

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active. Contents lists available at ScienceDirect



Journal of Substance Abuse Treatment

journal homepage: www.elsevier.com/locate/jsat

Access to substance use disorder treatment during COVID-19: Implications from reduced local jail populations



Erkmen G. Aslim^{a,*}, Murat C. Mungan^b

^a Seidman College of Business, Grand Valley State University, 50 Front Avenue SW, Grand Rapids, MI, USA
 ^b Antonin Scalia Law School, George Mason University, 3301 Farifax Dr, Arlington, VA 22201, USA

ABSTRACT

Many states have responded to the spread of COVID-19 by implementing policies which have led to a dramatic reduction in jail populations. We consider the benefits associated with providing the population of individuals who would, but for these policies, be incarcerated with substance use disorder (SUD) treatment. We discuss problems that may prevent this population from receiving SUD treatment as well as policies which may mitigate these problems.

Many states have responded to the spread of COVID-19 by implementing policies which have led to a dramatic reduction in jail populations (PPI, 2020, Marcum, 2020 and Fig. 1, below). A large proportion of individuals who would be incarcerated but for these new policies are likely to have substance use disorders (SUDs) (Belenko and Peugh, 2005; Mumola and Karberg, 2006). Failing to provide medical care for these individuals carries exceptionally large social costs (Wakeman, McKinney and Rich, 2009) partly due to the harms that may come about from criminal propensities of a sub-set of individuals within this group, which could substantially be mitigated through appropriate medical care (Aslim, Mungan, Navarro, and Yu, 2019; He and Barkowski, 2020; Vogler, 2020). Moreover, because the spread of COVID-19 exacerbates existing barriers and expected costs to receiving conventional SUD treatments,¹ there is an important risk that many of these individuals will not receive the SUD treatments they need. Thus, it is likely that the pandemic not only increased the number of individuals in need of SUD treatment, but also reduced the average propensity of individuals in need to receive such treatment. Of course, the pandemic may have contributed to similar access problems among the general population. However, given the unusual drop in jail populations as well as the exceptional SUD-related risks associated with this group, we limit our focus on the channels through which the pandemic may have exacerbated access to SUD treatment problems within this population. With the limited information that is already available, we consider potential methods to mitigate this problem.

In the United States, 2.3 million people are incarcerated each year, and about one-third of this population is confined in local jails (Sawyer and Wagner, 2020). About two-thirds of inmates who were sentenced in local jails meet the DSM-IV² criteria for drug dependence or abuse (Bronson, Stroop, Zimmer and Berzofsky, 2017). To flatten the curve³ against the spread of COVID-19, local jails have downsized their population. Fig. 1 shows the changes in local jail populations (thick curve). The break in the trend corresponds to March 16, 2020, which is the date that the White House released COVID-19 guidelines for America. This downward trend is partially a result of local jails responding to the pandemic by either lowering the bar for releases or enhancing the requirements for detention (see, e.g., UCLA Law, 2020 providing a detailed breakdown of jail releases by types of release across different states). Given the evidence that most individuals cycling through the criminal justice system have serious substance use and addiction problems, the reduction in jail populations creates an increase in the number of unincarcerated individuals with potential behavioral health problems during the COVID-19 pandemic.

There are obvious private costs to individuals who have SUDs and are unable to receive care. Releasing individuals from incarceration without providing them adequate SUD treatment is actually likely to increase such costs born by these individuals, since the average inmate has access to some SUD treatment while incarcerated (Karberg and James, 2005).⁴ Moreover, a failure to provide SUD care for these individuals also carries

² Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition.

https://doi.org/10.1016/j.jsat.2020.108147

Received 10 May 2020; Received in revised form 12 August 2020; Accepted 21 September 2020 Available online 25 September 2020

0740-5472/ © 2020 Elsevier Inc. All rights reserved.

^{*} Corresponding author.

E-mail addresses: aslime@gvsu.edu (E.G. Aslim), mmungan@gmu.edu (M.C. Mungan).

¹ These barriers and costs include increased risks associated with social interactions (NIDA, 2020), heightened preventive measures one has to comply with (ASAM, 2020), limited access to outpatient addiction providers (D'Onofrio, Venkatesh and Hawk, 2020), and deprioritization of SUD patients (Volkow, 2020 describes how individuals with SUD may be deprioritized if they present with COVID-19 symptoms and SAMSHA, 2020a advises that inpatient treatment options should not be provided for SUD unless there are suicidal tendencies or life threatening SUDs.). We discuss these in further detail, below.

 $^{^{3}}$ This is a popular phrase that refers to the idea of implementing policies to shift the distribution of active cases over time with the goal of reducing the number of cases in the peak of the epidemic.

⁴ See, e.g., Pelissier et al. (2001) for the effectiveness of residential drug treatment programs in federal prisons.

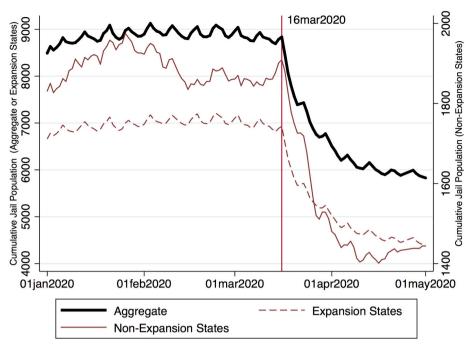


Fig. 1. Cumulative Local Jail Population, January 1, 2020-May 1, 2020.

Note: The sample includes a balanced panel of 56 local jails. Data were obtained from the Jail Data Initiative of Public Safety Lab at NYU (https://publicsafetylab. org/jail-data-initiative).

social costs in the form of future offenses that may be committed by a subset of these individuals, which they cannot otherwise commit while incarcerated. Prior work suggests that health coverage is an effective tool in reducing crime through access to SUD treatment (Wen, Hockenberry and Cummings, 2017). Consistently with this literature, Aslim et al. (2019) provide both theoretical and empirical support that access to SUD treatment is a potential channel through which Medicaid reduces the likelihood of recidivism. Therefore, limitations in accessing substance use treatment is likely to contribute to higher crime rates.

Given these risks, we identify potential constraints for released inmates to access substance use treatment and propose policy actions. First, we do not observe any systematic differences in the reduction of jail populations across expansion and non-expansion states (see solid and dashed red lines in Fig. 1). Most justice-involved individuals come from low-income populations, a group that is specifically targeted by Medicaid. It is worth noting that Medicaid covers mental health and substance use treatment as an essential health benefit since the implementation of the ACA's Medicaid expansion in 2014.5 Individuals released to non-expansion states, however, are not likely to qualify for Medicaid. The takeup rate may also be low in expansion states if jails do not provide enrollment assistance prior to release. Wenzlow, Ireys, Mann, Irvin and Teich (2011) and Cuddeback, Morrissey and Domino (2016) show that Medicaid enrollment and the use of mental health services within 90 days of release are higher among states that expedite Medicaid enrollment for offenders (see also Gertner, Grabert, Domino, Cuddeback and Morrissey, 2019). These observations suggest that access to SUD treatment is likely to be a serious problem among non-expansion and low expansion states, even when they offer the services needed.

Even if the enrollment problem described above can be mitigated, absent forthcoming changes in policies, people in need of SUD treatment may not adequately receive in-person treatment. First, people with SUD problems may be reluctant to seek in-person care during the pandemic out of fear of being infected⁶ and due to the perceived inconveniences caused

by enhanced preventive measures required prior to admission.⁷ Moreover, "[a]ccess to outpatient addiction providers has been limited by community social distancing policies" (D'Onofrio et al., 2020, p.2). Finally, given the (misplaced) stigma toward individuals with SUDs (Volkow, 2020) as well as the introduction of new inpatient admission policies in response to the spread of COVID-19,⁸ there is an increased risk of deprioritizing care for SUD patients as inpatient and emergency departments near their capacity.

These challenges are likely to cause a large gap between the SUD treatments that are needed and those that are actually received. We discuss two policies that can be implemented to reduce access problems and increase the utilization of SUD treatment.⁹ To mitigate the enrollment problem among exiting inmates, jails in expansion states can adopt outreach and assistance strategies to facilitate connections to Medicaid coverage prior to release.¹⁰ While informing exiting inmates about coverage options and SUD treatment services they are entitled to, local jails can advance these policies by coordinating access to SUD care, including medication treatment with methadone and buprenorphine.¹¹ Non-expansion states, on the other hand, may have to provide

⁵ 42 U.S. Code § 18022. Essential health benefits requirements.

⁶ NIDA (2020) suggests, for instance, a 40% decline in emergency department visits including visits for SUD withdrawal.

⁷ These include clinical guidance on heightened measures such as phone screening for COVID before arrival and physical distancing within facilities (ASAM, 2020).

⁸ In response to the pandemic, SAMSHA (2020a) have issued guidance that individuals seeking inpatient or residential treatment options for SUDs should be evaluated for referral to a Level 1 or 2 program such as intensive outpatient programs and partial hospital programs (ASAM, 2020).

⁹ One may naturally question whether during the pandemic facilities would have the capacity to provide treatment, if these policies were to be implemented. Although it is difficult to find conclusive evidence to answer this question, available interviews with physicians, especially residents in emergency departments, suggest that the capacity is available and that access is the primary problem (see, e.g., the interview by NIDA, 2020).

¹⁰ Using data from the 50-State Medicaid Budget Survey of Kaiser Family Foundation, we calculate that about 22% of the expansion states do not provide enrollment assistance to inmates prior to release. Outreach and assistance data were obtained from the following source: https://bit.ly/3dujqaz.

¹¹ See D'Onofrio et al. (2020) for the regulatory barriers such as DATA 2000 waiver requirements to prescribe medication.

temporary solutions to enable exiting inmates to receive care, given the large scale of the problems we have discussed. Vehicles to implement these solutions include vouchers that can be given to exiting inmates which can be used to receive SUD treatment, or simply providing universal telemedicine for SUD treatments to the entire population.

The political feasibility of these options may be debatable. However, we note that states have been invited to apply for (and many have been provided) additional funds to supplement their SUD treatment budgets, which they may use to meet the increased demand for telemedicine that these policies may generate (see, e.g., the emergency grants on SUD treatment during COVID-19 by SAMSHA, 2020b). Thus, it is important for governments to consider the potential benefits associated with various policies when seeking to secure and allocate funds. We note that universal telemedicine for SUD treatments naturally go beyond mitigating problems for former and potential inmates, since it can reduce access problems among the general population as well.¹² Telemedicine has the potential to mitigate barriers to SUD care, and we already see evidence of states expanding coverage for these services during the pandemic, as we discuss next.

Although telemedicine programs were widely available in more than 50 U.S. health systems prior to the pandemic, it was neither widely adopted nor implemented (Hollander and Carr, 2020). Many factors contribute to the inefficiencies associated with these programs, including the shortage of providers as well as the varying complexities in payment methods. For patients, competing incentives between physicians and payers make telemedicine reimbursements more complex and can increase spending relative to in-person care (Ashwood, Mehrotra, Cowling and Uscher-Pines, 2017). In fact, payment parity between telemedicine services and in-person care exists only in 20% of states (Lacktman, Acosta, and Levine, 2019). While certain aspects of telemedicine have been redesigned and scaled up to mitigate these aforementioned challenges,¹³ Medicaid reimbursement policies are still dictated by states, which in turn create complex variations in telehealth laws and regulations. Given the low rates of telemedicine for SUD use documented in existing studies. modifying reimbursement policies under Medicaid can be essential for strengthening telemedicine for SUD use to complement in-person care (Huskamp et al., 2018). During the COVID-19 outbreak, it is a welcome development that several states have already started to expand telemedicine for SUD benefits under Medicaid (APA, 2020).¹⁴ These expansions can provide an evidence-based assessment of the effectiveness of telemedicine for SUD services. Moreover, this may be an important step toward the future of SUD treatment in jails and prisons to curb recidivism. Given the potential benefits of these services we have discussed, we hope to see other states follow suit, which would make telemedicine for SUD a commonly available mode of service in the near future.

CRediT authorship contribution statement

Erkmen G. Aslim: Conceptualization, Data curation, Project administration, Visualization, Writing-original draft. Murat C. Mungan: Conceptualization, Project administration, Writing-original draft.

References

strategies in residential treatment facilities. Accessed at https://bit.ly/2WaKdT8.

- Ashwood, J. S., Mehrotra, A., Cowling, D., & Uscher-Pines, L. (2017). Direct-to-consumer telehealth may increase access to care but does not decrease spending. *Health Affairs*, 36(3), 485–491.
- Aslim, E. G., Mungan, M. C., Navarro, C., & Yu, H. (2019). The effect of public health insurance on criminal recidivism. *George Mason Law & Economics Research Paper*(19), Article 19.
- Belenko, S., & Peugh, J. (2005). Estimating drug treatment needs among state prison inmates. Drug and Alcohol Dependence, 77(3), 269–281.
- Bronson, J., Stroop, J., Zimmer, S., & Berzofsky, M. (2017). Drug use, dependence, and abuse among state prisoners and jail inmates, 2007–2009. U.S. Department of Justice. Cuddeback, G. S., Morrissey, J. P., & Domino, M. E. (2016). Enrollment and service use
- Cuddeback, G. S., Morrissey, J. P., & Domino, M. E. (2016). Enrollment and service use patterns among persons with severe mental illness receiving expedited Medicaid on release from state prisons, county jails, and psychiatric hospitals. *Psychiatric Services*, 67(8), 835–841.
- D'Onofrio, G., Venkatesh, A., & Hawk, K. (2020). The adverse impact of COVID-19 on individuals with OUD highlights the urgent need for reform to leverage emergency department–based treatment. NEJM Catalyst Innovations in Care Delivery.
- Gertner, A. K., Grabert, B., Domino, M. E., Cuddeback, G. S., & Morrissey, J. P. (2019). The effect of referral to expedited Medicaid on substance use treatment utilization among people with serious mental illness released from prison. *Journal of Substance Abuse Treatment*, 99, 9–15.
- He, Q., & Barkowski, S. (2020). The effect of health insurance on crime: Evidence from
- the affordable care act Medicaid expansion. Health Economics, 29(3), 261–277. Hollander, J. E., & Carr, B. G. (2020). Virtually perfect? Telemedicine for COVID-19. New England Journal of Medicine. 382(18), 1679–1681.
- Huskamp, H. A., Busch, A. B., Souza, J., Uscher-Pines, L., Rose, S., Wilcock, A., ... Mehrotra, A. (2018). How is telemedicine being used in opioid and other substance use disorder treatment? *Health Affairs*, 37(12), 1940–1947.
- Karberg, J. C., & James, D. J. (2005). Substance dependence, abuse, and treatment of jail inmates, 2002. Office of Justice Programs, Bureau of Justice Statistics: US Department of Justice.
- Lacktman, N. M., Acosta, J. N., & Levine, S. J. (2019). 50-state survey of telehealth commercial payer statutes. Foley & Lardner LLP. Accessed at https://bit.ly/2WFVf1X.
- Marcum, C. D. (2020). American Corrections System Response to COVID-19: An examination of the procedures and policies used in Spring 2020. American Journal of Criminal Justice, 1.
- Mumola, C. J., & Karberg, J. C. (2006). Drug use and dependence, state and federal prisoners, 2004. Office of Justice Programs, Bureau of Justice Statistics: US Department of Justice.
- National Institute on Drug Abuse (NIDA) (2020). Emergency care and SUD during COVID-19. Accessed at https://bit.ly/2Oe1h6f.
- Pelissier, B., Wallace, S., O'Neil, J. A., Gaes, G. G., Camp, S., Rhodes, W., & Saylor, W. (2001). Federal prison residential drug treatment reduces substance use and arrests after release. *The American Journal of Drug and Alcohol Abuse*, 27(2), 315–337.
- Priester, M. A., Browne, T., Iachini, A., Clone, S., DeHart, D., & Seay, K. D. (2016). Treatment access barriers and disparities among individuals with co-occurring mental health and substance use disorders: An integrative literature review. *Journal* of Substance Abuse Treatment, 61, 47–59.
- Prison Policy Initiative (PPI) (2020). Responses to the COVID-19 pandemic. Accessed at https://bit.ly/3ekel4G.
- Sawyer, W., & Wagner, P. (2020). "Mass incarceration: The whole pie 2020." Prison population initiative. Accessed at https://bit.ly/3fDJFxc.
- Substance Abuse and Mental Health Services Administration (SAMSHA) (2020a). Considerations for the care and treatment of mental and substance use disorders in the COVID-19. Accessed at https://bit.ly/32PEJBn.
- Substance Abuse and Mental Health Services Administration (SAMSHA) (2020b). Emergency grants to address mental and substance use disorders during COVID-19. Accessed at https://bit.ly/2CFEazh.
- UCLA Law (2020). COVID-19 behind bars data project. Accessed at https://bit.ly/ 3fyjp6Z.
- Vogler, Jacob. 2020. "Access to health care and criminal behavior: Evidence from the ACA Medicaid expansions." Journal of Policy Analysis and Management, forthcoming.
- Volkow, N. D. (2020). Collision of the COVID-19 and addiction epidemics. Annals of Internal Medicine. 173(1), 61–62.
- Wakeman, S. E., McKinney, M. E., & Rich, J. D. (2009). Filling the gap: The importance of Medicaid continuity for former inmates. *Journal of General Internal Medicine*, 24(7), 860–862.
- Wen, H., Hockenberry, J. M., & Cummings, J. R. (2017). The effect of Medicaid expansion on crime reduction: Evidence from HIFA-waiver expansions. *Journal of Public Economics*, 154, 67–94.
- Wenzlow, A. T., Ireys, H. T., Mann, B., Irvin, C., & Teich, J. L. (2011). Effects of a discharge planning program on medicaid coverage of state prisoners with serious mental illness. *Psychiatric Services*, 62(1), 73–78.

(footnote continued) treatment under State plan benefits.

American Psychiatric Association (APA) (2020). Practice guidance for COVID-19. Accessed at https://bit.ly/2WkRMqO.
American Society of Addiction Medicine (ASAM) (2020). Infection control and mitigation

¹² Prior scholarship suggests that access problems are not unique to prior or potential inmates (Priester et al., 2016) although the marginal benefit from reducing access within the latter group is presumably larger due to the added benefits from reductions in recidivism.

¹³ SAMHSA have awarded individual grants to some states to increase capacity through an expansion of telemedicine services for SUD (see https://bit.ly/ 3ftNuox for details and recipients of each grant).

¹⁴ Requesting for Medicaid Section 1135 Waiver Flexibilities, for example, California expanded the coverage of telemedicine services for behavioral health