Tackling the Trifecta: State Approaches to Addressing Co-Occurring Substance Use Disorders, HIV, and Hepatitis C

By Eliza Mette, Jodi Manz, and Kristina Long

In response to an increase in HIV and hepatitis C virus (HCV) infections in individuals with substance use disorders (SUD), including opioid use disorders (OUD), state policymakers are employing multifaceted strategies to address this syndemic, collaborating with public and private partners to prevent the spread of infectious disease and provide access to evidence-based treatment. This report explores innovative approaches Louisiana, New York, and West Virginia have taken to address co-occurring HIV and HCV infections and SUD – providing both rural and urban perspectives – and highlights their resourceful use of funding streams, leveraging of data, and advancing community readiness.

Background

The opioid epidemic has left no state untouched. In 2017, over 70,000 people died from drug overdoses,¹ 11.4 million people improperly used opioids, and 2.1 million people suffered from an opioid use disorder.² In addition to the thousands of overdoses and overdose deaths attributed to opioids, another result of the nation’s substance use disorder crisis has been an increase in rates of infectious diseases in people who inject drugs (PWID), including hepatitis C virus (HCV) and human immunodeficiency virus (HIV) infections, which can be transmitted by sharing contaminated syringes.³

Of particular concern is the fact that most new cases of hepatitis C are related to injection drug, and a previously consistent 25-year downward trend in rates of HIV infection among PWID is beginning to plateau.⁴ The cumulative costs of treatment for these two conditions in the United States is quite high:

- The total annual cost of providing treatment and services to people living with HIV was $21.5 billion in FY 2019,⁵
- And the total annual health care cost for managing chronic hepatitis C in the is estimated to be $15 billion.⁶

In contrast, allocating the equivalent of the cost of treatment for a single person living with HIV ($400,000) to harm reduction⁷ strategies would lead to the prevention of 30 new HIV cases – a significant cost-savings beyond the clear benefit of disease prevention for individuals and communities.⁸ States at the forefront of addressing the opioid epidemic are increasingly interested in providing not only

<table>
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<th>What is comprehensive harm reduction?</th>
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<td>- Provision of sterile syringes and other drug preparation equipment and disposal services;</td>
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<tr>
<td>- Education and counseling;</td>
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<td>- Provision of condoms;</td>
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<td>- HIV, hepatitis B and C, sexually transmitted diseases (STD), and tuberculosis (TB) screening;</td>
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<td>- Provision of naloxone to reverse opioid overdoses;</td>
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<td>- Referral to HIV, hepatitis B and C, STD, and TB prevention, treatment, and care services;</td>
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<td>- Referral to hepatitis A and B vaccination;</td>
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<td>- Referral to and treatment of substance use disorder treatment; and</td>
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<td>- Referral to medical care, mental health services, and other support services.</td>
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treatment, but also access to comprehensive prevention services in order to safeguard public health and make good use of limited resources.

Louisiana

In Louisiana, the number of opioid-related overdose deaths nearly tripled between 2012 and 2018 and exceeded 450 in 2018 – a 13.5 percent increase from the previous year.\(^9\) Louisiana is experiencing a concurrent hepatitis C and HIV crisis:

- Between 2007 and 2017, 40,263 people received a hepatitis C diagnosis,\(^10\) and the Louisiana Office of Public Health estimates that injection drug use is currently putting 112,424 more Louisianans at “very high risk” of infection.\(^11\)
- There is significant co-morbidity within this population – in 2017, the state recorded at least 1,290 Louisianans who were co-infected with HIV and HCV.\(^12\)

To address these challenges, Louisiana developed a statewide Hepatitis C Elimination Plan. The plan was created by the Louisiana Office of Public Health (OPH) in collaboration with the Louisiana Department of Health, the state Department of Public Safety and Corrections (DPS&C), the US Centers for Disease Control and Prevention (CDC), the Health Resources and Services Administration (HRSA), the Centers for Medicaid & Medicare Services (CMS), and state and national experts.\(^13\) This comprehensive plan acknowledges the role of SUD in the state’s hepatitis C epidemic and the risks associated with intravenous drug use, and it aims to diagnose 90 percent and treat 80 percent of Louisianans living with hepatitis C within five years.\(^14\) It also details a range of cross-cutting strategies that engage the private and public sectors, the health care industry, and community-level partners.\(^15\)

Key features of Louisiana’s hepatitis C elimination strategy and related efforts to address SUD and its co-morbidities include:

- **Restructuring reimbursement for hepatitis C treatment:** Historically, Louisiana has paid for hepatitis C medications by the dose, incurring significant costs in its effort to pay for treatment for Medicaid enrollees or who are corrections-involved.\(^16\) In response, the state’s HCV Elimination Plan features an innovative purchasing agreement between Louisiana and Asegua Therapeutics, a wholly owned subsidiary of Gilead Sciences Inc., a biopharmaceutical company.\(^17\) Referred to as a “modified subscription model,” this agreement sets a capped cost for all HCV medication administered to the state’s Medicaid and corrections-involved populations.\(^18\) The methodology incentivizes the state to identify and treat as many people as possible, as the marginal cost of each additional patient is essentially zero.\(^19\)

Louisiana estimates that approximately 34,000 Medicaid enrollees and 5,000 incarcerated individuals in state corrections facilities have chronic hepatitis C; however, fewer than 3 percent of those 34,000 Medicaid enrollees were treated in 2018.\(^20\) Under its agreement with Asegua, Louisiana aims to treat 10,000 Medicaid-enrolled and corrections-involved individuals by the end of 2020, and 30,000 individuals by 2024.\(^21\) Preliminary claims data indicate that 2,900 people have initiated treatment since the July 15 start date, considerably more than the number of people treated in all of 2018.\(^22\)
• **Leveraging data to track and address co-morbid conditions:** The Louisiana Public Health Information Exchange (LaPHIE)\(^2\) was first implemented in 2008 as a partnership between OPH and Louisiana State University Health Care Services Division.\(^4\) OPH maintains comprehensive HIV surveillance data that is updated daily through lab reporting. If a patient enters a participating hospital and a provider opens that patient’s electronic medical record to provide services, the provider will be notified if the patient has not received timely HIV care and prompted to take appropriate action.\(^5\) LaPHIE is also bi-directional: any action taken by the provider with respect to the patient, whether it be a referral or a link back into care, is incorporated into the patient’s electronic medical record (EMR) and returned to OPH, which then updates the state’s HIV surveillance data.\(^6\) This system is designed to strengthen care retention and improve disease management for patients living with HIV by engaging them at different care sites across the region. Improved HIV care management, with the aim of making a patient’s viral load undetectable, has the potential to not only improve an individual’s health status but also reduce the likelihood of HIV transmission to others.

Louisiana recently received funding to expand LaPHIE’s innovative functionality to include hepatitis C surveillance data and is now in the process of building out this new capacity.\(^7\) State officials view the Hepatitis C Elimination Plan as a call to action to Louisiana hospital systems, whose participation in the LaPHIE surveillance system has dropped in recent years.\(^8\)

• **Focusing on high-risk populations:** Louisiana has been successful by targeting limited state resources on particularly high-need populations:

**HIV Prevalence and Diagnoses Attributed to Injecting Drug Use**

![HIV Prevalence Chart](source)

- **Individuals with SUD:** In conjunction with its Hepatitis C Elimination Plan, Louisiana’s STD/HIV/Hepatitis Program updated its contracts with community-based organizations to require combined HIV, syphilis, and HCV screening and linkages to treatment for individuals with new diagnoses.\(^9\)
Individuals who are corrections-involved: OPH has worked closely with the Louisiana DPS&C to develop a treatment model for HCV and HIV, including linkage to care. The DPS&C has offered opt-out HCV screening for all new individuals as they enter the state correctional system since 2008 and opt-out HIV screening for individuals upon release since 2014. OPH provides supplies and training for both of these initiatives. Starting in October 2019, OPH launched a population-level screening project with DPS&C through which OPH offers screening for hepatitis A, B, and C, HIV, and syphilis in every state-run facility, and plans to complete screening all current state inmates by mid-2020. OPH also supports a corrections-based, pre-release program leveraging Ryan White HIV/AIDS Part B funding from HRSA – specialists work with inmates living with HIV prior to their release and connect them with case management and support services in the communities to which they are discharged. Louisiana is exploring the possibility of building a similar system for people with hepatitis C as part of its elimination plan.

Individuals with HIV: Recognizing that people with SUD and related comorbidities often have insufficient dental care that can contribute to poor health outcomes, the Louisiana Health Access Program (LA HAP) leveraged Ryan White Part B resources and worked with Guardian Dental to increase access to comprehensive oral health care for people with HIV. Prior to this collaboration, people with HIV regularly encountered barriers to adequate dental care, including low annual caps, unexpected bills, and limitations on covered services. The state was supported by the Health Services and Research Administration (HRSA) to structure a self-insured plan that would reduce unmet oral health care needs of people infected with HIV. As a result, more than 2,000 individuals have been able to access a comprehensive set of services that address oral health care issues related to HIV infection.

West Virginia

West Virginia has one of the highest rates of drug overdose and mortality in the country. Compounding this crisis, injection drug use in West Virginia has contributed to the five-fold increase in new HIV diagnoses from 2014 to 2019. Injection drug use is the second-leading cause of transmission for new HIV diagnoses for men and women in the state, according to most recent data from the National Institute of Drug Abuse (NIDA). In 2018, Cabell County, on the state’s western edge, reported 81 new cases of HIV, which qualified it as an active HIV cluster – all 81 new HIV infections were tied to injection drug use. As a very rural state that has been highly affected by the opioid crisis and its comorbidities, West Virginia has taken a decentralized approach in its harm reduction efforts, providing guidance and certification standards to communities to assist them in developing and administering programs at the local level. Since 2011, when the state’s first harm reduction program opened, West Virginia has navigated the challenges of operating syringe exchange programs, which is an evidenced-based, albeit sometimes controversial, approach.
HIV Prevalence and HIV Diagnoses Attributed to Injecting Drug Use

![Pie charts showing prevalence and diagnoses by gender and risk factors.]

*Rural areas can face particular challenges in developing and sustaining harm reduction programs. Transportation is limited, confidentiality can be elusive in small towns, and the stigma associated with drug use can be heightened in rural, conservative communities.*

In West Virginia, Kanawha County started the Kanawha-Charleston harm reduction program through its department of health, offering syringe exchange in addition to comprehensive harm reduction services. At its height, the program provided services to over 400 individuals weekly, effectively maximizing access to sterile syringes, preventing new HIV cases, and screening for HCV. However, highly publicized public opposition, which was attributed to an uptick in crime and increase in discarded syringes in the area where the organization worked, ultimately led to the closure of the program in early 2019.

West Virginia’s experience with the site in Kanawha County suggests that state support for community-level harm reduction programs can be most successful when they are community-specific. Noted one West Virginia state official, “At the state level, you can’t just say, this program will work everywhere, or look at what other states have done and assume that it will work everywhere – state policymakers and public health officials have to tailor [the program] to the individual, unique communities that they serve.” Those states in which syringe exchange (as a component of harm reduction) is more controversial are faced with the added challenge of finding the balance between the need for a comprehensive, evidence-based approach and implementing more limited models that are acceptable to local communities. Providing messaging that helps to educate communities about the benefits of harm reduction services, including syringe exchange, may also be important in building community support.

**Standardizing processes, engaging communities:** In an effort to support implementation of harm reduction programs, West Virginia created Harm Reduction Program Guidelines and Procedures, which establish core certification requirements that these programs must meet in order to receive Department of Health and Human Resources’ funding. To be certified, the program must outline all services provided, demonstrate compliance with state laws, rules, and local ordinances, and provide documentation of the involvement of the local health department. The organization must also coordinate with local law enforcement and document any concerns they may have. An integral step outlined in the guidelines is assessing the community’s readiness and building the community’s support prior to implementation. The guidelines also offer several strategies to engage community stakeholders and encourage community buy-in prior to implementing harm reduction programs.
Although these programs do not need to be certified in order to operate in West Virginia, sites that complete the certification process are more likely to programmatically align with the state’s eight core strategies for successful harm reduction programs:

1. Build community support prior to implementation of a harm reduction program and maintain support for the duration of the program;
2. Conduct routine program and process evaluation;
3. Have a detailed community syringe retrieval in place for non-sterile syringes found in the community;
4. Emphasize harm reduction as a Pathway to Care;
5. Emphasize increasing stability and reducing risk among harm reduction participants and fostering supportive relationships with harm reduction program personnel;
6. Train caring and supportive staff to provide consistent messaging of safe injection practices, overdose prevention, and infectious disease screening;
7. Recommend dispensing syringes in person, not via proxy; and
8. Have a mechanism to get patients in treatment when they are ready.55

**Incremental changes:** Despite the programmatic and public relations challenges that harm reduction programs have sometimes faced in West Virginia, communities are gradually embracing these programs. New sites are opening, existing programs are experiencing higher client engagement,56 and the state has allocated State Treatment Response and State Opioid Response federal grant funding to support harm reduction programs in recent years.57 This community-by-community approach has allowed the state to increase access to treatment for SUD and prevent the spread of infectious diseases.58 In its work with local communities, West Virginia has also leveraged CDC’s and HRSA’s HIV/AIDS Bureau’s HIV cluster detection and response service in order to identify at-risk communities, assist local health departments as they identify prevention and service system gaps, and allocate resources accordingly to be responsive to new outbreaks.59

**New York**

New York has a long history of innovation in preventing the spread of infectious disease associated with injection drug use. In particular, the state invested early in its Syringe Exchange Program,60 creating the foundation for a comprehensive harm reduction approach. Through these efforts, only 2 percent of new HIV infections per year are reported among PWID.61 Gov. Andrew Cuomo’s *Ending the Epidemic* plan includes achieving zero new HIV infections among PWID and a plan for the first-ever decrease in HIV prevalence in New York by the end of 2020.62
**A lasting result of this early investment is New York’s Harm Reduction Initiative, a program funded by the state’s Department of Health, AIDS Institute.** This program funds comprehensive harm reduction programs for individuals living with SUD and the people and communities that support them, including New York’s innovative Drug User Health Hubs.

### Supporting integrated models of care:

Drug User Health Hubs are enhanced syringe exchange programs that offer a broad range of services, driven by the particular needs of the population in the surrounding community. Hubs are intended to increase access to physical and behavioral health services, including medication-assisted treatment (MAT) for people with opioid use disorder (OUD). Services are offered at hub sites and through referral. Hubs provide services and support with an emphasis on prevention and responding to opioid overdose. Services can include:

- **Medical services**: Includes accessible buprenorphine; wound care; HCV testing, diagnosis, and treatment; and rapid assessment of a client’s needs.

- **Opioid overdose prevention/aftercare for an overdose**: Includes training and provision of naloxone overdose reversal kits; training on safer injection practices and provision of syringes; facilitation of appropriate referrals from Emergency Departments and first responders, etc.

- **Law enforcement diversion**: Includes the law enforcement diversion of PWID who have committed low-level infractions to Drug User Health Hubs.

- **Anti-stigma activities**: Features hub employees who engage with local providers to encourage a harm reduction focus in their provision of care to PWID, and with local communities to destigmatize injection drug use and create a welcoming environment for all community members.

The goal of New York’s hubs is to transform the state’s syringe exchange programs into locations that can provide comprehensive, easily accessible medical services to PWID. In many health care settings, patients are required to receive psychosocial counseling in order to be prescribed medications to treat OUD. Recognizing that this can be a substantial disincentive to getting treatment, New York’s Department of Health (NYSDOH) began a buprenorphine-first approach, providing medications for treating OUD as a first step, without initially requiring other services. Individuals can receive buprenorphine only, or opt to concurrently access services that can include counseling and other
medical treatments as needed, such as those for soft tissue infections, hepatitis C, HIV, and diabetes.73 As part of the state’s Strategy to Eliminate Hepatitis C, the NYSDOH Bureau of Hepatitis Health Care funds patient navigator positions in seven different hubs in upstate New York.74 These individuals provide guidance to people living with hepatitis C as they navigate the health care system, and help link them to care and treatment.75

**Leveraging Medicaid for prevention:** In 2018, New York implemented a Medicaid state plan amendment (SPA) that allows the state’s harm reduction programs to deliver certain Medicaid reimbursable services, including medication management and treatment adherence counseling for MAT, HIV and HCV infections, mental health conditions, and pre-exposure prophylaxis (PrEP) to prevent HIV infection.76

A product of a partnership among the NYSDOH AIDS Institute’s Office of Drug User Health, the Office of Health Insurance Programs, and community partners, the SPA came to fruition after extensive negotiation and revision.77 Initially, it was required to have a physician perform the harm reduction services covered under the SPA, but the state was able to modify staffing requirements, recognizing that many harm reduction programs in the state do not have medical providers on staff.78 The approved SPA permits licensed clinical social workers, certified peers, and direct service providers with relevant experience to provide Medicaid-reimbursable harm reduction services under the SPA.79

The NYSDOH also recently amended the requirements that community-based organizations must satisfy in order to become licensed health care facilities, allowing organizations such as syringe exchange programs, to provide and bill Medicaid for primary care services.80 Syringe exchange programs have historically been unable to directly deliver primary health care services and have been required to contract out these services in order to deliver them on-site – a model that was not financially sustainable for most.81 The change permits these organizations to fully integrate Medicaid-reimbursable primary care, including HCV and HIV screening, assessment, and treatment within the harm reduction setting.82 State officials see the ability to deliver primary care in these nontraditional settings as necessary to achieve the goal of disease elimination.83

**Considerations for States**

While states have taken different approaches to addressing the opioid crisis and its related increase in infectious disease incidence, these three states’ approaches provide some common themes that can be implemented elsewhere:

- **Robust data is critical to address the complex co-morbidities associated with SUD.** Unlike HIV surveillance, which remains relatively well-funded and robust, hepatitis C surveillance typically does not have consistent funding nor a robust infrastructure across states. However, some states are taking steps to improve their infrastructure and leverage new technology. For example, Louisiana is adapting its HIV surveillance strategy and standards to include hepatitis C surveillance, and in so doing has turned a passive registry into an “active and rigorous system of care,” according to one state public health official. Similarly, New York is in the process of improving its hepatitis C surveillance infrastructure as part of its statewide elimination plan. In West Virginia, the CDC’s HIV cluster detection and response team has been an important resource to help the state accurately track HIV outbreaks and appropriately allocate resources.


- **Medicaid plays an important role in prevention and treatment.** One Louisiana state official observed, “Our plan to eliminate hepatitis C hinged on the increased insurance coverage that Medicaid expansion has provided our residents.” Medicaid expansion in Louisiana was critical in expanding access to comprehensive HIV prevention and treatment, as newly eligible Medicaid beneficiaries were able to transition away from reliance solely on the Ryan White HIV/AIDS program. Louisiana used Medicaid funding to shift and alleviate costs and was able to provide expanded services to people with HIV. New York, similarly, has been able to leverage Medicaid to create a harm reduction benefit, which has expanded the ability of the state’s syringe exchange sites to engage in prevention activities.

- **Solutions must be tailored to local needs.** Because the OUD crisis looks very different in different places, policymakers must be responsive to specific drivers and factors that shape a community’s experience. In response to the challenges it experienced in implementing sustainable harm reduction programs in West Virginia, the state developed certification guidelines that it ties to state funding. In so doing, the state ensures that the majority of harm reduction programs in West Virginia assess and engage with their local communities prior to implementation. Similarly, one of the mandates of New York’s Drug User Health Hubs is to work with the communities in which they operate to reduce the stigma associated with substance use, and better involve community members who inject drugs.

**Conclusion**

The concurrent increase in the incidence of blood-borne infectious diseases is just one consequence of an OUD crisis that has had a far-reaching impact on the nation. By implementing evidence-based, community-tailored prevention and treatment policies, states can prevent new infections, better address co-morbid SUD and infectious diseases, and reduce state costs. Through coordination and targeted resources, states are developing sustainable prevention and treatment policies that can address the complexity of factors at the intersection of SUD and infectious disease.

**Notes**

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