

Evidence-based Opioids Treatment and Prevention

How SAMHSA Could Use Proven Programs and Practices to Help Halt an Epidemic

By Patrick Lester ¹
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Executive Summary

In 2016, over 63,000 Americans died from substance use disorders, with two-thirds attributable to opioids such as heroin and fentanyl. Over the past two years, Congress and the Trump administration have acted to address this growing epidemic, with much of the increased assistance provided by the Substance Abuse and Mental Health Services Administration (SAMHSA).

However, relatively little of SAMHSA's assistance is directed toward programs that are evidence-based. Funds spent on ineffective care waste limited public resources, prevent patients from receiving more effective care, and cost lives. Congress could help ensure that federal funds are spent on proven programs and practices through the following concrete steps:

- **Congress Should Support More Research on Evidence-based Opioids Use Prevention, Treatment, and Recovery:** While some programs and practices have been shown to be effective for addressing opioid use disorder, most are not backed by rigorous and reliable studies. Research by the National Institute on Drug Abuse is focused primarily on medication-based treatments, overdose antidotes, and alternative pain medications. Comparably little has been invested to determine the effectiveness of SAMHSA-funded services. To help address this research gap, Congress should create a tiered evidence grant program at SAMHSA.
- **Congress Should Ensure that Most SAMHSA Funds Are Spent on Interventions that are Backed by Rigorous Research:** To promote greater use of evidence-based interventions, Congress should:
 - (1) Provide greater funding for and lower existing barriers to the use of medication-assisted treatment (MAT);
 - (2) Include stronger evidence requirements in SAMHSA's substance use grants;
 - (3) Create a tiered evidence program at SAMHSA;
 - (4) Incorporate stronger evidence requirements in Opioid Treatment Program regulations, certifications, and accreditation; and
 - (5) Promote greater use of value-based payments to SAMHSA providers.
- **SAMHSA's New Strategy for Supporting Evidence-based Interventions Should Be Monitored to Determine Its Effectiveness:** SAMHSA's leadership is planning or has adopted several new strategies to support the use of evidence-based programs. These include replacing its existing evidence clearinghouse with a new online resource center and replacing existing technical assistance providers with a new regional and locally-based system of assistance. These strategies should be closely monitored to determine their impact.

¹ For more information, contact Patrick Lester, Director, Social Innovation Research Center, at (443) 822-4791 or patrick@socialinnovationcenter.org.

Background

The United States is facing a growing opioids crisis. In 2016, an estimated 11.8 million Americans misused opioids over the past year.² Of these, an estimated 2.1 million are suffering from opioid use disorder.³ Over 63,600 people died from drug-related overdoses in 2016, most of which were opioids-related.⁴ This represented a significant increase over previous years, with much of the growth due to spikes in the use of heroin and fentanyl, a deadly synthetic.⁵

The crisis may be accelerating. Recent data from the Centers for Disease Control indicate that the number of suspected opioid overdoses treated in hospital emergency rooms increased by 30 percent over 14 months from 2016-2017.⁶

The federal response to the epidemic has been wide-ranging. In 2016, Congress enacted two pieces of legislation that provided new funding for opioids treatment and prevention programs, the Comprehensive Addiction and Recovery Act (CARA) and 21st Century Cures Act (Cures Act).⁷ On October 26, 2017, the Trump administration declared the opioid crisis a public health emergency.⁸ The following week, the President's Commission on Combatting Drug Addiction and the Opioid Crisis released its final report with recommendations for interdiction, law enforcement, public education, prescription drug practices, prevention, and treatment.⁹

SAMHSA has been at the center of these efforts.¹⁰ As part of a larger strategy, Congress has supported substantial increases in funding for SAMHSA prevention, treatment and recovery programs.¹¹

Federal policymakers have also indicated that these services should be evidence-based. For example, CARA established an evidence-based prescription opioid and heroin treatment and interventions demonstration program at SAMHSA.¹² The Cures Act created a new office at SAMHSA, the National Mental Health and Substance Use Policy Laboratory, which launched in January to help make SAMHSA's programs more evidence-driven.¹³ President Trump's opioids commission also made recommendations

² SAMHSA, "Key Substance Use and Mental Health Indicators: Results from the 2016 National Survey on Drug Use and Health," September 2017, p 20. Available at: <https://www.samhsa.gov/data/sites/default/files/NSDUH-FFR1-2016/NSDUH-FFR1-2016.pdf>

³ Ibid., p. 30.

⁴ National Center for Health Statistics, "Drug Overdose Deaths in the United States, 1999–2016," December 2017. <https://www.cdc.gov/nchs/products/databriefs/db294.htm>; Centers for Disease Control, "Drug Overdose Death Data," accessed April 7, 2018. <https://www.cdc.gov/drugoverdose/data/statedeaths.html>

⁵ John Keilman, "As More Heroin is Mixed with Fentanyl, Opioid Crisis Turns Even Deadlier," *Chicago Tribune*, August 28, 2017. <http://www.chicagotribune.com/news/local/breaking/ct-fentanyl-heroin-epidemic-met-20170826-story.html>

⁶ Centers for Disease Control and Prevention, "Opioid Overdoses Treated in Emergency Departments," March 2018. Available at: <https://www.cdc.gov/vitalsigns/opioid-overdoses/>

⁷ For a summary of opioids-related provisions of CARA (P.L. 114-198) and the Cures Act (P.L. 114-255), see: Hector Hernandez-Delgado, "CARE, the 21st Century Cures Act: More Tools to Address the Opioid Epidemic," National Health Law Program, February 2017. Available at: <https://www.napsw.org/assets/docs/Advocacy/caracuresact%202.22.17%201.pdf>; The full text of CARA is at <https://congress.gov/114/plaws/publ198/PLAW-114publ198.pdf>; The full text of the Cures Act is at <https://www.congress.gov/114/plaws/publ255/PLAW-114publ255.pdf>

⁸ Jenna Johnson and John Wagner, "Trump Declares the Opioid Crisis a Public Health Emergency," *The Washington Post*, October 26, 2017. Available at: <https://www.washingtonpost.com/news/post-politics/wp/2017/10/26/trump-plans-to-declare-the-opioid-crisis-a-public-health-emergency/>; See also: <https://www.hhs.gov/sites/default/files/opioid%20PHE%20Declaration-no-sig.pdf>

⁹ The President's Commission on Combatting Drug Addiction and the Opioid Crisis, "Final Report," November 1, 2017. Available at: https://www.whitehouse.gov/sites/whitehouse.gov/files/images/Final_Report_Draft_11-15-2017.pdf

¹⁰ Department of Health and Human Services, "The Federal Response to the Opioid Crisis: Written Testimony from HHS," October 5, 2017. Available at: <https://www.help.senate.gov/hearings/the-federal-response-to-the-opioid-crisis>

¹¹ Paige Winfield Cunningham, "The Health 202: Congress is Poised to Invest More Dollars in the Opioid Crisis," *The Washington Post*, February 8, 2018. Available at: <https://www.washingtonpost.com/news/powerpost/paloma/the-health-202/2018/02/08/the-health-202-congress-is-poised-to-invest-more-dollars-in-the-opioid-crisis/5a7b434830fb041c3c7d769b/>; The White House, "2019 Budget Fact Sheet: Combatting the Opioid Epidemic," February 9, 2018. Available at: https://www.whitehouse.gov/wp-content/uploads/2018/02/FY19-Budget-Fact-Sheet_Combatting-the-Opioid-Epidemic.pdf

¹² This demonstration program was created in Sec. 301 of CARA. See: 42 U.S. Code § 290bb–10. See: <https://www.law.cornell.edu/uscode/text/42/290bb%E2%80%9310>

¹³ 42 U.S. Code § 290aa–0. See: <https://www.law.cornell.edu/uscode/text/42/290aa%E2%80%930>

on evidence-based treatment and prevention.¹⁴

This paper explores options for accomplishing these goals. It does so by addressing three main questions:

1. What is the current state of evidence for SAMHSA-funded opioids treatment, prevention, and recovery programs?
2. What can be done to further build knowledge of what works, under what conditions, and for whom?
3. What can be done to promote greater use of evidence-based programs and practices to combat the epidemic?

Evidence-Based Treatment and Prevention

Any effort to make SAMHSA-funded opioids programs more evidence-driven must begin with an understanding of the existing knowledge base. While a thorough review is beyond the scope of this paper, a brief summary can provide insights on what is known and what else is needed.

The following summary, loosely based on the continuum of care, highlights existing knowledge and gaps in the research:

- **Prevention:** One central strategy for addressing the opioids epidemic is prevention. Some prevention strategies, such as those focused on interdiction and law enforcement, are outside SAMHSA's jurisdiction. However, the agency plays a central role in many other prevention efforts through its grants and initiatives.¹⁵

SAMHSA's prevention strategies are focused on widely-recognized risk and protective factors.¹⁶ To address these issues, the agency has devised a multi-step Strategic Prevention Framework that includes needs assessments, capacity building, strategic planning, program implementation, and ongoing evaluation.¹⁷ A wide variety of programs, policies, and interventions can be implemented within this framework.

Many of them are evidence-based. Some interventions that have been positively reviewed by evidence clearinghouses include LifeSkills Training, Project Towards No Drug Abuse, and Creating Lasting Connections.¹⁸ Some have been, or are being, assessed to determine their relative costs, benefits, or comparative effectiveness.¹⁹ Most target a specific population

¹⁴ The President's Commission on Combatting Drug Addiction and the Opioid Crisis, "Final Report," November 1, 2017, pp. 68-69. Available at: https://www.whitehouse.gov/sites/whitehouse.gov/files/images/Final_Report_Draft_11-15-2017.pdf

¹⁵ SAMHSA, "Prevention of Substance Abuse and Mental Illness" at: <https://www.samhsa.gov/prevention>; SAMHSA, "SAMHSA's Efforts Related to Prevention and Early Intervention," at <https://www.samhsa.gov/prevention/samhsas-efforts>; Laurel Sindewalk, "Complex and Interacting Factors Predispose People to Addiction," April 15, 2017.

<http://www.handshakemediainc.com/2017/04/15/complex-and-interacting-factors-predispose-people-to-addiction/>

¹⁶ SAMHSA, "Risk and Protective Factors," at <https://www.samhsa.gov/capt/practicing-effective-prevention-behavioral-health/risk-protective-factors>; NIDA, "Preventing Drug Use among Children and Adolescents (In Brief)," at <https://www.drugabuse.gov/publications/preventing-drug-abuse-among-children-adolescents/chapter-1-risk-factors-protective-factors>; *Science Daily*, "Largest Study of Opioid Deaths Reveals Who is at Most Risk", November 28, 2017. <https://www.sciencedaily.com/releases/2017/11/171128091007.htm>;

¹⁷ SAMHSA, "Applying the Strategic Prevention Framework (SPF)" at <https://www.samhsa.gov/capt/applying-strategic-prevention-framework>

¹⁸ Coalition for Evidence-Based Policy, "LifeSkills Training" at <http://toptierevidence.org/programs-reviewed/lifeskills-training>; NREPP, "Project Towards No Drug Abuse" at <https://www.nrepp.samhsa.gov/Legacy/ViewIntervention.aspx?id=21>; and NREPP, "Creating Lasting Family Connections (CLFC)/ Creating Lasting Connections (CLC)" at <https://nrepp.samhsa.gov/ProgramProfile.aspx?id=181>

¹⁹ Washington State Institute for Public Policy, "Benefit-Cost Results: Substance use Disorders" at http://www.wsipp.wa.gov/BenefitCost/Pdf/7/WSIPP_BenefitCost_Substance-Use-Disorders; Washington State Institute for Public Policy, "Preventing Youth Substance Use: A Review of Thirteen Programs," September 2014. Available at: <http://www.wsipp.wa.gov/Reports/540>; Patient-Center Outcomes Research Institute, "Strategies to Prevent Unsafe Opioid

(children, youth, adults, specific minority groups) in a particular setting (school, work, family, or community).²⁰

- **Early Intervention and Treatment Referral:** Identifying and referring to treatment individuals with opioids use disorder can reduce drug use and save lives.²¹ Individuals treated for overdoses in hospital emergency rooms are one important population. Others can be identified in other settings (school clinics, primary care offices) through screening procedures, possibly including Screening, Brief Intervention and Referral to Treatment (SBIRT), although this strategy has been used successfully primarily for alcohol use disorder.^{22,23} The criminal justice system can also identify individuals in need of treatment, particularly individuals who have been diverted to drug courts.²⁴ Inmates can also be provided treatment while in prison or after they are released.²⁵
- **Treatment:** Medication-assisted treatment (MAT) pairs FDA-approved medications (methadone, buprenorphine, or naltrexone) with counseling or cognitive behavioral therapy or other psychosocial services to reduce illicit drug use and address co-occurring mental health disorders. Patients that receive both medications and therapy generally experience better outcomes than patients who only receive one or the other.²⁶

The National Institute on Drug Abuse has established 13 research-backed principles for drug addiction treatment in general.²⁷ Some of the most widely studied behavioral strategies include contingency management (CM), which provides patients with tangible rewards for positive behaviors such as abstinence from drugs and remaining in treatment, and cognitive behavioral therapy (CBT), which teaches patients to identify and correct problematic behaviors.²⁸ Several treatment programs for substance use disorder have been independently reviewed by evidence clearinghouses, including Multidimensional Family Therapy, Multisystemic Therapy, and

Prescribing in Primary Care among Patients with Acute or Chronic Non-cancer Pain," September 6, 2017.

<https://www.pcori.org/sites/default/files/Unsafe-Opioid-Prescribing-Town-Hall-Cycle-2-2017-Presentation-Slides-090617.pdf>

²⁰ SAMHSA, "SAMHSA's Prevention Efforts for Specific Populations," at <https://www.samhsa.gov/prevention/specific-populations>

²¹ Bertha Madras, et al, "Screening, Brief Interventions, Referral to Treatment (SBIRT) for Illicit Drug and Alcohol Use at Multiple Healthcare Sites: Comparison at Intake and Six Months," October 2008. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2760304/>

²² The President's Commission on Combatting Drug Addiction and the Opioid Crisis, "Final Report," November 1, 2017, pp. 43-44, 67. Available at: https://www.whitehouse.gov/sites/whitehouse.gov/files/images/Final_Report_Draft_11-15-2017.pdf; SAMHSA, "Screening, Brief Intervention, and Referral to Treatment (SBIRT)" at <https://www.samhsa.gov/sbirt>

²³ Peter Roy-Byrne, et al., "Brief Intervention for Problem Drug Use in Safety-Net Primary Care Settings," *Journal of the American Medical Association*, August 6, 2014. <https://jamanetwork.com/journals/jama/fullarticle/1892249>; Richard Saitz, "Screening and Brief Intervention for Drug Use in Primary Care," *Journal of the American Medical Association*, August 6, 2014. Available at: <https://jamanetwork.com/journals/jama/fullarticle/1892250>

²⁴ The President's Commission on Combatting Drug Addiction and the Opioid Crisis, "Final Report," November 1, 2017, pp. 72-73. Available at: https://www.whitehouse.gov/sites/whitehouse.gov/files/images/Final_Report_Draft_11-15-2017.pdf; Douglas Marlowe, et al., "Painting the Current Picture: A National Report on Drug Courts and Other Problem-Solving Courts in the United States," National Drug Court Institute, June 2016. <https://www.ndci.org/wp-content/uploads/2016/05/Painting-the-Current-Picture-2016.pdf>; SAMHSA provides about \$60 million per year to expand treatment capacity in drug courts. See: <https://www.samhsa.gov/grants/grant-announcements/ti-18-008>

²⁵ Traci C. Green, et al, "Postincarceration Fatal Overdoses After Implementing Medications for Addiction Treatment in a Statewide Correctional System," February 2018. <https://ohsam.org/2018/02/19/postincarceration-fatal-overdoses-after-implementing-medications-for-addiction-treatment-in-a-statewide-correctional-system/>

²⁶ Pew Charitable Trusts, "Medication-Assisted Treatment Improves Outcomes for Patients with Opioid Use Disorder," p. 5, November 2016. Available at: http://www.pewtrusts.org/~media/assets/2016/11/medicationassistedtreatment_v3.pdf; Kenneth Anderson and April Smith, "Seven Countries That Beat an Overdose Crisis," *The Fix*, May 18, 2017.

<https://www.thefix.com/seven-countries-beat-overdose-crisis> Richard P. Mattick, "Methadone Maintenance Therapy Versus No Opioid Replacement Therapy for Opioid Dependence," *Cochrane Database of Systematic Reviews*, July 8, 2009. Available at: http://www.oregon.gov/oha/HSD/AMH/docs/Methadone_maintenance_therapy_review.pdf;

²⁷ NIDA, "Principles of Drug Addiction Treatment: A Research-Based Guide (Third Edition)." Available at: <https://www.drugabuse.gov/publications/principles-drug-addiction-treatment-research-based-guide-third-edition/principles-effective-treatment>

²⁸ NIDA, "Behavioral Therapies," at: <https://www.drugabuse.gov/publications/principles-drug-addiction-treatment/evidence-based-approaches-to-drug-addiction-treatment/behavioral-therapies>; Karen Dugosh, et al., "A Systematic Review on the Use of Psychosocial Interventions in Conjunction with Medications for the Treatment of Opioid Addiction," *Journal of Addiction Medicine*, March/April 2016. Available at: <https://journals.lww.com/journaladdictionmedicine/Pages/articleviewer.aspx?year=2016&issue=04000&article=00004&type=FullText>

Functional Family Therapy.²⁹

- **Recovery Support Services:** Addiction is a chronic disease that presents a persistent danger of relapse.³⁰ Recovery support services (RSS) can help individuals achieve stable, long-term recovery. Such services are commonly provided by (or in) community or faith-based nonprofit organizations, treatment providers, schools, and other organizations. Services can include ongoing treatment, peer support, supported employment, education, and housing.³¹

Services often vary depending on the population served.³² One set of services backed by strong evidence is supported housing for the homeless.³³

- **Rural Issues / Telehealth:** Although rural issues and telehealth are not discrete categories in the continuum of care, the opioids crisis in the United States is partly (and substantially) a rural one.³⁴ Treatment and support for patients in rural communities can be more challenging because of the distance to specialized clinics or other facilities.³⁵ Studies have suggested that telehealth, where clinical and/or non-clinical services and communication take place between a provider and patient in real-time through assistive technology, is an effective alternative that can lead to greater retention in treatment.³⁶

As this brief review shows, several programs for treating or preventing opioids use disorder exist that are evidence-based. However, they are a small fraction of the total. A broad 2016 Surgeon General's review of all alcohol and drug prevention programs (only some of which were useful for addressing opioid use disorder) found that only 42 of 600 met its criteria as evidence-based.³⁷ Another 2016 systematic review of psychosocial interventions used in opioids treatment found that while some were effective, there were significant gaps in the research.³⁸

Even for interventions backed by research, replication studies are often needed to validate earlier findings.³⁹ A 2017 study of 114 interventions that had been recently reviewed by SAMHSA's evidence clearinghouse found that most had been approved on the basis of a single study.⁴⁰ Many of the studies

²⁹ California Evidence-Based Clearinghouse, "Multidimensional Family Therapy (MDFT)." Available at: <http://www.cebc4cw.org/program/multidimensional-family-therapy/>; California Evidence-Based Clearinghouse, "Multisystemic Therapy (MST)." Available at: <http://www.cebc4cw.org/program/multisystemic-therapy/>; NREPP, "Functional Family Therapy for Adolescent Alcohol and Drug Abuse." Available at: <https://www.nrepp.samhsa.gov/Legacy/ViewIntervention.aspx?id=372>

³⁰ Arthur Robin Williams and Adam Bisaga, "The Opioid Commission: Ringing the Right Alarm to Respond to the Overdose Epidemic," *Health Affairs*, August 21, 2017. Available at: <https://www.healthaffairs.org/doi/10.1377/hblog20170821.061605/full/>

³¹ SAMHSA, "Recovery and Recovery Support," at <https://www.samhsa.gov/recovery>

³² U.S. Department of Health and Human Services, "Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health," 2016, pp. 190-193 of pdf. Available at: <https://www.surgeongeneral.gov/library/2016alcoholdrughealth/index.html>

³³ J-PAL, "Strategies to Combat the Opioid Epidemic," January 5, 2017. Available at: https://www.povertyactionlab.org/sites/default/files/documents/Final_Opioid%20Brief_1.5.17.pdf

³⁴ Centers for Disease Control and Prevention, "Illicit Drug Use, Illicit Drug Use Disorders, and Drug Overdose Deaths in Metropolitan and Nonmetropolitan Areas — United States," October 2017. <https://www.cdc.gov/mmwr/volumes/66/ss/ss6619a1.htm>

³⁵ Sarah Heath, "Convenient Telemedicine Access Reduces Travel, Healthcare Costs," *Patient Engagement HIT*, March 24, 2017. Available at: <https://patientengagementhit.com/news/convenient-telemedicine-access-reduces-travel-healthcare-costs>

³⁶ Joseph Eibl, et al, "The Effectiveness of Telemedicine-delivered Opioid Agonist Therapy in a Supervised Clinical Setting," *Drug and Alcohol Dependence*, July 1, 2017. Available at: [http://www.drugandalcoholdependence.com/article/S0376-8716\(17\)30207-7/fulltext](http://www.drugandalcoholdependence.com/article/S0376-8716(17)30207-7/fulltext)

³⁷ U.S. Department of Health and Human Services, "Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health," 2016, Appendices A and B, pp. 346- 371 of pdf. Available at: <https://www.surgeongeneral.gov/library/2016alcoholdrughealth/index.html>

³⁸ Karen Dugosh, et al., "A Systematic Review on the Use of Psychosocial Interventions in Conjunction with Medications for the Treatment of Opioid Addiction," *Journal of Addiction Medicine*, March/April 2016. Available at: <https://journals.lww.com/journaladdictionmedicine/Pages/articleviewer.aspx?year=2016&issue=04000&article=00004&type=Fulltext>

³⁹ Monya Baker, "First Results from Psychology's Largest Reproducibility Test," *Nature*, April 30, 2015. <https://www.nature.com/news/first-results-from-psychology-s-largest-reproducibility-test-1.17433>; John P.A. Ioannidas, "Contradicted and Initially Stronger Effects in Highly Cited Clinical Research," *JAMA*, July 13, 2005. <https://jama.jamanetwork.com/journals/JAMA/articlepdf/201218/joc50060.pdf>

⁴⁰ Dennis Gorman, "Has the National Registry of Evidence-based Programs and Practices (NREPP) lost its way?". *International*

suffered from methodological problems, including very small and non-representative samples, high rates of study attrition, and brief length of follow-up.

These reviews suggest that more research is needed. Many existing treatment, prevention, and recovery programs need more research to determine their effectiveness. In some cases, existing services have not been validated for opioid use disorder. Larger research questions also warrant further attention, including:⁴¹

- **Prevention:** Which prevention strategies are most effective or cost-effective and for which populations?⁴²
- **Screening and Referral:** What forms of outreach are most likely to cost-effectively identify people in need of treatment?
- **Treatment:** For MAT, which psychosocial interventions work best with which medications and for which populations?⁴³ How can treatment programs be better personalized to the needs of the patient? What are the best strategies for tapering medications without risk of relapse?⁴⁴ How should specialty treatment programs be integrated with primary care?⁴⁵ How can patients be kept engaged in treatment over time?⁴⁶ How should treatment be integrated with other wrap-around social services?
- **Recovery Support Services:** Which support services are most effective for which populations? How long should they be provided?
- **Workforce Issues:** What credentials or training will produce better outcomes for which services? How can workforce turnover be reduced? What training is needed for general healthcare providers? What policies can address shortages of qualified personnel in specific regions?
- **Technology:** How should health IT systems be connected and integrated to facilitate better outcomes? How can telehealth be better utilized? How can technology support more effective delivery of care? How can it be used to prevent relapses?

Journal of Drug Policy, 2017. [www.ijdp.org/article/S0955-3959\(17\)30114-7/fulltext](http://www.ijdp.org/article/S0955-3959(17)30114-7/fulltext)

⁴¹ Except where otherwise specified, most of the identified research gaps are drawn from U.S. Department of Health and Human Services, "Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health," 2016. Available at: <https://www.surgeongeneral.gov/library/2016alcoholdrughealth/index.html>

⁴² Patient-Centered Outcomes Research Institute, "Research Spotlight on Opioid Use," Updated November 2017. <https://www.pcori.org/sites/default/files/PCORI-Research-Spotlight-Opioid-Use.pdf>

⁴³ The Centers for Disease Control (CDC) is currently conducting an epidemiologic study on different types of MAT and the contextual, provider, and individual factors that influence implementation and effectiveness. See: *Federal Register*, "Centers for Disease Control and Prevention: Proposed Data Collection Submitted for Public Comment and Recommendations," June 19, 2017. Available at: <https://www.federalregister.gov/documents/2017/06/19/2017-12736/proposed-data-collection-submitted-for-public-comment-and-recommendations>; Karen Dugosh, et al., "A Systematic Review on the Use of Psychosocial Interventions in Conjunction with Medications for the Treatment of Opioid Addiction," *Journal of Addiction Medicine*, March/April 2016. Available at: <https://journals.lww.com/journaladdictionmedicine/Pages/articleviewer.aspx?year=2016&issue=04000&article=00004&type=Fulltext>

⁴⁴ Joseph W. Frank, et al., "Patient Outcomes in Dose Reduction or Discontinuation of Long-Term Opioid Therapy: A Systematic Review," *Annals of Internal Medicine*, August 1, 2017. <http://annals.org/aim/fullarticle/2643842/patient-outcomes-dose-reduction-discontinuation-long-term-opioid-therapy-systematic>

⁴⁵ Katherine E. Watkins, et al., "Collaborative Care for Opioid and Alcohol Use Disorders in Primary Care," *Journal of the American Medical Association*, October 2017. <https://jamanetwork.com/journals/jamainternalmedicine/article-abstract/2652574>; SAMHSA, "Primary and Behavioral Health Care Integration (PBHCI)." Available at: https://www.integration.samhsa.gov/PBHCI_Program_Profile_2012.pdf ;

⁴⁶ Mark Vogel, "Rethinking Retention in Treatment of Opioid Dependence—The Eye of the Beholder," *International Journal of Drug Policy*, January 2017. <https://www.sciencedirect.com/science/article/pii/S0955395916302985>

Evidence Building

Historically, SAMHSA's primary focus has been programmatic, not research-oriented. The 1992 legislation that created the agency also moved the National Institute on Drug Abuse (NIDA) and most of the other research functions of its predecessor agency – the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA) – to NIH.⁴⁷ Today, the agencies regularly collaborate to help service providers adopt practices that are evidence-informed.

As of late 2017, NIH was spending about \$116 million on opioid use disorder research, primarily through NIDA.⁴⁸ In April 2018, the agency announced a new initiative to increase this funding following recent action by Congress.⁴⁹ This research is focused primarily on developing medication-based treatments, overdose antidotes, and alternative pain medications.

SAMHSA has maintained a role in practitioner-oriented applied research. This has included implementing a variety of demonstration programs intended to help disseminate research findings to the field.⁵⁰ It has also included tracking the implementation and performance of its programs. Current or planned evidence-building activities at SAMHSA include:

- **Federally-Funded Research:** In FY 2017, SAMHSA spent \$31.5 million, just under one percent of its \$3.78 billion budget, on 16 evaluations. SAMHSA's evaluations are decentralized and typically funded from congressionally mandated set-asides for evaluation or technical assistance within its larger grants. This work is overseen by the Center for Behavioral Health Statistics and Quality (CBHSQ).⁵¹

The 21st Century Cures Act further expanded SAMHSA's evidence-building role by authorizing \$14 million for FY 2018-2020 for a newly-created Policy Lab.⁵² These funds are intended to evaluate promising models or improve, expand, or replicate evidence-based models.

- **Establishing an Evaluation Strategy:** Some federal agencies have established learning agendas to identify and prioritize major research questions that need to be answered to improve program performance.⁵³ Learning agendas can also identify the appropriate research methods needed to answer such questions. One example is the Research Roadmap developed by HUD.⁵⁴

SAMHSA is currently working to develop an agency-wide evaluation strategy.⁵⁵ Opioid abuse was the first topic addressed as part of this process, which included an inventory of all evaluations conducted between FY 2011 and FY 2017.⁵⁶ Ideally, such efforts should identify and prioritize applied research gaps that are not being addressed by other agencies, such as CDC or NIDA.

⁴⁷ Public Law 102-321. See: <https://www.congress.gov/bill/102nd-congress/senate-bill/1306>

⁴⁸ Elizabeth O'Brien, "Here's What It Would Cost to Fix the Opioid Crisis, According to 5 Experts," *Money*, November 27, 2017. Available at: <http://time.com/money/5032445/cost-fix-opioid-crisis/>

⁴⁹ National Institutes of Health, "NIH Launches HEAL Initiative, Doubles Funding to Accelerate Scientific Solutions to Stem National Opioid Epidemic," April 4, 2018. <https://www.nih.gov/news-events/news-releases/nih-launches-heal-initiative-doubles-funding-accelerate-scientific-solutions-stem-national-opioid-epidemic>

⁵⁰ GAO, "Emerging Drug Problems: Despite Changes in Detection and Response Capability, Concerns Remain," July 1998, pp. 15-16. Available at: <https://www.gao.gov/products/HEHS-98-130>

⁵¹ Results for America, "Federal Invest in What Works Index (2017)," October 2017, pp. 3, 13. Available at: http://2017.results4america.org/wp-content/uploads/2017/10/2017_Federal_Index-FINAL.pdf; SAMHSA, "Evaluation Services," September 2016. <https://www.samhsa.gov/data/evaluation-services>

⁵² 42 U.S. Code § 290aa-0. See: <https://www.law.cornell.edu/uscode/text/42/290aa%E2%80%930>

⁵³ The White House, "Analytical Perspectives: Budget of the U.S. Government Fiscal Year 2018," pp. 55-56. Available at: <https://www.gpo.gov/fdsys/pkg/BUDGET-2018-PER/pdf/BUDGET-2018-PER.pdf>. The process of developing a learning agenda is described in: USAID Learning Lab, "Learning Agenda," January 25, 2017. Available at: <https://usaidlearninglab.org/library/learning-agenda>

⁵⁴ HUD, "HUD Research Roadmap: 2017 Update," January 2017. Available at: <https://www.huduser.gov/portal/pdf/ResearchRoadmap-2017Update.pdf>

⁵⁵ Communication from SAMHSA, March 30, 2018.

⁵⁶ Results for America, "Federal Invest in What Works Index (2017)," October 2017, p. 9. Available at: http://2017.results4america.org/wp-content/uploads/2017/10/2017_Federal_Index-FINAL.pdf

- **Tiered Evidence Grants:** SAMHSA is exploring the creation of a tiered evidence grant to further build out the evidence base. President Trump's FY 2018 budget request included a proposal to implement a tiered evidence strategy to support Screening, Brief Intervention, and Referral to Treatment (SBIRT).⁵⁷

Sen. Todd Young (R-IN) has introduced legislation that would create a broader tiered evidence grant program at SAMHSA focused on opioids use disorder.⁵⁸ Some analysts have suggested that such an initiative is needed to fill evidence gaps.⁵⁹

Tiered evidence grants commonly offer smaller grants for field-generated, early-stage innovations, mid-phase grants for validating programs that have some evidence of effectiveness, and larger expansion grants intended to scale programs with high levels of evidence.⁶⁰ Many existing federal grant programs could be transformed into tiered grant programs without a change to current law, possibly including grant programs already administered by SAMHSA.⁶¹

Evidence Use

The existence of evidence-based programs and practices does not guarantee their use. Researchers and clinicians often suggest that it takes an average of 17 years for research results to make their way into practice.⁶² Once in place, practices that have been shown to be ineffective can also linger for many years.⁶³

The delivery of unproven care can expose patients to health risks. The epidemic of opioid use began, in part, because of a poor understanding of addiction risks when using them to manage pain.⁶⁴ Even when interventions do not pose direct risks to the patient, those that are ineffective can consume limited budgetary resources, divert patients from more effective care, and cost lives.

A large portion of opioids-related care is insufficiently evidence-based. For example, while research indicates that patients experience better outcomes with medication-assisted treatment that pairs methadone, buprenorphine, or naltrexone with counseling or cognitive behavioral therapy,⁶⁵ most substance abuse treatment facilities do not offer, and most of their clients do not receive, this combination of services.⁶⁶ Although many individuals with addiction also experience co-occurring mental health conditions, only half of substance abuse treatment facilities provide comprehensive mental health

⁵⁷ Results for America, "Federal Invest in What Works Index (2017)," October 2017, p. 45. Available at:

http://2017.results4america.org/wp-content/uploads/2017/10/2017_Federal_Index-FINAL.pdf

⁵⁸ S. 2626, introduced March 22, 2018. Available at: <https://www.congress.gov/bill/115th-congress/senate-bill/2626/>

⁵⁹ Andrew Feldman, Richard Franks, and Christopher Spera, "Fighting the Opioid Epidemic with Evidence and Innovation," *Government Executive*, August 22, 2017. Available at: <http://www.govexec.com/excellence/promising-practices/2017/08/fighting-opioid-epidemic-evidence-and-innovation/140429/>

⁶⁰ Andrew Feldman and Ron Haskins, "Tiered-Evidence Grantmaking," Evidence-Based Policymaking Collaborative, September 9, 2016. Available at: <http://www.evidencecollaborative.org/toolkits/tiered-evidence-grantmaking>

⁶¹ Ibid.

⁶² Cindy L. Munro and Richard H. Savel, "Narrowing the 17-Year Research to Practice Gap," *American Journal of Critical Care*, May 2016. <http://ajcc.aacnjournals.org/content/25/3/194.full>; Zoë Slote Morris, Steven Wooding, and Jonathan Grant, "The Answer is 17 years, What is the Question: Understanding Time Lags in Translational Research," *Journal of the Royal Society of Medicine*, December 16, 2011. <http://journals.sagepub.com/doi/full/10.1258/jrsm.2011.110180>

⁶³ David Epstein and Propublica, "When Evidence Says No, but Doctors Say Yes," *The Atlantic*, February 22, 2017. <https://www.theatlantic.com/health/archive/2017/02/when-evidence-says-no-but-doctors-say-yes/517368/>; Justin Timbie, et al., "Five Reasons That Many Comparative Effectiveness Studies Fail to Change Patient Care and Clinical Practice," *Health Affairs*, October 2012. <https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2012.0150>; Austin Frakt, "Information Overload," *The Incidental Economist*, January 27, 2012. <http://theincidentaleconomist.com/wordpress/information-overload/>; Victor R. Fuchs and Arnold Milstein, "\$640 Billion Question — Why Does Cost-Effective Care Diffuse So Slowly?," *New England Journal of Medicine*, May 26 2011. <http://www.nejm.org/doi/full/10.1056/NEJMp1104675>

⁶⁴ Sonia Moghe, "Opioid History: From 'Wonder Drug' to Abuse Epidemic," CNN, October 2016. <https://www.cnn.com/2016/05/12/health/opioid-addiction-history/index.html>

⁶⁵ Pew Charitable Trusts, "Medication-Assisted Treatment Improves Outcomes for Patients with Opioid Use Disorder," p. 5, November 2016. Available at: http://www.pewtrusts.org/~media/assets/2016/11/medicationassistedtreatment_v3.pdf

⁶⁶ SAMHSA, "National Survey of Substance Abuse Treatment Services (N-SSATS): 2016," July 2017, pp. 2, 12-13, 39, 41, 67. https://www.samhsa.gov/data/sites/default/files/2016_NSSATS.pdf

assessment or diagnosis.⁶⁷ Inadequate treatment may contribute to patient relapse.⁶⁸

Public policy changes can incentivize greater evidence use. For example, coverage determinations by the Centers for Medicare and Medicaid Services (CMS) for Medicare beneficiaries are increasingly being tied to CMS-reviewed clinical evidence and recommendations in clinical guidelines.⁶⁹ At the direction of Congress, SAMHSA has taken actions to speed the use of evidence in the Mental Health Block Grant program.⁷⁰

More could be done to encourage the adoption of evidence-based treatment and prevention programs for opioids use disorder. Options include:

- **Expanded Use of MAT:** Despite the evidence supporting the effectiveness of MAT for treating opioid user disorder, relatively few people receive it. One 2017 review found that only 16.7 percent of people hospitalized for opioid addiction received an FDA-approved medication within 30 days.⁷¹

There are several reasons for the limited availability of MAT. Stigma and provider perceptions about its effectiveness, especially the use of methadone, can prevent individuals from seeking it and reduce its availability.⁷²

Regulation also plays an important role.⁷³ Two of the three medications used for MAT, methadone and buprenorphine, are regulated under the federal Controlled Substances Act. Methadone usually must be administered on-site by SAMHSA-certified Opioid Treatment Programs (OTPs).⁷⁴ Most OTPs are located in urban areas, which can make access more difficult for rural patients. Buprenorphine can be prescribed by a qualified practitioner who has a waiver from SAMHSA and is registered with the Drug Enforcement Administration, but there are regional disparities in the number of waived physicians that inhibit access in some areas.⁷⁵ Shortages of waived physicians are positively correlated with states' rates of overdose deaths.⁷⁶

Funding is also an important determinant. MAT can be expensive.⁷⁷ Many individuals with opioid use disorder lack sufficient insurance.⁷⁸ Public funding can make up for these shortfalls. SAMHSA provides funding to states through its MAT Prescription Drug and Opioid Addiction (MAT-PDOA) and State Targeted Response (STR) programs.⁷⁹ It also provides MAT training to medical

⁶⁷ Ibid., pp. 20, 47.

⁶⁸ CASA Columbia National Advisory Commission on Addiction Treatment, "Ending the Opioid Crisis: A Practical Guide for State Policymakers," October 2017, p. 45. <https://www.centeronaddiction.org/addiction-research/reports/ending-opioid-crisis-practical-guide-state-policymakers>

⁶⁹ James Chambers, et al., "Medicare Is Scrutinizing Evidence More Tightly for National Coverage Determinations," *Health Affairs*, February 2015. <https://www.healthaffairs.org/doi/10.1377/hlthaff.2014.1123>

⁷⁰ Thomas Insel and Pamela Hyde, "From Research to Practice," SAMHSA Blog, June 17, 2014. Available at: <https://blog.samhsa.gov/2014/06/17/from-research-to-practice/>

⁷¹ Sarah Naeger, et al., "Prescriptions Filled Following an Opioid-Related Hospitalization," *Psychiatric Services*, June 1, 2016. Available at: <https://ps.psychiatryonline.org/doi/10.1176/appi.ps.201500538>

⁷² GAO, "Opioid Addiction: Laws, Regulations, and Other Factors Can Affect Medication-Assisted Treatment Access," September 2016, pp. 15-17. Available at: <https://www.gao.gov/products/GAO-16-833>; Maia Szalavitz, "The Wrong Way to Treat Opioid Addiction," *The New York Times*, January 17, 2018. <https://www.nytimes.com/2018/01/17/opinion/treating-opioid-addiction.html>

⁷³ GAO, "Opioid Addiction: Laws, Regulations, and Other Factors Can Affect Medication-Assisted Treatment Access," September 2016. Available at: <https://www.gao.gov/products/GAO-16-833>

⁷⁴ Ibid., p. 12.

⁷⁵ Hannah Knudsen, "The Supply of Physicians Waivered to Prescribe Buprenorphine for Opioid Use Disorders in the United States: A State-Level Analysis," *Journal of Studies on Alcohol and Drugs*, July 2015. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4495082/>

⁷⁶ Ibid.

⁷⁷ NIDA, "Medications to Treat Opioid Addiction," January 2018. Available at: <https://www.drugabuse.gov/publications/research-reports/medications-to-treat-opioid-addiction/how-much-does-opioid-treatment-cost>

⁷⁸ GAO, "Opioid Addiction: Laws, Regulations, and Other Factors Can Affect Medication-Assisted Treatment Access," September 2016, pp. 17-18. Available at: <https://www.gao.gov/products/GAO-16-833>

⁷⁹ SAMHSA, "State Grant Programs." Available at: <https://www.samhsa.gov/programs-campaigns/medication-assisted-treatment/training-materials-resources/state-grant-programs#mat-pdoa>

professionals through its Provider's Clinical Support System (PCSS) program.⁸⁰ Medicaid also provides access to MAT for eligible populations.⁸¹

- **Evidence Requirements in SAMHSA Grants:** SAMHSA already includes some evidence requirements in its grants. Standard grant language directs applicants to: (1) show that the selected evidence-based practices are appropriate for intended outcomes; (2) explain how they meet SAMHSA's goals for the grant program; (3) describe any modifications or adaptations; (4) explain why they were selected; (5) justify the use of multiple evidence-based practices, if applicable, and (6) discuss training needs or plans to ensure successful implementation.⁸²

Starting in FY 2014, Congress directed SAMHSA to reserve 5 percent of Mental Health Block Grant funding for evidence-based services for people with early serious mental illness.⁸³ Congress raised this set-aside to 10 percent in FY 2016.⁸⁴ Participating states have committed to evaluating program effectiveness and fidelity.⁸⁵

Congress could create similar evidence-based set-asides for SAMHSA's substance use block grant programs. It could also use different tiers of evidence (strong, moderate, or promising) and reserve higher levels of funding for programs with higher levels of evidence.

Tiered funding structures of this kind have been applied in federal tiered evidence grants for several years.⁸⁶ They are also increasingly being applied in larger federal competitive and mandatory grant programs, including in K-12 education, child welfare, and employment service programs.⁸⁷ New federal child welfare legislation enacted by Congress in February, which includes funding for preventive mental health and substance abuse programs, requires not 5 percent, but at least 50 percent of new funding for these prevention programs to meet its highest (well-supported) evidence standard.⁸⁸

- **Evidence Clearinghouse & Technical Assistance:** SAMHSA's National Registry of Effective Prevention Programs (NREPP) functions as the agency's evidence clearinghouse, reviewing and rating studies of substance use and mental health programs. Reliable third-party reviews of program evaluations can help states and communities identify programs that are evidence-based.⁸⁹ Such ratings are especially important if states and other grantees are asked to meet evidence standards to receive competitive or mandatory grant funding, as described above.

⁸⁰ SAMHSA, "Cooperative Agreement for the Provider's Clinical Support System - Medication Assisted Treatment," November 5, 2015. Available at: <https://www.samhsa.gov/grants/grant-announcements/ti-16-003>

⁸¹ Suzanne Rinaldo, "Availability Without Accessibility? State Medicaid Coverage and Authorization Requirements for Opioid Dependence Medications," 2013 in American Society of Addiction Medicine, "Advancing Access to Addiction Medications," July 2013. Available at: https://www.asam.org/docs/default-source/advocacy/aaam_implications-for-opioid-addiction-treatment_final

⁸² Results for America, "Federal Invest in What Works Index (2017)," October 2017, p. 30. Available at: http://2017_results4america.org/wp-content/uploads/2017/10/2017_Federal_Index-FINAL.pdf

⁸³ Thomas Insel and Pamela Hyde, "From Research to Practice," SAMHSA Blog, June 17, 2014. Available at: <https://blog.samhsa.gov/2014/06/17/from-research-to-practice/>

⁸⁴ SAMHSA, "Guidance for Revision of the FY 2016-2017 Block Grant Application for the New 10 percent Set-aside," February 8, 2016. Available at: <https://www.samhsa.gov/sites/default/files/mhbg-5-percent-set-aside-guidance.pdf>

⁸⁵ Marcela Horvitz-Lennon, et al., "Case Study: Early Assessment of the Mental Health Block Grant Set-Aside Program for Addressing First Episode Psychosis and Other Early Serious Mental Illness," September 29, 2015. Available at: <https://aspe.hhs.gov/report/case-study-early-assessment-mental-health-block-grant-set-aside-program-addressing-first-episode-psychosis-and-other-early-serious-mental-illness/introduction-and-background>

⁸⁶ Andrew Feldman and Ron Haskins, "Tiered-Evidence Grantmaking," Evidence-Based Policymaking Collaborative, September 9, 2016. Available at: <http://www.evidencecollaborative.org/toolkits/tiered-evidence-grantmaking>

⁸⁷ Patrick Lester, "Evidence-based Child Welfare Legislation Enacted," Social Innovation Research Center, February 9, 2018. Available at: <http://www.socialinnovationcenter.org/archives/3153>; Patrick Lester, "New Evidence-based Reemployment Services Program," Social Innovation Research Center, February 13, 2018. Available at:

<http://www.socialinnovationcenter.org/archives/3271>; Patrick Lester, "K-12 Education Bill Advances Evidence-based Policy, Replaces i3," Social Innovation Research Center, December 7, 2015. Available at: <http://www.socialinnovationcenter.org/archives/1806>

⁸⁸ Patrick Lester, "Evidence-based Child Welfare Legislation Enacted," Social Innovation Research Center, February 9, 2018. Available at: <http://www.socialinnovationcenter.org/archives/3153>;

⁸⁹ In 2017, the agency established the NREPP Learning Center to provide such assistance. See: <https://nrepp-learning.samhsa.gov/>

However, the clearinghouse has come under significant criticism over the past year. According to a third-party review published in 2017, many of the programs approved for inclusion in the clearinghouse were insufficiently evidence-based.⁹⁰ On January 11, 2018, SAMHSA issued a statement criticizing the clearinghouse for including “a biased, self-selected series of interventions” with ratings that were unreliable or irrelevant to the disorders they were claimed to treat.⁹¹

In the fall of 2017, NREPP stopped publishing new program reviews. SAMHSA later terminated the contract with the organization overseeing its development.⁹² The agency has since indicated that it is moving away from a NREPP-like listing of evidence-based programs and is planning to replace it with a web-based resource center coupled with new regional and locally-based technical assistance.⁹³ The new resource center reportedly will not include the program-specific evidence ratings that were provided by NREPP.⁹⁴

Much of the new technical assistance will be provided with the help of the American Academy of Addiction Psychiatry.⁹⁵ Some outside observers have suggested that these changes will produce a greater emphasis on medically-based approaches to treatment.⁹⁶

- **Integrating Evidence into OTP Certifications, Accreditation, Oversight, and Quality Improvement Efforts:** Opioid Treatment Programs (OTPs), which provide MAT to people diagnosed with opioid use disorder, must be certified by SAMHSA’s Division of Pharmacologic Therapies (DPT) to operate.⁹⁷ Current regulations allow DPT to focus its oversight on improving treatment, not just ensuring that OTPs are meeting regulatory criteria. Such efforts also include subjecting OTPs to accreditation by SAMHSA-approved accrediting bodies, which includes site visits to ensure that facilities are meeting nationally-recognized standards.

Regulations are a potentially useful policy tool for encouraging the use of evidence-based practices.⁹⁸ Research has suggested that quality rating systems and quality improvement efforts may increase the use of evidence-based practices.⁹⁹

SAMHSA has encouraged OTPs to engage in continuous quality improvement through the use of quality control plans, which must be reviewed annually.¹⁰⁰ The agency could periodically review

⁹⁰ Dennis Gorman, "Has the National Registry of Evidence-based Programs and Practices (NREPP) lost its way?". *International Journal Of Drug Policy*, 2017. [www.ijdp.org/article/S0955-3959\(17\)30114-7/fulltext](http://www.ijdp.org/article/S0955-3959(17)30114-7/fulltext)

⁹¹ SAMHSA, "Statement of Elinore F. McCance-Katz, MD, PhD, Assistant Secretary for Mental Health and Substance Use regarding the National Registry of Evidence-based Programs and Practices and SAMHSA's new approach to implementation of evidence-based practices (EBPs)," January 11, 2018. <https://www.samhsa.gov/newsroom/press-announcements/201801110330>

⁹² Patrick Lester, "Trump Administration Terminates SAMHSA Evidence Clearinghouse Amid Questions About Its Objectivity," v, January 11, 2018. Available at: <http://www.socialinnovationcenter.org/archives/2771>

⁹³ SAMHSA communication, March 30, 2018; SAMHSA, "SAMHSA Revamping TA-Contractors Model to Deliver More Support to American Communities," March 22, 2018. <https://blog.samhsa.gov/2018/03/22/samhsa-revamping-ta-contractors-model-to-deliver-more-support-to-american-communities/>

⁹⁴ SAMHSA communication, March 30, 2018

⁹⁵ SAMHSA, "SAMHSA Announces New Efforts to Advance Evidence-Based Practices for Opioid Use and Serious Mental Illness," January 17, 2018. <https://www.samhsa.gov/newsroom/press-announcements/201801170130>; Bill Myers, "Group With Ties to Trump Opioid Chief Scores Big," *Who. What. Why*, April 5, 2018. <https://whowhatwhy.org/2018/04/05/group-with-ties-to-trump-opioid-chief-scores-big/>

⁹⁶ Benedict Carey and Sheri Finkmay, "Trump's Pick for Mental Health 'Czar' Highlights Rift," *The New York Times*, May 24, 2017. <https://www.nytimes.com/2017/05/24/health/mental-health-czar-elinore-mccance-katz.html>;

⁹⁷ SAMHSA, "Certification of Opioid Treatment Programs (OTPs)," updated September 28, 2015. <https://www.samhsa.gov/medication-assisted-treatment/opioid-treatment-programs>

⁹⁸ Cary Coglianese and Todd Rubin, "Learning What Works in Regulation," *The Regulatory Review*, March 7, 2018. Available at: <https://www.theregreview.org/2018/03/07/coglianese-rubin-learning-what-works-regulation/>

⁹⁹ Lawrence A. Palinkas and Patricia Chamberlain, "Children and Youth Services Review, Use of Research Evidence and Implementation of Evidence-Based Practices in Youth-Serving Systems," *Children and Youth Services Review*, November 2017. Available at: https://www.researchgate.net/publication/320886688_Use_of_Research_Evidence_and_Implementation_of_Evidence-Based_Practices_in_Youth-Serving_Systems

¹⁰⁰ SAMHSA, "Federal Guidelines for Opioid Treatment Programs," January 2015, p. 15. Available at:

these requirements and other guidelines and regulations to ensure that they encourage the use of the latest evidence-based practices and procedures.¹⁰¹

According to its authorizing legislation, SAMHSA's new Policy Lab is required to collect, evaluate, and disseminate information on evidence-based practices.¹⁰² These efforts could inform SAMHSA's oversight and quality improvement efforts with OTPs.

- **Value-Based Payments:** Value-based payments are another possible strategy for encouraging the use of evidence-based practices and programs. More states are adopting value-based payment strategies, including in behavioral health.¹⁰³ Some state Medicaid programs are also beginning to use value-based payments to address opioid use disorders.¹⁰⁴ Social determinants of health care, a central focus of opioids prevention efforts, are also increasingly being considered as part of this broader effort.¹⁰⁵

Value-based payments could produce better outcomes. One literature review of performance-based payments in behavioral health found that they were associated with increased access and continuity of treatment, treatment competence, and participation in quality improvement initiatives.¹⁰⁶ For example, a 2011 study of pay-for-performance in a community substance abuse clinic found that paying cash bonuses to counselors increased client retention rates.¹⁰⁷

Value-based payments also face certain limitations, however. Factors that have hindered their use include a limited number of quality measures for opioid treatment that have been tested for validity and feasibility.¹⁰⁸ High-risk and high-cost patients also present challenges under value-based care.¹⁰⁹

Addressing these limitations could pave the way for increased use of value-based payments in SAMHSA-funded programs, potentially creating incentives to adopt evidence-based practices, improve the quality of care, and lower costs.¹¹⁰ HHS Secretary Alex Azar recently indicated that value-based care is a departmental priority.¹¹¹ In 2018, SAMHSA and the HHS Health Resources and Services Administration launched an innovation community devoted to value-based care.¹¹²

<https://store.samhsa.gov/shin/content/PEP15-FEDGUIDEOTP/PEP15-FEDGUIDEOTP.pdf>

¹⁰¹ SAMHSA, "MAT Legislation, Regulations, and Guidelines," updated January 18, 2018. <https://www.samhsa.gov/programs-campaigns/medication-assisted-treatment/legislation-regulations-guidelines>

¹⁰² 42 U.S. Code § 290aa–0(b). See: <https://www.law.cornell.edu/uscode/text/42/290aa%E2%80%930>

¹⁰³ Jacqueline Belliveau, "Value-Based Purchasing Top Health Reform Priority for Governors," *RevCycle Intelligence*, March 1, 2018. Available at: <https://revcycleintelligence.com/news/value-based-purchasing-top-health-reform-priority-for-governors>; Michelle Herman Soper, et al., "Moving Toward Value-Based Payment for Medicaid Behavioral Health Services," Center for Health Care Strategies, June 2017. Available at: <https://www.chcs.org/media/VBP-BH-Brief-061917.pdf>

¹⁰⁴ Joshua Barrett, et al., "Value-Based Payment As Part Of A Broader Strategy To Address Opioid Addiction Crisis," *Health Affairs*, December 1, 2017. Available at: <https://www.healthaffairs.org/doi/10.1377/hblog20171130.772229/full>; CMS Medicaid Innovation Accelerator Program (IAP), "Clinical Pathways & Payment Bundles for Medication Assisted Treatment," January 17, 2017. Available at: <https://www.medicaid.gov/state-resource-center/innovation-accelerator-program/iap-downloads/reducing-substance-use-disorders/nds5mat-webinar.pdf>

¹⁰⁵ Sarah Heath, "Using Social Determinants of Health in Patient-Centered Care," *Patient Engagement HIT*, June 15, 2017. Available at: <https://patientengagementhit.com/news/using-social-determinants-of-health-in-patient-centered-care>

¹⁰⁶ Rebecca E. Stewart, et al. "Can We Pay for Performance in Behavioral Health Care?", *Psychiatric Services*, 2017. Available at: <https://ps.psychiatryonline.org/doi/pdf/10.1176/appi.ps.201600475>

¹⁰⁷ Ryan Vandrey, et al., "Pay-for-Performance in a Community Substance Abuse Clinic," *Journal of Substance Abuse Treatment*, September 2011. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3144289/>

¹⁰⁸ Ibid.

¹⁰⁹ Maria Castellucci, "Physicians with High-risk Patients Struggle Under Value-based Pay Model," *Modern Healthcare*, August 2, 2017. Available at: <http://www.modernhealthcare.com/article/20170802/NEWS/170809968>; Patrick Lester, "Medicare Value-based Care Program Penalizes Physicians Serving High-risk Patients," Social Innovation Research Center, August 5, 2107. Available at: <http://www.socialinnovationcenter.org/archives/2727>

¹¹⁰ Ibid.

¹¹¹ David Lim, "Azar Says HHS Could Intervene to 'Uncomfortable Degree' to Achieve Value," *Healthcare Dive*, March 6, 2018. Available at: <https://www.healthcaredive.com/news/azar-says-hhs-could-intervene-to-uncomfortable-degree-to-achieve-value/518474/>

¹¹² SAMHSA-HRSA Center for Integrated Health Solutions. https://www.integration.samhsa.gov/about-us/innovation_communities_2018#value_based_payment_IC

SAMHSA's Policy Lab could devote some of its evaluation funding to validating measures and testing the effectiveness of value-based payments in opioids treatment and prevention programs.

Recommendations

With tens of thousands of Americans dying annually from opioid use disorder, it is imperative that federal funds be spent on proven prevention, treatment, and recovery programs. This goal could be furthered through the following concrete steps:

- **Congress Should Support More Research on Evidence-based Opioids Use Prevention, Treatment, and Recovery Programs:** Some programs and practices have been shown to be effective for addressing opioid use disorder for some populations, but most are not backed by rigorous research. Those that are research-based often require further study to validate earlier findings. Many larger research questions remain unanswered.

Congress has funded research by the National Institute on Drug Abuse. However, this research has been primarily focused on developing medication-based treatments, overdose antidotes, and alternative pain medications.

Comparably little has been invested to determine the effectiveness of SAMHSA-funded prevention, treatment, and recovery services. To address this shortfall, Congress should consider supporting a tiered evidence grant program at SAMHSA.

- **Congress Should Ensure that Most SAMHSA Funds Are Spent on Interventions that are Supported by Rigorous Research:** As indicated above, a large portion of existing opioids-related interventions are insufficiently evidence-based. Spending limited public funds on ineffective care is wasteful, diverts patients from more effective care, and can result in lost lives.

Congress should promote greater use of evidence-based interventions through the following policy changes, including: (1) providing greater funding for, and lowering existing barriers to, the use of MAT; (2) including stronger evidence requirements in SAMHSA's substance use-related grants; (3) creating a tiered evidence program at SAMHSA (as described above); (4) better incorporating evidence requirements in Opioid Treatment Program regulations, certifications, and accreditation; and (5) exploring greater use of value-based payments to providers.

- **SAMHSA's New Strategy for Supporting Evidence-based Interventions Should Be Monitored to Determine Its Effectiveness:** SAMHSA's leadership is planning, or has implemented, several new policies to support the use of evidence-based programs. These have included replacing its existing evidence clearinghouse with a new online resource center. It is also replacing existing technical assistance providers with a new regional and locally-based system of assistance.

It is unclear how effective these new strategies will be. While the agency's clearinghouse, the National Registry of Effective Prevention Programs (NREPP), was criticized for insufficient rigor in its reviews, it is not clear that its successor will include any program-specific reviews or ratings. Absent reliable third-party reviews, it may be difficult for local administrators to choose programs that are backed by rigorous research.

Moreover, effective implementation of evidence-based programs usually requires fidelity to an existing program model, often with the oversight and assistance of the model developer.¹¹³ It is unclear whether SAMHSA's new approach to technical assistance will be able to successfully

¹¹³ Christopher Carroll, et al., "A Conceptual Framework for Implementation Fidelity," *Implementation Science*, 2007. <https://implementationscience.biomedcentral.com/articles/10.1186/1748-5908-2-40>

meet these needs. SAMHSA's new strategy for promoting and supporting evidence-based programs should be closely monitored to determine its impact.

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