effective.³

A meta-analysis of New York City SSPs found that individuals who did not participate in SSPs were three times as likely to become infected with HIV as persons who did.⁴ There are currently nearly 400 SSPs in the United States and territories. However, funding for these programs and services is a continual challenge. Currently SSPs can be supported through local, state, and federal funding (if the CDC concurs the jurisdiction is experiencing increased injection drug use), as well as through private foundations.

The current funding landscape for SSPs and harm reduction efforts is complicated, and innovation is essential to make sure they receive needed resources. However, in many jurisdictions, there are legal and social barriers to adopting SSPs. It remains the responsibility of community stakeholders and direct service providers to advocate for these lifesaving programs.

Support Advocacy and Implementation of Supervised Injection Facilities (SIFs)

These are evidence-based, harm reduction programs implemented globally, that play a significant role in reducing overdose and preventing disease transmission. SIFs, also known as supervised or safe consumption spaces (SCSs), offer a safe and medically supervised place to consume licit or illicit drugs that were previously obtained. These facilities operate in 12 countries and number well over 100 worldwide. Not only do they prevent overdose among people who use drugs, but also they drastically reduce hepatitis and HIV risk behaviors through education about safe injection practices. They also attempt to link participants to preventive care, testing, treatment, and social services.

By providing information on safer injection and wound care, as well as a sterile environment to inject, SIFs and SSPs present significant cost-saving opportunities. A recent study from Florida estimates that the cost of treating six serious soft tissue infections related to IDU (\$200,000) is equivalent to the cost to operate a comprehensive SSP for an entire year.⁵ It is essential that health departments, advocates, and frontline service providers support efforts to implement these initiatives.

Increase Focus on Prevention, Care, and Curative Efforts for Hepatitis and HIV

Due to the interconnected nature of hepatitis and HIV risk for PWID, any interaction with the medical system, behavioral health providers, or harm reduction services is an opportunity for screening, vaccination, education, and possibly treatment of these diseases. An additional focus on providers of MAT offers opportunities for outreach, and linkage to care activities. Health departments and medical providers have an important role coordinating efforts that meaningfully connect PWID to services they need.



A Comprehensive Response—Suggested Action Support Harm Reduction Efforts

Harm reduction interventions play a critical role in reducing overdose and the spread of hepatitis and HIV. These interventions complement traditional prevention and treatment efforts. They also provide support to individuals using drugs by protecting their health while accessing vital medical and behavioral health services.

Expand and Strengthen Syringe Service Programs (SSPs)

These programs are steeped in decades of research that support their efficacy, provide lifesaving tools to help individuals protect themselves from exposure to blood borne infections, prevent overdoses, and increase access to treatment. SSPs are integral to the U.S. and jurisdiction-level response to the opioid crisis. Research confirms SSPs do not encourage drug use initiation nor do they increase the frequency of drug use. They are highly effective in preventing HCV and

Reduce Barriers to HCV and HIV Treatment Regimens

Reducing barriers to treatment is integral to addressing the combined epidemics of hepatitis, HIV, and opioid use within our communities, without restrictions based on income or current sobriety. Several studies affirm that individuals who are actively using drugs adhere to treatment, as well as those who are sober. This strengthens the argument that HCV treatment should be affordable and made available to all. Individual insurance providers and state-level policies that base HCV treatment eligibility on length of sobriety are discriminatory and at odds with clinical guidelines and evidence. It is vital that we challenge health departments and medical providers to address stigma and discrimination towards PWIDs.

Ensure Access to Health Care, Coordinated Care Services, and Medicaid and Medicare

Consistent access to comprehensive, affordable health care is elemental. Without coverage, access to MAT, mental health services, and screening and treatment of hepatitis would be inaccessible to many. Additionally, people with a history of IDU living with HIV and/or co-infected with HCV, rely on ADAPs to ensure access to medications. These unified, cross-agency efforts demonstrate the importance of collaboration among programs to ensure that comprehensive care and services are available.

Advocate for Universal Access to Affordable Health Insurance

Ensuring health insurance to everyone is the highest form of non-discriminatory health care design and is critical to successfully addressing the opioid crisis. The Healthcare Cost and Utilization Project indicate a 64% increase in inpatient stays and a nearly 200% increase in emergency room visits related to opioid-related issues since 2005.⁶ This report found decreases in the overall incidence of uninsured stays since the implementation of the Affordable Care Act in 2014, further supporting the benefits of the ACA in attaining much-needed health care to combat the opioid crisis.

Advocate for Medicaid Expansion and Funding

Medicaid and Medicare account for 21% of overall spending related to treatment and services for SUDs. Approximately 12% of all Medicaid (MA) beneficiaries over the age of 18 have a SUD, according to the Centers for Medicaid and Medicare Services (CMS). In the current U.S. opioid crisis, major increases in both hepatitis and opioid use have occurred in rural, low-income areas. A large number of people who reside in these areas depend on Medicaid and Medicare as their primary health insurance

would be significantly impacted by cuts to these healthcare programs.

As a result of the 2018-midterm elections, specifically a Democratic majority in the House, there are opportunities to expand access to Medicaid. It is also critical to maintain or increase funding for both Medicaid and Medicare to improve health care access for PWIDs. Service providers and public health agencies must continue to advocate for Medicaid in non-expansion states, especially in the South. This past November, three states (Idaho, Nebraska, and Utah) voted to expand Medicaid, which increases health care coverage for PWIDs in these states and should help address the opioid crisis.

Changing the course of the opioid, hepatitis, and HIV epidemics requires an honest and critical examination of efforts among diverse stakeholders. A commitment to a unified, comprehensive approach from government, service providers, and public health agencies is needed. Expanded federal, state, and local investment in substance use prevention and treatment, treatment of HIV and hepatitis, and behavioral health care are three key components. Cooperation between government agencies, community-based organizations, directly affected persons, and other stakeholders to develop innovative strategies that address these intersecting crises is fundamental.

At NASTAD, we continually encourage health departments to examine their programs and shift focus to incorporate an increased emphasis on the association between drug use and infectious diseases, especially the transmission of hepatitis and HIV. While the national discussion of the opioid crisis is focused on preventing overdose deaths, it is also necessary to focus on preventing disease transmission, which results in increased health care costs and often poor outcomes including premature death. It is vital that public health programs, service providers, and frontline staff prioritize the implementation of a comprehensive response when addressing these devastating and potentially lethal crises.



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Integrating Care



for HIV and Opioid Use Disorder

PRACTICAL STRATEGIES

By **BENJAMIN J. OLDFIELD, MD, MHS; LYDIA A. BARAKAT, MD; and E. JENNIFER EDELMAN, MD, MHS**

ILICIT OPIOID USE AND HIV INFECTION ARE SUBSTANTIAL RISK FACTORS for morbidity and mortality worldwide, and they often co-occur in vulnerable populations.¹ Among persons living with HIV (PLWH), opioid use is associated with decreased quality of HIV care, ongoing HIV risk behaviors, and subsequent HIV transmission.^{2,3,4} Opioid use disorder (OUD) is a symptom-based diagnosis in which the most recent Diagnostic and Statistical Manual combines (and does away with) the previous diagnoses of “opioid dependence” and “opioid abuse,” encompassing the problematic use of illicit and/or prescribed opioids (**Text Box**).⁵

TextBox: DSM-5 criteria for the diagnosis of opioid use disorder; a total of two to three criteria corresponds to mild opioid use disorder; a total of four to five criteria corresponds to moderate opioid use disorder, and a total of six or more criteria corresponds to severe opioid use disorder. Tolerance and withdrawal are not criteria for opioid use disorder for the patient taking opioid pain medication as prescribed.

- Opioids are often taken in larger amounts or over a longer period of time than intended.
- There are persistent desires or unsuccessful efforts to cut down or control opioid use.
- A great deal of time is spent in activities necessary to obtain the opioid, use the opioid, or recover from its effects.
- Craving, or a strong desire to use opioids.
- Recurrent opioid use resulting in failure to fulfill major role obligations at work, school or home.
- Continued opioid use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of opioids.
- Important social, occupational or recreational activities are given up or reduced because of opioid use.
- Recurrent opioid use in situations in which it is physically hazardous.
- Continued use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by opioids.
- Tolerance, as defined by either of the following:
 - (a) a need for markedly increased amounts of opioids to achieve intoxication or desired effect.
 - (b) markedly diminished effect with continued use of the same amount of an opioid.
- Withdrawal, as manifested by either of the following:
 - (a) the characteristic opioid withdrawal syndrome
 - (b) the same (or a closely related) substance are taken to relieve or avoid withdrawal symptoms.

Despite the major impact that untreated OUD has on the lives of PLWH and concerns that the current opioid crisis may be kindling new HIV outbreaks, screening for and treating OUD in HIV care settings may not be prioritized for patients or providers.^{6,7} In addition, current U.S. Health Resources Services Administration quality measures stipulate that HIV care settings screen for substance use disorders annually but offer little other guidance.⁸ While recent guidelines do not support routine use of opioids for chronic pain in PLWH, opioids have historically been prescribed with greater frequency to PLWH than uninfected individuals.^{9,10} Therefore, there is an urgent need for HIV providers to have the knowledge, skills, attitudes, and infrastructure to recognize and treat OUD.¹¹

Here, we describe current practices for integrating OUD screening and treatment into HIV care settings. We propose a framework for clinicians and administrators seeking to meet the needs of PLWH who have OUD. Indeed, such efforts have facilitated some of the most gratifying experiences of our clinical work given the major benefits of treatment on patients' lives.

The evidence for integration

Although optimal screening practices for OUD in PLWH are unclear, a number of validated screening tools exist for use in ambulatory care.^{12,13} These can be used in HIV care practices in conjunction with urine toxicology screening and prescription drug monitoring programs (PDMPs) for complementary information. With respect to treatment, there are three medications approved by the U.S. Food and Drug Administration for the treatment of OUD (buprenorphine/naloxone, methadone, and naltrexone) which form the cornerstone of treatment of OUD and can be successfully integrated with HIV care (Table 1).^{14,15,16}

Prior studies of integrated care have focused on the use of buprenorphine/naloxone in HIV care settings, demonstrating clinical benefits such as increased initiation of antiretroviral therapy, decreased needle sharing among people who inject drugs (PWID), decreased opioid use, increased visits with HIV providers, and improved quality of life.^{17,18,19,20,21}

Although care integration may be associated with operational sequelae such as increased labor, overhead, and urine toxicology costs, it can be done with various team-based structures that already exist in many HIV care practices.^{22,23} HIV- and OUD-related care can also be integrated in primary care settings, needle-exchange programs, and correctional settings.^{24,25,26} With respect to other medications, the use of methadone as treatment of OUD outside of certified opioid treatment programs (OTPs) is currently restricted by U.S. federal law. Evidence for the integration of naltrexone treatment into HIV clinics is still emerging.²⁷

Along with medications, brief counseling can be as effective as behavioral health consultation for PLWH with

OUD, so lack of behavioral health services should not be a reason not to treat patients.^{28,29}

Other adjuncts to care, particularly for patients not ready to begin addiction treatment, include harm reduction strategies such as overdose education and naloxone distribution, referral for syringe exchange, and counseling regarding safer injection practices for PWID.^{30,31} Overdose education and naloxone distribution can be delivered with a team based approach involving a pharmacist and/or social worker in individual or group settings to patients at risk for opioid overdose or receiving prescription opioids for pain management.

Recommendations from the front-line: views of patients, clinicians, and administrators

Based on perspectives of multiple stakeholders in two cities in Connecticut, our experiences indicate that there are three key principles when considering an optimal approach to integrate HIV and OUD care, grounded in the socio-ecological model for health (Figure).^{32,33} These findings offer a starting point for devising ways to measure the quality of integrated care. They also provide a framework for those seeking to meet the needs of PLWH with OUD through clinical efforts and organizational improvements or partnerships.

First, mismatches in resources and knowledge among clinicians and in health systems present barriers to care and should be mitigated. For example, health systems should assess for and address, social risk—such as housing insecurity and transportation difficulty—side-by-side with the need for medical services. Whereas such wrap-around services may be a hallmark of HIV care supported by the Ryan White HIV/AIDS Program, similar resources and programming targeting OUD-related dimensions of care are often lacking.

Knowledge gaps may be mitigated by providers familiarizing themselves with updated guidelines for the management of chronic pain in PLWH, which focus on multimodal, opioid-sparing approaches.⁹ Administrators may support providers' completion of training to obtain waivers for prescription of buprenorphine/naloxone, and can foster a culture where medications are the cornerstone of treatment for OUD.

Second, communication between the various organizations that care for and support PLWH who have OUD and patient-centered policies are needed. The communication between providers about information pertaining to substance use disorders is subject to increased restrictions due to Title 42 of the Code of Federal Regulations (CFR) Part 2. This has been identified as a barrier to care coordination.³⁴ OTPs that offer methadone, for example, may be key providers of care for PLWH who have OUD. Standardized communication practices between OTPs and HIV providers, such as through electronic medical record linkages or cross-organization consents for the release of information that comply with CFR 42, can facilitate HIV

providers' ongoing communication with methadone providers. Avenues of communication should be secure and simple for team-based decisions regarding dose adjustments, potential drug-drug interactions, and other dimensions of integrated care.

Third, meeting people where they are through individualized approaches, geographically and at their stage of change, can increase access to and engagement in care. This may involve incorporating PLWH who have OUD or their representatives (such as community advisory boards) in the generation of clinic policies, promoting rapid enrollment into medication treatment for OUD from community or emergency services, and employing harm reduction strategies such as naloxone for overdose prevention and access to syringe exchange programs.^{31,35,36}

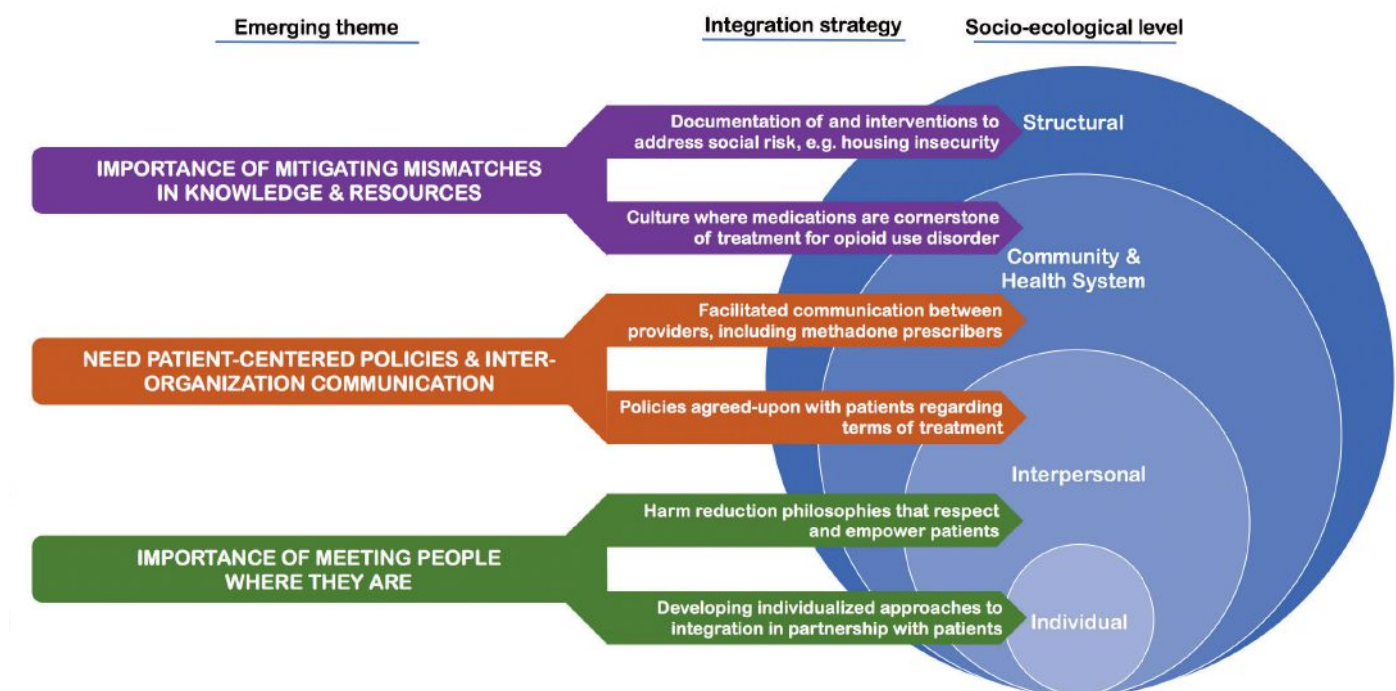
Such strategies can be mobilized in partnership with pharmacists and other health professionals.³⁷ Using non-pejorative, person-centered language when referring to patients with OUD (e.g., "person with opioid use disorder" instead of "addict"), treatments (e.g., "medication for opioid use disorder" instead of "medication assisted therapy," or "opioid substitution") and monitoring (e.g., "urine with opioids" instead of "dirty urine") may decrease stigma and facilitate engagement in care.^{38,39}

Table 1. U.S. Food and Drug Administration-approved medications for the treatment of opioid use disorder, training needed to prescribe, settings of provision, and dosing.

Medication	Training requirements or restrictions	Setting dispensed/prescribed	Usual dose range
Buprenorphine/naloxone	Schedule III medication; waiver to prescribe requires 8-hour training (physicians) or 24-hour training (nurse practitioners and physician assistants)	By any prescriber waived to prescribe buprenorphine/naloxone	2-24mg sublingually daily
Methadone	Schedule II medication; may only be prescribed by opioid treatment programs certified by the Substances Abuse and Mental Health Services Administration	By any certified opioid treatment program	60-80mg orally daily
Naltrexone	Schedule 0 medication; may be prescribed by any prescribing clinician	By any prescriber	50mg orally daily* or 380mg intramuscularly monthly

*While oral naltrexone is approved by the U.S. Food and Drug Administration for the treatment of opioid use disorder, its use is limited by non-adherence. Other medications are preferred by the U.S. Substance Abuse and Mental Health Services Administration.⁴³

Figure. Themes emerging from the perspectives of patients, clinicians, and administrators on integrating care for HIV and opioid use disorder, associated integration strategies, and the socio-ecological levels of health impacted.



The clinical bottom-line

Incorporating OUD screening and treatment into HIV care settings may require nontrivial increases in labor and laboratory costs, and the optimal arrangement for which professionals perform which tasks is at times unclear.²² To meet the needs of patients with OUD, HIV treatment settings may draw from Collaborative Care Models for integrating opioid treatment into community health centers. They can successfully utilize providers (MDs, DOs, NPs, PAs) trained in prescribing buprenorphine/naloxone, as well as encourage and incentivize HIV clinicians to obtain waivers to prescribe buprenorphine/naloxone, with the support of networks for referral as needed.⁴⁰

Given the major role that stigma plays in deterring treatment, it is important that clinical settings consider the practice milieu (e.g. educational pamphlets used, signage, group spaces), the language staff and providers use, and patients' experience of care to promote optimal engagement in treatment. HIV clinicians can seek training to obtain waivers to prescribe buprenorphine/naloxone, and seek partnerships with and information about harm reduction modalities available locally, to better meet the needs of PLWH with OUD. As a chronic and often relapsing condition for many patients, OUD requires processes that facilitate frequent patient entry, as well as re-entry in care.

Looking forward

Despite the many challenges and the uncertain future of the opioid epidemic, part of the solution may be informed by our past. The community of HIV providers, scientists, activists, and patients are particularly well suited to lead the charge towards better prevention and treatment for PLWH with OUD given the lessons learned by the large-scale, highly coordinated response to the AIDS epidemic of the early- to mid-1990s.⁴¹

Evidence-based modalities need to be expanded and supported—such as access to life-saving medications and wrap-around social services, with a focus on marginalized populations, including PLWH. New tools and infrastructure are at our disposal such as telemedicine, educational venues to promote prescribing of medications for OUD, and non-opioid alternatives for pain management. Medicaid expansion and parity laws that protect and support payment for OUD treatment have improved access to care for many patients. There also is an expanding wealth of resources to guide HIV providers interested in learning more about addiction medicine and effective treatments (Table 2).

To fully actualize a response that uses these tools we can draw from lessons learned in the 1990s. An organized multi-dimensional workforce in partnership with patients and increased federal and state funding are needed to fully impact the opioid epidemic and provide care for all persons who need it.

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We encourage all HIV clinicians to join national efforts in combatting the opioid epidemic by becoming proficient in and waived to prescribe medications to treat OUD, by focusing on non-opioid, multimodal strategies for pain control, and by partnering with patients in efforts to expand treatment access and harm reduction strategies. Calls have been made for an “all hands on deck” approach to curb the opioid epidemic; HIV clinicians are ideally positioned to be a key part of the solution.⁴² **HIV**



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Table 2. Key resources for HIV clinicians seeking further information regarding the care of opioid use disorder.

Organization	Resource Title	URL
National Institute on Drug Abuse	Screening for Drug Use in General Medical Settings	https://www.drugabuse.gov/publications/resource-guide/preface
Substance Abuse and Mental Health Services Association	Buprenorphine Training for Physicians	https://www.samhsa.gov/medication-assisted-treatment/training-resources/buprenorphine-physician-training
Substance Abuse and Mental Health Services Association	Buprenorphine Treatment Practitioner Locator	https://www.samhsa.gov/medication-assisted-treatment/physician-program-data/treatment-physician-locator
Substance Abuse and Mental Health Services Association	Opioid Overdose Prevention Toolkit	https://store.samhsa.gov/product/Opioid-Overdose-Prevention-Toolkit/SMA18-4742
Providers Clinical Support System	Overview of Medication-Assisted Treatment	https://pcssnow.org/medication-assisted-treatment/
International Antiviral Society	Opioid Withdrawal, Opioid Substitution, and HIV Infection	https://www.iasusa.org/2018/11/19/opioid-withdrawal-opioid-substitution-and-hiv-infection-8/
Centers for Disease Control and Prevention	CDC Guideline for Prescribing Opioids for Chronic Pain	https://www.cdc.gov/drugoverdose/prescribing/guideline.html

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Supervised



Injection Facilities

A Neglected Tool in the Fight Against Overdose and HIV Infection

By MARY CLARE KENNEDY and THOMAS KERR, PhD

THE UNITED STATES is currently facing the worst nationwide overdose epidemic in its history. Driven largely by the increasing presence of fentanyl and other powerful synthetic opioids in illicit drug supplies, a record number of more than 70,000 Americans died of accidental overdoses in 2017, and people vulnerable to HIV, including people who inject drugs (PWID), have been disproportionately affected.¹

In addition, increases in injection opioid use over the past decade have been linked to recent outbreaks of HIV and Hepatitis C (HCV) infection in various communities across the country.² For example, in 2015, a surge of new HIV infections among PWID in rural Scott County, Indiana attracted national media attention and led to the declaration of a public health emergency by then-Governor Mike Pence.² The Centers for Disease Control also recently identified 220 counties that are at particularly heightened risk of experiencing similar HIV and HCV outbreaks in the near future, and new clusters of HIV and HCV infection stemming from injection opioid use have already been observed in Ohio, Kentucky, West Virginia and Massachusetts.³

These under-addressed and interconnected epidemics of opioid use, fatal overdose and infectious disease have contributed to growing interest in supervised injection facilities (SIFs) among public health and elected officials in the U.S.^{4,5} SIFs are government-sanctioned healthcare settings that aim to reduce harms such as fatal overdose and infectious disease transmission by providing spaces in which people can inject illicit drugs with sterile equipment while supervised by nurses or other trained professionals.⁴ More than 120 SIFs are now operating in eleven countries worldwide, including in Canada, Australia, Mexico and eight countries in Western Europe.⁶⁻⁸

In recent years, officials in various cities across the U.S., including Seattle, San Francisco, Philadelphia, New York City, Baltimore and Denver, have developed proposals to implement these facilities as part of strategies to mitigate harms associated with injection drug use.^{4,5} However, SIFs remain highly controversial in this country and efforts to establish these facilities have been met with considerable political and legal opposition to date.⁴ Indeed, authorities at various levels of government have thus far prevented such efforts and a legal SIF has not yet been established in the U.S.^{4,5}

Opponents of SIFs, including high-ranking government officials, continue to misrepresent the evidence concerning the effectiveness of these facilities, often arguing that SIFs would have little impact on drug-related deaths and would encourage high-risk drug use.^{9,10} For example, in an op-ed published in the *New York Times* earlier this year, Rod Rosenstein, the Deputy Attorney General of the U.S., argued that “injection sites normalize drug use and facilitate addiction” and “are very dangerous and would only make the opioid crisis worse.”¹⁰ Further, Jerome Adams, the Surgeon General of the U.S., recently expressed disapproval of efforts to establish SIFs, claiming that “high quality scientific evidence... does not exist for SIFs.”⁹ However, a close look at the evidence derived from evaluations of SIFs in Canada and elsewhere indicates that such claims are unfounded.



North America's first SIF, Insite, was established in Vancouver, Canada in 2003.⁴ The facility acquired an exemption from federal drug laws under the condition that it be subjected to a rigorous independent evaluation.⁴ Since then, dozens of peer-reviewed studies published in some of the world's leading public health and medical journals have demonstrated an array of health and community benefits of the facility.¹¹⁻¹³

Of note, the opening of Insite was associated with a 35% reduction in overdose deaths in the surrounding community of the SIF compared to a 9% reduction in the rest of Vancouver.¹⁴ Despite concerns that SIFs may encourage drug use and deter PWID from seeking addiction treatment, research undertaken in Vancouver found that there

were no substantial changes in rates of injection drug use initiation, cessation or relapse in the community after Insite opened.^{15,16} Moreover, SIF users have been found to be more likely than non-users to enroll in addiction treatment, and to subsequently cease injecting drugs entirely.¹⁷⁻²⁰

Studies have also documented reductions in behaviors associated with infectious disease transmission among SIF clients, including a 70% decrease in syringe sharing.^{21,22} In addition to direct benefits to PWID, several studies have demonstrated benefits related to the opening of Insite for the broader community, including declines in public injection and public discarded syringes, with no observed increases in crime.^{23,24} Further, five studies have found the facility to be cost effective.²⁵⁻²⁹

In synthesizing and assessing the quality of the evidence derived from scientific evaluations of Insite and other SIFs operating in international settings, a systematic review led by our research team concluded that "high-quality scientific evidence suggests that SIFs effectively achieve their primary public health and order objectives with a lack of adverse impacts, and therefore supports their role as part of a continuum of services for PWID."¹¹

Despite the demonstrated effectiveness of Insite, the former conservative government of Canada tried to shut the facility down.³⁰ This ultimately led to a legal case heard before the Supreme Court of Canada. Several major health organizations intervened in the case to support Insite, including the Canadian Medical Association and Canadian Nurses Association.³⁰ The Supreme Court Justices ruled 9-0

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in favor of the continued operation of Insite, stating in their decision that “Insite has been proven to save lives with no discernible negative impact on the public safety and health objectives of Canada.”^{9,10,31}

Since 2016, there has been an expansion of SIFs in Canada, and there are now at least 28 facilities presently operating in cities across the country.⁷ Unfortunately, the U.S. continues to lag behind in such efforts, and detractors of SIFs continue to misrepresent and politicize the evidence supporting these facilities.^{9,10,32}

Most recently, opposition to SIFs has been fueled by a meta-analysis of SIF research that was published in September 2018.³³ In contrast with previous systematic reviews,^{11–13} this meta-analysis argued that the available evidence was not strong enough to indicate that SIFs reduce overdose deaths or syringe sharing.³³ Although this study garnered significant media attention, it has since been retracted due to methodological weaknesses.³³

Nonetheless, this study has been cited by government officials in several jurisdictions as a reason to not support the implementation of SIFs.³² For instance, state officials in Vermont relied on the findings of the meta-analysis in a report that concluded that SIFs were “not a viable option” for the state, even though the study had already been retracted.³² Upon learning of the study’s retraction, the state did not alter its position or the main conclusions of the report.³²

As deaths related to overdose and infectious disease continue to rise in settings across the U.S., we cannot allow such politicization of science to cloud debates and undermine the

implementation of effective public health and policy responses. These complex public health challenges demand urgent action and innovative solutions based on the best available scientific evidence. Although SIFs are not a panacea, the evidence is clear that these interventions play an important role in saving lives, preventing harm, and promoting the well-being of individuals and communities.^{11–13}

As a result of the well-documented successes of these programs, SIFs have been endorsed by some of the country’s leading national health organizations, including the American Medical Association, the American Public Health Association, the HIV Medical Association and the Infectious Disease Society of America.³⁴ In light of the ongoing opioid crisis, it is critical that we heed such evidence-based recommendations and continue to advocate for the inclusion of SIFs as part of comprehensive public health strategies to prevent fatal overdose, infectious disease, and other outstanding drug-related harms in the U.S. **HIV**



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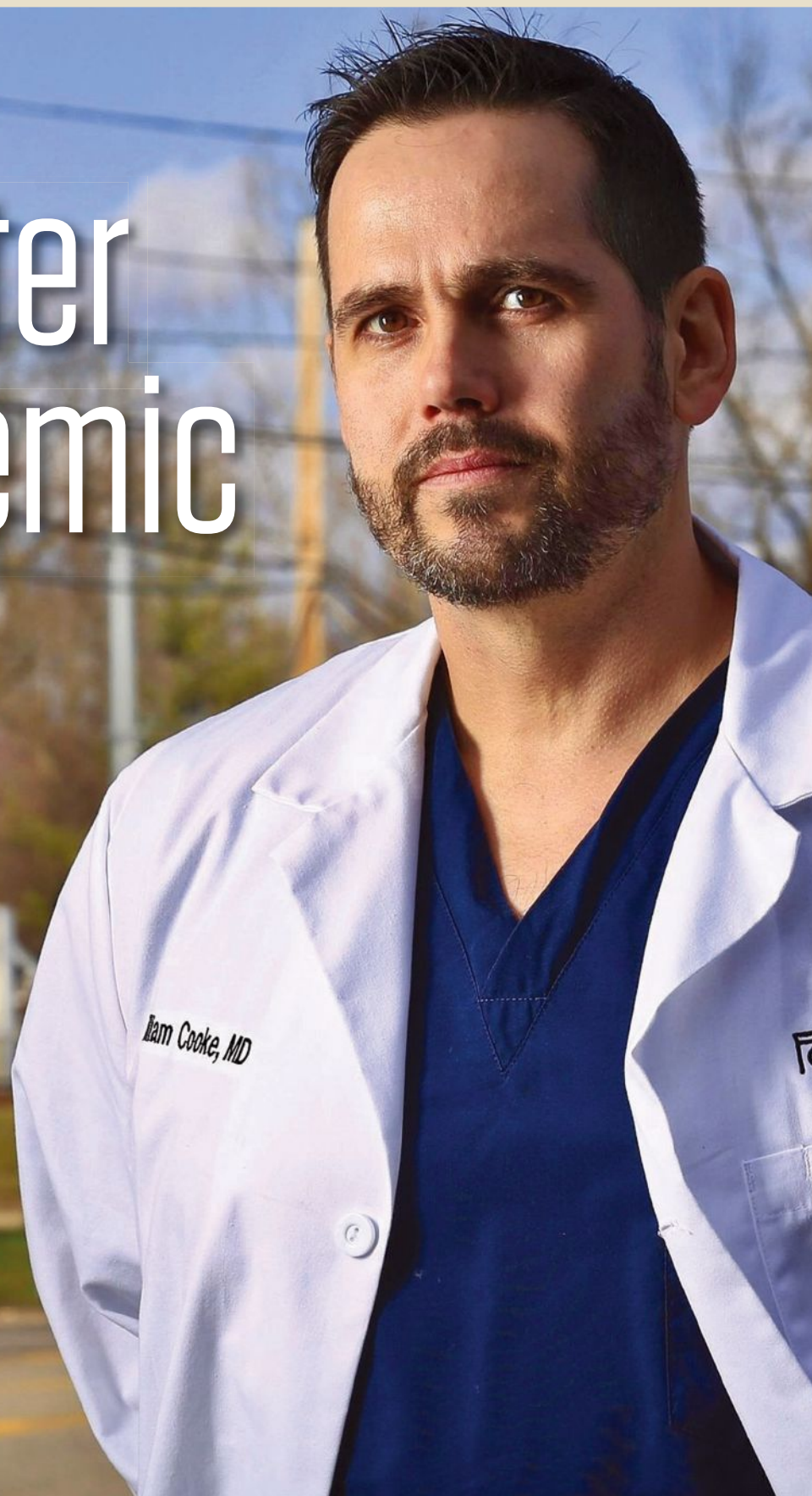
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THE Epicenter OF THE Epidemic





An Interview with Dr. William Cooke

FAMILY PHYSICIAN OF THE YEAR Award Winner

Tell us a little bit about your practice in Austin, Indiana.

I was originally trained in family medicine and started my practice, Foundations Family Medicine, in 2004 in my home state of Indiana. It was really important to me to start a practice in this area due to the fact that there was really no medical access to health. I felt it was important to provide more medical access for those living in this rural area.

When I started Foundations Family Medicine in 2004, there was nothing there. The office consisted of a nurse and a receptionist and myself. Over the years the practice has grown steadily, although we took a bit of a hit during the HIV outbreak in 2015 because of fear and stigma. We currently have a second family medicine doctor, three nurse practitioners and a physician's assistant. We also have a great partnership with a behavioral health organization, Centerstone. We are able to do warm handoffs with them when patients are in need of counseling, addiction treatment or mental health assistance.

When did you first notice an increase in opioid addiction in your area?

Honestly, the moment I started seeing patients in 2004, I was shocked by the number of patients asking for opioids, in combination with benzodiazepines no less. That took me by surprise. Within my first few years of establishing the practice, I started reaching out to the community to try and address the issue. But there were no other medical access or behavioral health organization to which to refer. The health department was not in town, but rather in the county seat. It was extremely challenging.

How were people accessing the opioids?

They were getting them from several places including pain clinics in neighboring counties. Dentists were also major prescribers. Austin is located right off of Interstate 65 that runs from Chicago all the way down to Alabama. So, it was easy for distributors to come into town. We would have suppliers get off the exit ramp in Austin to distribute the medications in exchange for sex or money.

What were some of the societal elements that played a role in fueling the opioid epidemic?

We found poverty that had spanned several generations. Often patients were squatting in abandoned housing, had no transportation, very high unemployment and a lack of education.

When did things begin to get worse?

The epidemic got worse in 2011 due to a change in the pain medication Opana®. The manufacturer had changed the formulation to be tamper proof, in that people were not able to crush and snort the medication. If you attempted to crush Opana®, it would turn into a gel-like substance. But users quickly discovered that they could melt down the gel in water, draw it up in syringes and inject. This led to a wave of overdoses and an increase in Hepatitis C infection rates in the community.

It was at this point that many in the medical community, including myself, began calling for harm reduction strategies, better linkage to care options, and syringe exchange programs; but that just didn't happen. Everything continued as it had been.

What we know now is that HIV rates were also starting to increase at this time.

What HIV testing models were in place to screen for HIV?

Planned Parenthood was stripped of funding and closed so there was no free and anonymous testing. No community health clinics were available. We didn't have a good way to detect HIV. The closest HIV clinic was in Louisville, Kentucky. So basically, the only way you could get tested for HIV was at the hospital or in my office.

Based upon the report "Dynamics of the HIV Outbreak and Response in Scott County, IN" by Dr. Gregg Gonsalves, which was published in the October 2018 issue of *The Lancet*, we now know that if we had HIV testing and linkage to care in place in 2011, the number of



Talk about the demographics of the people you were seeing.

The average age of patients at this time was about 35 years, and evenly split between men and women. Of the women we saw, one quarter admitted to sex work, although I think the actual number was probably higher. You have to remember, these are primarily very poor people. Women would be exploited not just in exchange for drugs, but for basic needs. I

would see women that would sleep with a man because he would agree to buy diapers for her children. It was very sad and tragic. No one should ever be in a position like that.

One thing that most had in common was trauma. Repeated adverse childhood experiences is something we see in many people that inject drugs. The traumatic childhood ex-

periences lead to toxic stress, which rewires the brain development with regards to feeling safe, sound decision making, reward systems, and emotional responses. Since basic needs had not been met and the reward pathways starved, when they do use drugs, those rewards systems exploded. These combined effects of toxic stress, social challenges, stigma, and altered brain development unlocks a really unhealthy relationship with drugs. Unfortunately, the cycle of trauma continues with the users' children witnessing and experiencing their own adverse childhood experiences due to their parents' drug use as well as environmental triggered epigenetic changes that become inheritable.

You are currently credentialed with AAHIVM as an HIV Specialist. But many in your area were not. What did you do about the lack of HIV-trained clinicians in your area when the opioid epidemic hit?

I was treating the majority of the HIV positive patients in the area. At the peak of the epidemic, I was treating approximately 180 patients. I am proud to say that 76% of my patients now have undetectable viral loads. However, when the epidemic hit, I knew very little about how to treat HIV. I rarely saw any HIV patients. I had to learn on the fly, with a great team and a lot of distance learning, going from 0 to 180 within a year. For instance, I didn't know anything about PrEP. The CDC was actually really great during this time. They came to our offices and conducted a PrEP education workshop. It is remarkably easy and effective. What I was impressed with was how incredibly effective treatment is with prevention. Keeping people on treatment and undetectable for at least 6 months completely prevents sexual transmission of the virus.



HIV cases would have peaked at only 10 versus the 180+ cases we eventually found.

But it's important to remember that these people were already very stigmatized and marginalized due to the societal factors I already mentioned. Homelessness, unemployment and lack of education already carry with it a stigma. When you add drug use to the mix, which is a criminal offense, it drives down their interest in getting tested.

People stayed away from clinics. I would see many of these people only in crisis situations such as pregnancy or soft tissue infections. Other than that, it was extremely difficult to get people to come in for HIV testing.



Is that why you think 76% of your patients are now virally suppressed?

I think this success all comes down to relationships. Healthcare providers need to see a patient as a fellow human being, bringing no judgment. That's why my clinic makes such an effort to reach out to the community. For instance, we work with the AIDS Healthcare Foundation to help a local church serve the community dinner every Thursday night. We believe in investing in the community. People need a safe place to go. I also send health workers out into the community. For instance, if someone gets out of jail, we track them down, ensure they have their medicine, help them navigate their insurance and get them into care. The Scott County Health Department has also been a huge help with how well they have done with the syringe services program for the community.

Explain the barriers to getting a syringe services program up and running.

First we had to fight the state law. It was completely illegal when we started. It is a shame when public health and law enforcement have to line up on separate sides. Laws should never pit law enforcement against public health. But ideology gets in the way of what is evidence-based. It is easy to stigmatize people to the point where they don't seem to deserve care.

There was an enormous advocacy push by state Infectious Disease doctors, including now Surgeon General Dr. Jerome Adams. We were able to convince then Governor Pence to sign an executive order allowing for the creation of syringe exchanges. Some very brave state legislators, like Republican Edward Clere, then took up the cause and passed the program through the state legislature to be written into the law.

Of your patients that are virally suppressed, are they also in active addiction recovery?

Sadly, no. I would say that one third of my patients are in recovery from drugs. The others continue to use, primarily to cope with their past traumas and chronic toxic stress.

But the frustrating part for me is that many have not been given the opportunities afforded to others. People with drug dependency are shunned by society. Rarely are they offered compassion by others thanks to the stigma that goes along with the drug use, including homelessness and poverty. People in more affluent circumstances typically don't offer opportunities because they don't believe people with drug addiction are capable of success. Yet I have found that if you actually provide them with the opportunity to be responsible, they are.

In fact, about 80% of injection drug users are accessing the syringe services program. If you look at those that are HIV positive, that number goes up to 98%. This demonstrates that if they are given the opportunity to take care of themselves and their community, they do.

Explain how you currently work with your behavioral healthcare partner, Centerstone.

As the outbreak grew, we wanted to build a patient-centered, sustainable and collaborative system. It made sense to bring in a behavioral health partner and Centerstone has been outstanding. Together, we developed a SBIRT model: Screening, brief intervention, referral to treatment. In this model, you do a quick screen of each patient that presents to determine where they are with risk for addiction. Are they taking prescription medications, are they injecting drugs, are they drinking alcohol? If they screen positive, we do a brief intervention that's based on motivational interviewing to help them understand where they are with their disease and help them understand the recovery cycle. The referral to treatment portion proved to be the biggest barrier we



encountered prior to partnering with Centerstone. Now we can create a warm hand off to Centerstone to help with any recovery services they might need.

What prescribing advice do you have for frontline HIV care providers for issues related to pain management for their patients?

What I've found is pain and anxiety go hand and hand. From this standpoint, I do not prescribe any benzodiazepines because they are not evidence-based for chronic anxiety. The only time I will consider prescribing benzodiazepines is with alcohol addiction to help with the acute withdrawal symptoms.

I also do not prescribe opioids for chronic pain management. The protocol has been to just throw opioids at any pain-related condition, but we have to be smarter with prescribing. But being smarter is also more time consuming. You really have to investigate the source of the pain. What is the type of pain? Is it joint related? Is it complicated by anxiety? Is it neurological?

Despite the enormous amount of opioids prescribed, pain scales reported by patients were no better now than they were in the 80's. We are finally starting to understand that opioids are doing nothing to provide long-term pain relief.

You were recently honored by the American Academy of Family Physicians with the 2019 Family Physician of the Year award. Congratulations! How does it feel to receive this award in recognition of your outstanding work?

I'm honored to represent the more than 131,000 Family Medicine physicians serving their communities. I set up my practice in Austin, Indiana to help this community and meet their health-care needs. I had been there for over ten years already when the epidemic hit, I couldn't just ignore it. My job was to respond to the needs of my community. I'm proud of the work we did and continue to do. But we can't leave anyone behind. Everyone should have access to proper healthcare. I feel like it is my responsibility encourage healthcare providers have to become advocates for those without a voice, those that are stigmatized and marginalized. Austin is not unique. This is happening all over the country and people need our help.

You have a new book coming out next year. Tell us about that.

It's called *Canary in the Coal Mine* published by Hachette Book Group. I hope it will help give a voice to people who have been silenced by stigma and fear. It's a very personal story about my work, the story of Austin, and the people who were directly affected by the HIV outbreak there in 2015. It will be released in September of 2019. **HIV**

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Lessons Learned from the

By GREGG S. GONSALVES, PhD, and FORREST W. CRAWFORD, PhD

IN NOVEMBER 2014, two new cases of HIV infection were diagnosed in Scott County, Indiana. This small number of new infections raised concern in this rural area of southeastern Indiana, as only five cases of HIV had been diagnosed there in the previous nine years from 2004-2013. By the beginning of 2015, over a dozen new cases of HIV had been reported and the state of Indiana began a public health investigation.



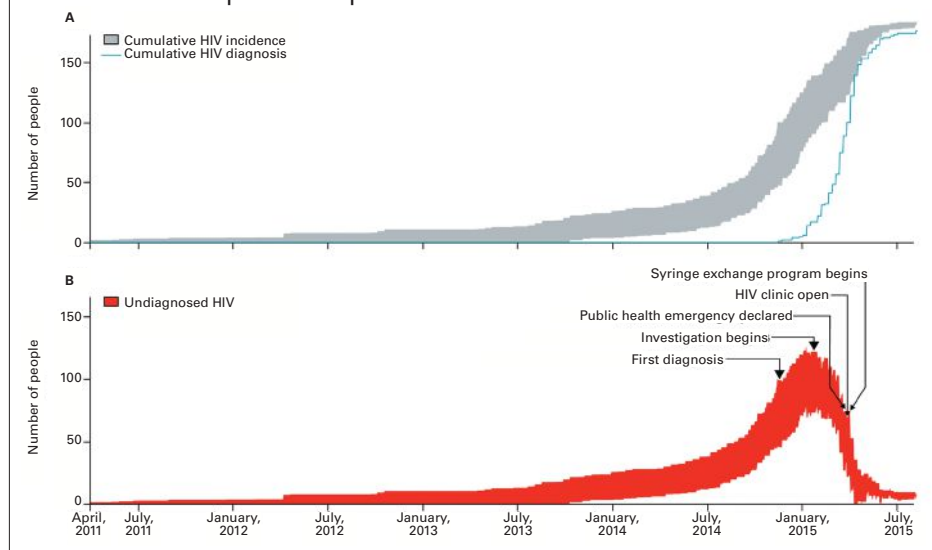
Indiana HIV Outbreak

By November 2015, a year after the first cases were reported, 181 patients would be diagnosed, with the final tally of new HIV infections in Scott County ending up at 215. Close to 90% of these infections were associated with needle sharing among people who use drugs, usually the extended-release formulation of the prescription opioid oxycodone.¹

Though the Centers for Disease Control and Prevention (CDC) was called in to assist the state with its response to the outbreak, then Governor Mike Pence waited until late March 2015 to declare a public health emergency. This declaration by the governor allowed syringe exchange (previously

illegal) to be established in the county to try to reduce HIV transmission among people who inject drugs.

By that summer, national experts in HIV and substance use began to criticize leaders in Indiana for their slow and piecemeal response to the outbreak. Josiah Rich and colleagues wrote in July in the *Journal of the American Medical Association* that the outbreak was “predictable and avoidable.” In the *New England Journal of Medicine*, Strathdee and Beyrer documented the warning signs of an outbreak, and described the steps that could have been taken earlier to avoid it.^{2,3}

FIGURE 1. Was the public response late? Yes.

transmission, we studied the possible impact of earlier initiation of a comprehensive public health intervention similar to the one established in early 2015.

The authors of the 2017 CDC paper showed that the first cases of HIV infection arrived in Scott County as early as 2011 and HIV diagnoses exploded in mid-2014 (Figure 1, page 30). Warning signs of an imminent HIV outbreak were already apparent in Indiana by 2011. The opioid crisis was well documented in the state and an outbreak of hepatitis C among people who use drugs occurred in 2010-2011 in other counties nearby Scott County itself.^{6,7,8}

What would have occurred if the state had intervened to address the possibility of an outbreak in 2011 around the time of the statewide HCV outbreak or later on in 2013—when political leaders decided to withdraw funding from Planned Parenthood, the only HIV testing provider in Scott County?⁹

In reality, we cannot turn back time to see what would happen if policymakers had acted differently, so we used data from the outbreak and computer simulations to recreate the dynamics of what happened in Scott County in a mathematical model. The model projections closely mirror what happened on the ground.

We then studied what would have happened if the most basic interventions in Scott County—testing and diagnosis of HIV—had started years earlier, in a simulated outbreak whose dynamics mirrored the real outbreak. We found that the outbreak could have been dramatically curtailed if the state had acted in 2011 (less than 10 infections instead of 215)

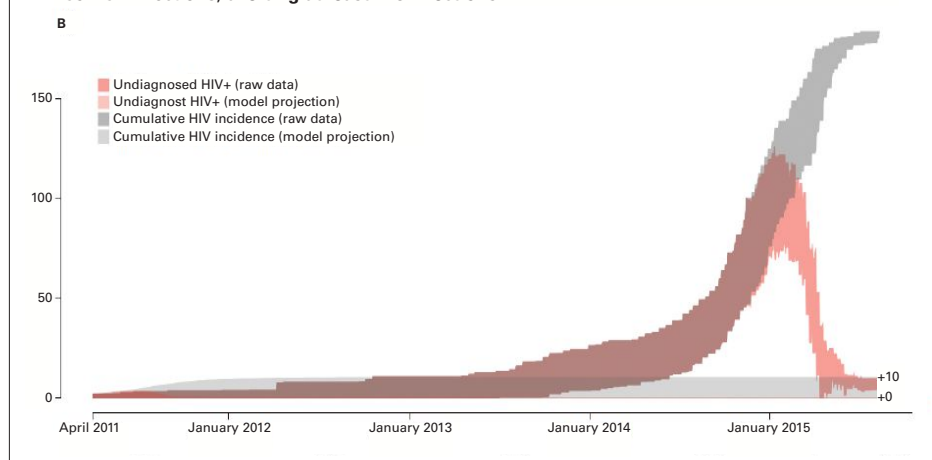
and significantly blunted if they had responded in 2013 (Figures 2 and 3).

Why does this matter? Our research suggests that over 200 people were needlessly infected with HIV when we had both the tools to prevent them and the early warning signs calling on us to act. There are now 215 people who require life-long antiretroviral therapy in order to stay alive, at personal costs to them and economic costs to the state of Indiana.

Ours is actually a very conservative approach. We did not add in the specific impact of needle exchange and opioid agonist therapy which would have further tampered the

FIGURE 2. Counterfactual intervention scenario: Apr. 1, 2011

When diagnostic scale-up starts on April 1, 2011, cumulative HIV incidence on Aug. 11, 2015, is projected to be between zero and ten people, compared with the estimated actual incidence of 183–184 infections, **averting at least 173 infections.**



The health commissioner of Indiana, Jerome Adams, responded to Strathdee and Beyrer in NEJM that October, claiming that he and his colleagues would never know if the establishment of a needle exchange program in a more timely manner would have averted the crisis in his state.⁴

In our article in *The Lancet HIV*, we tried to answer the challenge Dr. Adams posed in his response to his critics: was the Scott County outbreak avoidable? We used publicly available data—the timing of diagnoses from the initial outbreak investigation, and estimated dates of infection from a 2017 CDC paper—to reconstruct the dynamics of the outbreak.^{1,6} Then, using a mathematical model of HIV

epidemic. Even with a modest set of interventions—testing for and prompt diagnosis of HIV—initiated in 2011 and 2013, the outbreak could have been largely avoided. With a more comprehensive response it may have been avoided altogether. Our article provides a take-home message for policymakers: to prevent and respond to HIV outbreaks among injection drug users, early availability of syringe exchange, opioid agonist therapy, HIV testing and treatment are essential.

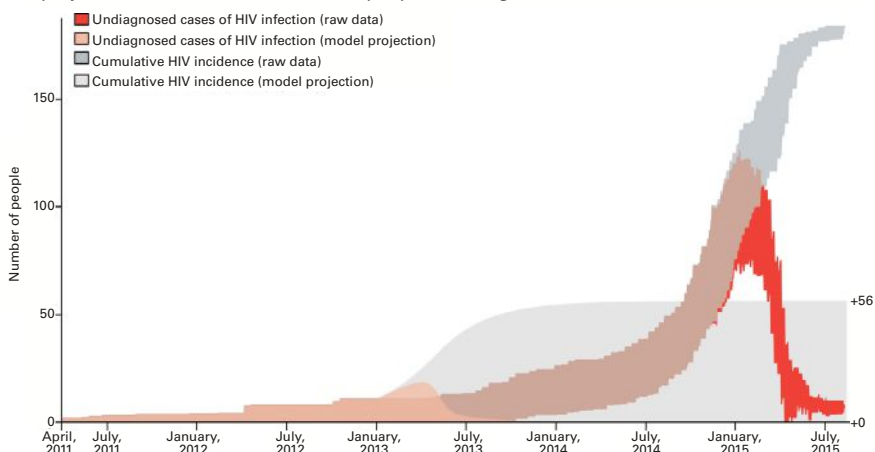
New outbreaks of HIV infection among persons who inject drugs (PWID) have been reported in Cincinnati, Ohio and nearby towns in Northern Kentucky; in West Virginia; in Lawrence and Lowell, Massachusetts.^{10,11,12} The CDC has warned of more counties around the U.S. at high risk for outbreaks of HIV and HCV among injection drug users.¹³ We know from years of research and public health interventions what works to prevent new HIV infections. We also know that outbreaks among PWID escalate rapidly once they take hold in a population. It is important to be prepared for such events by deploying the kinds of interventions described above for all at-risk populations.

Unfortunately, policymakers in many jurisdictions across the U.S. have failed to respond to the threat of infectious disease among PWID, even as the opioid epidemic continues to expand across the country. Dr. Chris Beyrer from the Johns Hopkins Bloomberg School of Public Health wrote a commentary to accompany our *Lancet* HIV article—it was called “No More Scott Counties.”¹⁴ In his piece, Beyrer made

a plea and an admonition: “Delayed responses to the Scott County outbreak clearly occurred and, with about 220 U.S. counties at risk of a similar outbreak, these delays should not be repeated.” **HIV**

FIGURE 3. Counterfactual intervention scenario: Jan. 1, 2013

When diagnostic scale-up starts on January 1, 2013, cumulative HIV incidence by Aug 11, 2015, is projected to be between zero and 56 people, averting at least 127 infections.



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Providing Addiction Treatment to People in Jail



The Next Step in HIV Prevention and Treatment

By ALYSSE G. WURCEL, MD, MS

N RESPONSE to significant HIV outbreaks in states such as Indiana, Mississippi and Montana, the Massachusetts Department of Public Health (DPH) requested assistance in April 2018 from the Centers for Diseases Control and Prevention (CDC) to evaluate increases in HIV diagnosis occurring in two Massachusetts cities, Lowell and Lawrence.^{1,2,3,4} The CDC Epi-Aid team conducted interviews with key stakeholders in the community, including people who inject drugs (PWID). The case definition for purposes of the epidemiologic evaluation was any PWID who was diagnosed with HIV since 2015. It also included HIV diagnosed in an injecting or sexual partner molecularly linked to the temporal and geographic criteria.

In October, the DPH presented the results of their findings: they discovered 144 cases of incident HIV infections in PWID. The majority of the cases were in persons aged 20 to 39, about two-thirds were white, non-Hispanic, and about half were men. The EpiAid team interviewed PWID in these communities and found a high frequency of injection (hourly to a few times a day). There was frequent sharing and reusing of needles, and use of fentanyl, stimulants and commonly co-injection of both.

These numbers came as no surprise to me. I started working as an Infectious Diseases physician in four Eastern Massachusetts counties including those encompassing Lowell and Lawrence (Middlesex and Essex, respectively) in 2017. Over the past year, I have seen over thirty new cases of HIV in young men and women who reported injection of opioids in my clinic. Like all HIV care providers, I focus on HIV as a chronic illness, completely treatable with one pill a day, and I am consistently able to get patients on treatment right away. One of the biggest surprises to me is a concern of both men and women with new infection about future

ability to safely have children. I assure them that having children is still a possibility—a truth that frequently brought them to tears.

However, I also practice in four Massachusetts county jails. This setting of care presents unique challenges. First, privacy is hard to find. One day when I walked into jail, there were five men in the holding area waiting to see me. When my first patient walked in he said, “We all know why you are here—we used together on the outside.” Unable to close the exam room door, I started whispering “I will use the word ‘diabetes’ instead of HIV” at the beginning of clinical interactions to help the patient in front of me focus on my words rather than the people walking by the room.

I caution people with new HIV that despite it being easily treatable, they should be cautious who they tell, as some cellmates still need education on the basics of HIV. For instance, needing support, one of my patients told their cellmates who then refused to do her laundry or share the toilet with her, and made their life miserable. HIV medications are distributed by nurses during medicine call, and many patients live in fear that people in jail

with them will learn about their diagnosis.

The response to the HIV outbreak in Massachusetts has included increased partnership with community centers, harm reduction centers, and hospitals to prioritize testing. The criminal justice system represents an opportunity to test and treat for HIV, hepatitis C (HCV) and other infectious diseases like hepatitis A, B, and syphilis.

In Massachusetts, HIV and HCV testing are offered in most jails through the Department of Public Health. There is heterogeneity in the process of offering testing however, with the minority of jails using evidence based “opt-out” testing.⁵ Relatively short periods of incarceration, competing work and sentence-related responsibilities, and concern for privacy all prevent increased HIV testing. I diagnosed one person after he had spent one year in jail and lost 100 pounds. His CD4 count was 1. This case highlighted missed opportunities for HIV testing in jails.

Another important aspect of containing the HIV epidemic is connecting people with HIV to treatment on the outside. I am working with the DPH, colleagues at local community health centers, and researchers at Tufts University School of Medicine (Dr. Kimberly Dong) and Northeastern University (Dr. James Benneyan) to understand and improve the process of linking people with HIV in jail to care on the outside. There is strong evidence that substance use disorder treatment and case management involvement in the jail improves linkage to HIV care in the community.⁶⁻⁸ Within many jails, there are teams of people working to activate insurance, prepare supplies of HIV medications, and work on safe transition plans.

Despite these efforts, I have encountered many system, provider and patient-level challenges. I have seen low rates of HIV linkage to care similar to reported in other studies.⁹ Often the release date from jail is fluid, due to sentence hearings and innumerable other factors. It is difficult to make sure antiviral medications are ready for pick up when released, health insurance is properly activated, and follow-up appointments have been scheduled. Several patients have told me about their experiences trying to make appointments with new doctors, but being turned away because of “issues with insurance.” Something as simple as telling a patient to contact the hospital’s financial coordinator can be enough to prevent them from seeking healthcare. Direct linkage to a clinical site before discharge from jail should be the goal but, in reality, is difficult to implement due to barriers noted above.

As the person who has provided their initial HIV treatment at the jail, some patients want to follow me in my outpatient Boston clinic, but logistically it does not make sense. When I have tried to transfer their care to local provider offices, they often do not show up. Often when I asked why the patient did not keep their follow up appointment, they tell me they had competing responsibilities (e.g. probation officer appointments, mandated drug use disorder meetings, housing requests, etc.). Unfortunately, many often end up homeless and in close proximity to places where they used to buy and use drugs, increasing their risk for relapse.

My experience working in the corrections system has allowed me to make several observations. There should be an increase in opt-out HIV testing protocols. There is also an absolute need to increase substance use disorder treatment in the jails.¹⁰ Many persons are incarcerated for drug use and without treatment relapse soon after they are released. In November of this year, the state recognized substance use disorder as a disability covered by the American Disabilities Act, and launched a statewide pilot program allowing five jails to offer opioid use disorder treatment. I am hopeful that following implementation of this program, increasing the number of clinicians trained in prescribing medications for opioid use disorder, and ramping up other statewide harm reduction programs, the HIV epidemic in PWID in Massachusetts can be slowed. The lessons we learn here can help other people, providers, and corrections professionals if—and when—their community experiences an HIV outbreak. **HIV**

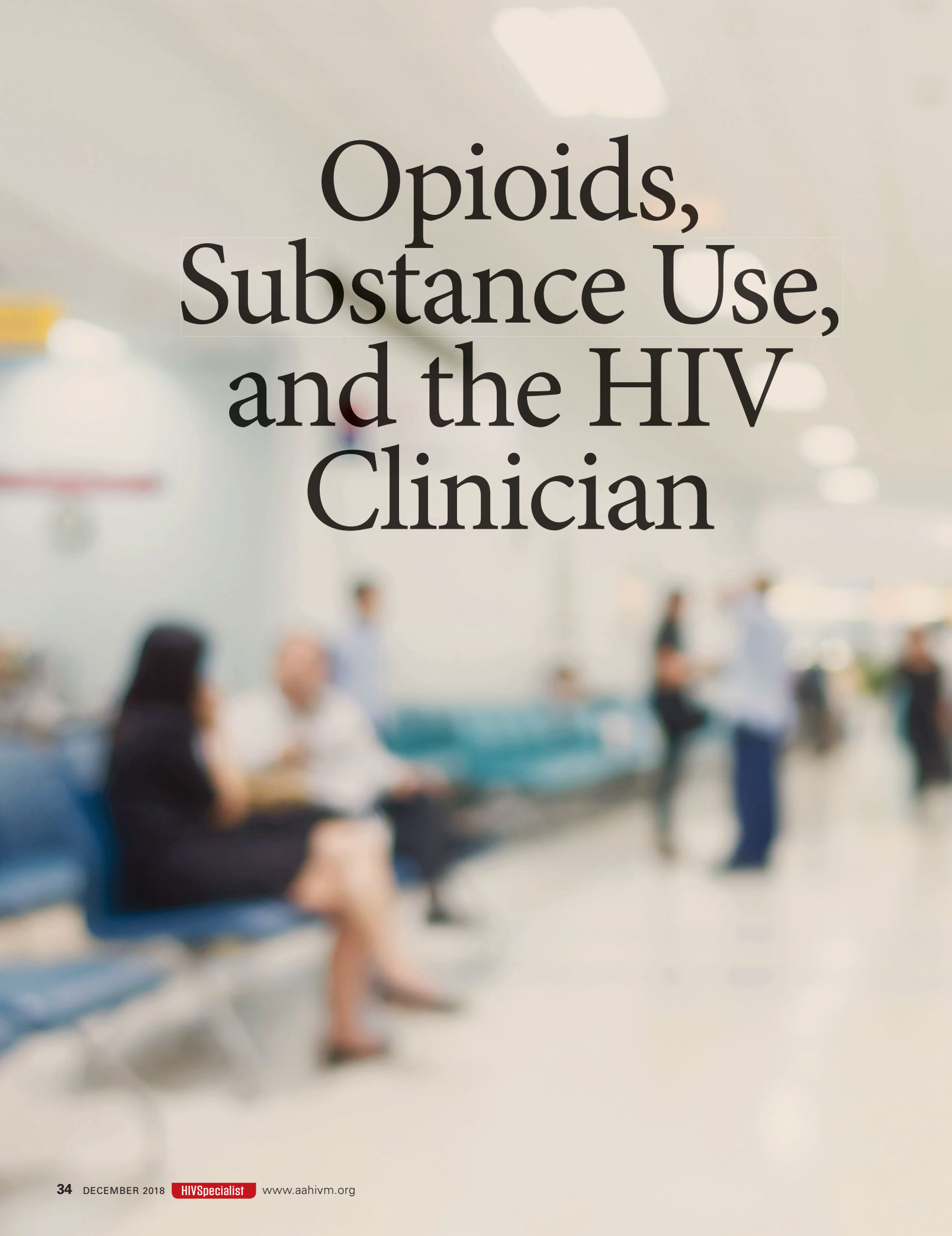


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Opioids, Substance Use, and the HIV Clinician

Tackling the Challenge of Two Critical Epidemics

By CAROLYN CHU, MD, MSC, FAAFP, AAHIVS

LONG BEFORE THE CURRENT OPIOID EPIDEMIC, Dr. Ron Goldschmidt had opioids on his mind. The San Francisco family physician and Founder and Director of the Clinician Consultation Center (CCC), had been thinking about whether the CCC could help address opioid use.

It was at the American Academy of Family Physicians 2012 Annual Scientific Meeting that Dr. Goldschmidt ran into a former resident who had become Chief Medical Officer of the Health Resources and Services Administration (HRSA) Bureau of Primary Health Care (BPHC). The former resident, Dr. Seiji Hayashi, was concerned that more and more opioid-related complications were being observed in community health centers across the country. He asked Dr. Goldschmidt if the CCC be able to provide consultations, as it had been doing since 1993 for HIV-related questions, to clinicians who were looking for guidance on how to manage opioids and other medications subject to overuse or abuse.

To Dr. Hayashi, it did not matter that the CCC had been primarily focused on HIV up until that point. What was important was the development of a resource that busy clinicians could easily access and get connected to subject matter experts to provide trustworthy, practical guidance on dealing with the opioid crisis in their patient base. He saw the interrelatedness of HIV and substance use as distinct but overlapping elements within a single goal of providing much-needed care to patients.

With the CCC, the framework for high-quality and accessible consultation was already in place: free, point-of-care clinical decision support from a multi-professional team of highly

Perinatal HIV Transmission and Perinatal Care Telephone Consultation Service and Perinatal Hotline

Dr. Ronald Goldschmidt, MD, Professor and Vice Chair of the University of California, San Francisco Department of Family and Community Medicine, is founder and Director of the National HIV/AIDS Clinician Consultation Center (CCC).

Results

- 66 Warmline calls were reviewed
- 4 (5.62%) perinatal calls were identified
- Callers had an average of 1.37 presenting questions per call:
- 167 callers asked 1 question
- 52 callers asked 2 questions
- 15 callers asked 3 or more questions
- 61 total topics were discussed
- an average of 2.48 topics discussed per call

Major Topics

Topic	Count	Percentage
HIV Care in Pregnancy	66	41.7%
ADRs (causing)	18	
Pre-natal care	13	
Testing in Pregnancy	17	20.1%
Rapid tests	0	
Indeterminate or false positive	17	
L&D	66	11.4%
ARV in labor	27	
Mode of delivery	30	
Infant Care	58	16.9%
ARV for post-exposure prophylaxis	40	
Seeking information	17	7.2%
Preconception	0	

Conclusions

Clinicians' questions about perinatal HIV care fall into four major categories:

- 44% of calls (n=141) concerned the management of HIV in pregnancy, with more than half (52.5%) addressing ARV therapy.
- 17.8% of calls (n=57) pertained directly to the care of HIV-exposed infants.
- 18.1% of calls (n=58) addressed HIV testing in pregnancy, including rapid testing.
- 9.4% of calls (n=30) concerned labor & delivery. Many of these involved questions about women in active labor when timely decisions need to be made.

Discussion

The urgency of some perinatal HIV questions, especially those about management in labor & delivery of infants, supports the need for a 24-hour service.

Increasing HIV testing are expected to increase the increased emphasis on testing and the more widespread use of rapid testing.

A network is being developed along with the CCC to help clinicians connect their HIV care providers.

Ronald Goldschmidt, MD, Professor and Vice Chair of the University of California, San Francisco Department of Family and Community Medicine, is founder and Director of the National HIV/AIDS Clinician Consultation Center (CCC).

knowledgeable and adept clinician experts. Most importantly, Dr. Hayashi was concerned that an epidemic might be brewing, and he thought it would be wise to make early investments into workforce capacity-building efforts.

Then came Scott County, Indiana. The inevitable had happened. Patients taking a powerful prescription opioid had progressed to injecting it, and had begun using heroin and other substances. The second public health crisis soon followed—the unanticipated numbers of new HIV and hepatitis diagnoses. Within months, a full-scale epidemic had occurred in a sparsely-populated community in a rural county in the Midwest, hardly an expected site of an HIV, hepatitis and opioid crisis.

Once the reality of Indiana hit, it became readily apparent to Dr. Goldschmidt what the CCC was capable of, and exactly how it could make a unique contribution to address an emerging problem.

“Events in Indiana really crystallized things for me,” said Dr. Goldschmidt. “I became more enthusiastic about expanding the scope of our program, re-building our team, and putting together a Substance Use Warmline, because I really wanted to be able to offer reliable access to addiction experts who also had enormous experience in both HIV and primary care. I knew we could bring on consultants who were the types of clinicians that a busy HIV provider would appreciate speaking with.”

“As a primary care physician myself, I also know how each of us has many patients who are taking high doses of pain medications and/or using substances in ways that introduce serious health risk,” Dr. Goldschmidt continued. “As primary care clinicians and HIV providers, we get very devoted to our patients and try to meet their needs as best we can. In that process, we try to limit prescribing practices

that carry risk, but it is an imperfect process.”

Soon after, federal funding for a consultation-based educational resource became a possibility through a new collaboration between BPHC and the HRSA HIV/AIDS Bureau. In December of 2015, the CCC Substance Use Warmline was launched.

Since then, the CCC’s inter-disciplinary team of substance use and HIV experts has provided approximately 1000 substance use consultations to callers from across the country. Over half of these consultations have involved questions about opioids and use of medications for addiction treatment (MAT), judicious prescribing, and/or overdose risk reduction. However, Warmline consultants are also able to address questions regarding alcohol, benzodiazepines, stimulants and other substances, as well as inquiries regarding drug interactions between MAT, antiretroviral therapies, direct-acting antivirals for HCV, urine toxicology interpretation, and many other areas.

Callers have ranged from clinicians who have never heard of buprenorphine, to X-waivered providers with limited buprenorphine experience, to prescribers at high-volume substance use treatment programs. Every consultation is tailored to the needs of the calling provider, as well as their patient and practice. This model sets the Warmline apart from most other resources and decision support tools, and—perhaps most importantly—CCC consultants can walk callers through questions about how to implement changes in practice.

Any U.S. health care provider is welcome to use the Warmline, regardless of their location, practice-type, or patient panel. Because the CCC is also staffed by HIV and hepatitis experts, it can be a uniquely helpful resource for providers who want to be confident that the person they’re speaking with understands the unique and interwoven

Meet Our Substance Use Warmline Consultants



Jacqueline Peterson Tulskey, MD, is a University of California, San Francisco Professor of Medicine, Emeritus and for over 20 years has been an HIV primary care provider in the Division of HIV, Infectious Disease and Global Medicine at Zuckerberg San Francisco General. A general internist by training, she is certified in Addiction Medicine and has been an educator with the California Society of Addiction Medicine.



Hannah Snyder, MD, practices primary care, hospital medicine and addiction medicine at Zuckerberg San Francisco General Hospital. She is a Clinical Assistant Professor in the Department of Family and Community Medicine at the University of California, San Francisco. Dr. Snyder is a leader of the California Bridge Project and Project SHOUT (www.projectshout.org), helping hospitals incorporate evidence-based addiction treatment into emergency department and inpatient settings.

needs of people living with HIV (PLWH) and/or hepatitis.

Dr. Greg Rehmann, has been calling the Substance Use Warmline from Washington State for over two years. He notes that it has been an “invaluable asset in starting my path in addiction medicine. They have helped me with all of the questions I’ve had about HIV, MAT in pregnancy, as well as many others. I have been able to offer more comprehensive care to many of my patients because of their service, and I could not have done it without them.”

Feedback from another provider caller: “This is a critical resource for me, especially as a provider at a community (rather than university) setting, where I really want access to evidence-based medicine and the ability to discuss issues with a colleague.”

Kristin Potterbusch, MPH, Director of HIV and Behavioral Health Integration at the National Council for Behavioral Health, states: “I am a big fan. The CCC is the operationalized version of leveraging equity in best practices.”

Providers caring for PLWH are well-positioned and well-suited to address substance use, but relatively few are doing so. Reasons are multi-factorial and include time constraints, prescribing hurdles at the pharmacy and health plan level. But above all is the challenge of disrupting the “status quo”, particularly involving changes in one’s usual counseling and prescribing practices (especially in patients living with HIV, HCV and other comorbidities, who sometimes have complex psychosocial circumstances).

The natural approach for both the clinician and the patient is to continue things as they are, without upsetting established routines. Nevertheless, in addition to the availability of the Substance Use Warmline, increasing opportunities for training/education and clinical resources

are being offered to HIV and ID providers. This complements the special role they play in treating patients who may face multiple stigmas from other providers, but also because of the value and high-impact that integrated HIV and substance use care offers. Those same clinicians who have risen to the challenge of providing life-saving care to PLWH have more ability and support to address opioid use than they might be aware of.

The CCC understands the challenges ahead. The providers are well-prepared to join the HIV provider workforce in the same type of collaborative decision making around safer prescribing and substance use through its Substance Use Warmline as it has been providing through its HIV Warmline, Perinatal HIV Hotline, Hepatitis C Warmline, PrEPline, and PEPline for years.

To speak with a CCC Substance Use Warmline consultant, call 855-300-3595 (9am–8pm ET, Monday through Friday). For more information about the Clinician Consultation Center, visit: nccc.ucsf.edu.

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James Gasper, PharmD, is a psychiatric clinical pharmacist who has worked extensively with PLWH and methamphetamine addiction and co-morbid mental illness, as well as opioid addiction and alcohol use disorders in primary care and specialty mental health settings. He is an active member of the College of Psychiatric and Neurologic Pharmacists and closely involved with their Substance Use Disorders Committee.



Benjamin Smith, MD, MPH, is an addiction medicine-certified family physician. He received his medical education at Harvard Medical School and Harvard School of Public Health, and then completed residency at Stanford-O’Connor Hospital. He sees patients in Multnomah County Health Department in Portland, Oregon.

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