



December 4, 2018

White House Office of Science and Technology Policy  
National Science and Technology Council  
1650 Pennsylvania Ave NW  
Washington, DC 20504

Dear Sir/Madam:

Opioid use disorder is a rapidly evolving national public health crisis. Infectious diseases (ID) are a substantial and increasing consequence of the opioid epidemic, yet they remain underreported and can be difficult to treat. Hepatitis C virus (HCV) rates have increased almost 300 percent<sup>1</sup>, along with increases in hepatitis B virus (HBV) and HIV infections linked to drug use. Serious, life-threatening bacterial and fungal infections, including infective endocarditis and necrotizing soft tissue infections, are also increasing in individuals with opioid use disorder and other substance use disorders.

The Infectious Diseases Society of America (IDSA) and the HIV Medicine Association (HIVMA) appreciate that the White House National Science and Technology Council (NSTC) is supporting a wide range of research projects to provide scientific solutions to help end the opioid crisis. However, more needs to be done to combat the epidemic of morbid and life-threatening infectious diseases occurring concurrently with opioid use disorder and to address outstanding research gaps in this area. Below, we highlight priority research questions at the intersection of opioids and ID within the scope of the Draft Report and offer recommendations for the Fast Track Action Committee (FTAC) on Health Science and Technology Response to the Opioid Crisis to help address these challenges.

### **Community Consequences of Opioid Addiction**

As the seventh research area in “Health Research and Development to Stem the Opioid Crisis: A National Roadmap,” Community Consequences of Opioid Addiction appropriately includes infectious disease spread in the list of research gaps for which novel approaches are needed to more quickly and accurately assess opioid morbidity and mortality. Our Societies have previously worked with the National Institutes of Health (NIH) to [highlight research gaps](#) at the intersection of the opioid epidemic and ID. In May 2018 we provided [comments](#) to the Senate HELP and House Energy & Commerce Committee regarding infectious diseases provisions for inclusion in opioid legislation and worked with member and stakeholder experts to identify [policy priorities](#) to improve the coordination of federal R&D essential to combating this crisis. Given the relevance of these efforts to the framework of the Opioid FTAC draft report, we urge the FTAC add the below ID recommendations to its list of research priorities within “Research Gaps and Needs” in this subsection of the R&D Roadmap.

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<sup>1</sup> “New Hepatitis C Infections Nearly Tripled over Five Years.” Centers for Disease Control and Prevention National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.  
<https://www.cdc.gov/nchhstp/newsroom/2017/Hepatitis-Surveillance-Press-Release.html>

**Recommendation: Prioritize research that assesses the infectious diseases, public health, and cost-effectiveness of care integration and push federal agencies and patient care facilities to coordinate their resources accordingly.**

The key to preventing infections, including HIV, HCV, and multi-drug resistant infections such as MRSA, is starting opioid use disorder (OUD) medication treatment as early as possible to reduce the risk of transmission. Research on widespread screening for OUD as prevention is needed. Once diagnosed, it is critical to have immediate access to medication such as buprenorphine, vivitrol, and methadone rather than via a referral.

While we were pleased that the SUPPORT Act for Patients and Communities Act recently signed into law by the President authorizes \$40 million in new funding for CDC to enhance surveillance, provider training, and treatment coordination, this funding needs to be appropriated by Congress and is not likely to be available until fiscal year 2020. Additional resources to support clinical research investigating effective prevention and treatment strategies is urgently needed to improve health outcomes and reduce the spread of infections among people who inject drugs.

**Recommendation: Understand the scope of ID morbidity and mortality as a complication of injection drug use and evaluate best practices for management of people who inject drugs (PWID)**

More attention is required to address preventable infections associated with injection drug use, including Hepatitis B (HBV) and life-threatening bacterial and fungal infections. There is also an urgent need to learn more about effective prevention and treatment modalities of infective endocarditis in individuals who inject drugs given the growing rates of infective endocarditis among PWID. Infective endocarditis in PWID is associated with increased morbidity, mortality, and personal and healthcare-associated costs due to this condition. Additional research funding should be aimed at understanding how to best and most quickly connect PWID with resources such as HBV vaccination, PrEP, HIV/HCV testing and treatment, and medication-assisted treatment for addiction, as traditional settings like primary care providers and substance use disorder treatment centers have not been fully effective.

**Recommendation: Federal agencies should fund infectious diseases-focused quality improvement and implementation science research on concurrent opioid use disorders in incarcerated and other vulnerable populations.**

OUD patients frequently cross many system-level boundaries (including incarceration), often seek care in different hospitals, and are frequently without secure housing. Without high-level tracking implemented at the city or jurisdiction level, it will not be possible to have useful estimates of the extent and outcomes of such infections nor to identify potential interventions.

It is critical to fund research on affected underrepresented groups such as incarcerated individuals and rural populations. Health disparities are commonly experienced by persons within the criminal justice system, yet there is limited research on how to best address these

issues. Understanding the epidemiology and current standards of care for inmates with infections is essential – especially as justice-involved individuals are at risk for transmitting infections upon release if not effectively treated. More attention must be paid to the processes of effectively transitioning people with infections like HIV and hepatitis B or C from jails or prisons to ongoing outpatient medical care, and ensuring uninterrupted access to HIV and HBV medications, curative HCV treatment, and outpatient intravenous antibiotic therapy (OPAT) for persons with severe bacterial infections who no longer require hospitalization.

Partnerships for a community-based program should include infectious diseases/HIV clinics, shelters, jails, addiction treatment facilities, and other programs offering supportive services. Having an external advisory board composed of community stakeholders may help foster collaboration and engagement in program implementation. By expanding the focus on implementation science, the biomedical research enterprise can cast a wider net to capture data from vulnerable and underrepresented populations with opioid-related infectious diseases. Much as the National Institute for Drug Abuse (NIDA) JJ-TRIALS Cooperative Research Centers utilize implementation science to prevent and treat substance use disorders in the criminal justice system, future research could facilitate enhanced coordinated treatment between infectious disease and HIV clinicians and addiction medicine professionals.

Additional questions that address research gaps in this area include:

- What are the impacts of incarceration on the trajectory of infections caused by illicit drug use? A 2016 study by IA Binswager<sup>2</sup> documents elevated risks of infectious disease mortality after release from prison, particularly from drug-related causes in the first weeks after release. While treatment and care linkage before release are key, more research is needed on identifying the systems and resources that can provide funding and services to this group.

**Recommendation: Evaluate the integration of ID treatment and addiction services and lift buprenorphine-prescribing limits on registered nurses, physician assistants, and midwives to expand physician and treatment capacity.**

As injection-related infections increase, more research is needed on what outcomes can be improved when co-locating or integrating care across disparate systems (e.g., provider training for buprenorphine, bringing methadone into different clinical settings including infectious diseases/HIV clinics and programs). The integration of ID and addiction medicine is essential to successfully address these questions and the opioid epidemic at large. We recommend that the federal government support research that assesses the infectious diseases, public health, and cost-effectiveness of care integration and push federal agencies and patient care facilities to coordinate their resources accordingly.

**Recommendation: Evaluate ways to encourage collaboration across specialists.**

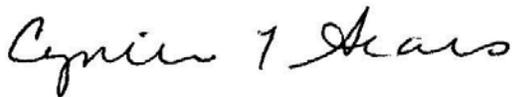
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<sup>2</sup> Binswanger IA, Blatchford PJ, Forsyth SJ, Stern MF, Kinner SA. Epidemiology of Infectious Disease–Related Death After Release from Prison, Washington State, United States, and Queensland, Australia: A Cohort Study. *Public Health Reports*. 2016;131(4):574-582.

Because infective endocarditis is an acute infection that requires hospitalization and is associated with injection drug use, it presents a valuable opportunity to drive collaboration across cardiothoracic surgeons, ID physicians, and addiction medicine specialists for efforts to study and better understand optimal approaches for coordinated treatment of addiction and related infectious diseases. It is critical that hospitals and clinics implement standardized OUD screening for all patients in the same way that testing for diabetes and hypertension are frequently administered. Programs should aim to increase capacity and access to treatment while decreasing barriers. Clinical research is needed to evaluate effective multi-disciplinary models of care and how this care can be incentivized and supported by healthcare systems.

IDSA and HIVMA appreciate the opportunity to provide recommendations on the use of federal funding to target and prioritize critical research associated with the opioid epidemic. We recognize that addressing this growing national emergency will require a collaborative effort by stakeholders and other federal agencies. We stand ready to aid the NSTC as it works to advance research to combat the national opioid crisis. Should you have any questions about these comments, please feel free to contact Jaclyn Levy, IDSA Senior Program Officer for Science and Research Policy, at [jlevy@idsociety.org](mailto:jlevy@idsociety.org) or 703-299-1216.

Sincerely,



Cynthia Sears, MD, FIDSA  
President, IDSA



W. David Hardy, MD  
Chair, HIVMA