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Considering the harms of our habits: The reflexive urine drug screen in opioid use disorder treatment

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ABSTRACT

The COVID-19 pandemic has led to abrupt changes in the delivery of substance use treatment, notably the adoption of telehealth services and a departure from mandatory urine drug screens (UDS). Amid current circumstances, the UDS, which had evolved to signal a “successful” recovery, no longer seems feasible, safe, or necessary. Even prior to the pandemic, the UDS had notable drawbacks, including sending a message of mistrust and hierarchy, potentially causing psychological trauma, and incentivizing falsification. Nonetheless, certain patients may state that they depend on the UDS for motivation or structure while some providers may rely on it to discover which patients are struggling. While a combination of self-report and UDS is generally regarded as the strongest measure of substance use among patients, our experiences caring for patients without the results of the UDS during the COVID-19 pandemic have forced us to examine the use of other measures to define a successful recovery. Complete abstinence may not be the goal for all patients and those who achieve abstinence may have additional goals worth supporting. While the UDS will likely be incorporated back into our treatment plans, we suggest unseating it as the centerpiece of substance use care and discovering additional methods of measuring our patients’ outcomes in less traumatizing and more patient-centered ways.

While the uncertainty of the COVID-19 pandemic overwhelmed the country, Fred felt optimistic about his future in a way that he never had during his 50 years of using substances. He had been initiated on buprenorphine through a telehealth visit just one week after the stay-at-home order was issued in his city. A couple weeks later, when asked by his clinician if the mild cravings he reported to her had triggered opioid use, he excitedly proclaimed “No, doc! My urine is clean. I will bring it to you whenever you want.” If this visit had occurred in the clinic during the pre-COVID era, Fred’s clinician would have conducted a urine drug screen (UDS) and likely would have spent much of the visit positively reinforcing the “clean” results. They may have completely missed an opportunity to engage in the conversation that actually occurred, one where Fred expressed that despite his abstinence, he was actually struggling. His goals for recovery were to be more physically active and a more present father and grandfather, neither of which he felt like he had yet achieved. Without the result of the UDS assuming its role as the centerpiece of the visit, Fred and his clinician instead talked about how to break down the barriers that were preventing him from achieving

these goals.

The global COVID-19 crisis and the resultant restructuring of health care delivery have allotted us the rare opportunity to question what we had previously accepted as norms and “established” practice patterns. In no field is this more relevant and timelier than in substance use care, a field that is ripe with rigid rules and regulations and one that was already struggling to reverse an epidemic well before COVID-19. With the closure of clinics despite growing concerns of mental health and substance use triggers that social isolation could cause, economic deprivation and unprecedented stress, we have made substantial leaps to improve access by allowing telehealth services for both induction and maintenance of buprenorphine for opioid use disorder (Davis & Samuels, 2020). Clinics around the country have adopted lower barrier access to treatment, including initiation and maintenance of treatment with buprenorphine through telehealth. Although these important developments unfortunately do not facilitate access for individuals without phones or Internet, substance use treatment via telehealth is a promising model to allow for many patients to engage in care without needing to

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worry about exposure to the virus or transportation difficulties, especially in rural areas where clinics might be scarce (Brunet et al., 2020; Davis & Samuels, 2020). In conjunction with these loosened restrictions, we have also seen the temporary departure of mandatory UDS. Professional societies, such as the American College of Medical Toxicology and American Society of Addiction Medicine, have issued guidelines that recommend pausing routine UDS as a requirement for continued treatment.

Many practitioners see a negative UDS as a signal of successful treatment engagement in many cases (Biondi et al., 2020). However, as clinicians who are continuing to provide treatment through telehealth, we have been tasked with gauging the successes and challenges that our patients face without ever asking them to urinate into a cup. With this new practice pattern has come some existential questions about the utility and necessity of the routine UDS. Do the benefits of asking our patients to travel to a lab to provide a urine sample really outweigh the harms of exposing them, or the lab staff, to the coronavirus? Who benefits from knowing the results anyway—patients, or us? What about the possible impacts on the clinician-patient relationship? How do the results change our management plans? What is the role of UDS in treatment programs that are guided by harm reduction philosophies, in which abstinence is not required nor necessarily encouraged (Jakubowski & Fox, 2020)? How else might we evaluate “success” of patients in achieving meaningful recovery (Witkiewitz et al., 2020)?

One clear downside to the UDS is the negative impact it may have on the clinician-patient relationship. It sends a message of mistrust: although we always ask how our patients have been doing, we often look to the UDS result for the “true answer.” On the other hand, we ask that our patients trust us, and this only adds to the burden of hierarchy that plagues most traditional clinician-patient relationships. This dynamic may be especially harmful at practices that have a counseling component. Observed UDS can be traumatic, especially for patients with histories of sexual assault, criminal justice involvement, or violence. For many patients, this may mean reliving a trauma every time they visit their clinic, and also being expected to engage in therapy at the same visit. Some treatment providers have acknowledged this possibility, which has led to an approach for “trauma-informed urine drug screenings” at some clinics (Carlson, 2019). UDS can also lead to an unfortunate scenario that many of us have experienced: patients falsifying UDS by using another person’s urine, something that these tests can inadvertently incentivize. This, too, can have serious negative impacts on the clinician-patient relationship.

We recognize that there may be some value in conducting the UDS at clinic visits. Some patients are motivated by it (Walter & Petry, 2016), and others are expected to share the results of their UDS with nonmedical agencies, such as parole or probation officers or departments of human services. They can be helpful in cases where clinicians worry about diversion of medication (if the UDS is negative for buprenorphine). We also appreciate that without an accepted alternative to assess the experience of our patients in recovery, we may be in danger of not recognizing when patients need extra support. With the rise of fentanyl-laced heroin, cocaine, and pills, urine screens can also serve as a helpful tool for patients if they are unaware of what their substances actually contain (Khatri et al., 2018). However, as we have learned in recent months, reflexively and routinely mandating UDS screens for stable patients is not necessary to continue their engagement in care.

An approach that combines both self-report and UDS is generally regarded to be the strongest method for assessing substance use in patients receiving medications for opioid use disorder (MOUD), as many clinicians regard self-report to be potentially unreliable—both because memory lapses and willful misreporting to avoid punishment—and because of how long substances will remain in the urine (Donovan et al., 2012). However, perhaps we should be considering if there are more helpful measures of treatment success rather than continued substance use. Of course, the goal of MOUD, from many clinicians’ perspectives at

least, is to allow patients to comfortably reduce use so that patients are able to more deeply engage with other parts of their lives. Some clinicians feel strongly that treatment hinges on abstinence from all non-prescribed substances. This may or may not line up with patients’ goals, although some individuals certainly strive for complete abstinence. Clinician should support such a goal if this is what a patient desires. But what if complete abstinence is not a part of a patient’s treatment goals? Or what if despite abstinence, a patient has not achieved their recovery goals, like in Fred’s case?

The COVID-19 pandemic has forced us to reevaluate how we deliver substance use treatment. We must reflect thoughtfully on the changes to our clinical practice that were abrupt and circumstantially necessary, like the unseating of the UDS as the guiding light to judge success. While many clinics will likely resume routine UDS testing, we hope that these tests will be used more judiciously, and only when the results will inform a change in the course of the treatment regimen. Clinicians might consider performing a UDS only as needed to confirm presence of buprenorphine or if a patient expresses interest in contingency management strategies as a part of their treatment plan (Ainscough et al., 2017). Because using UDS as needed has the potential to introduce clinician bias into treatment (i.e., are clinicians more likely to use UDS with certain patients versus others?), researchers might explore testing practices among clinicians who use an “as needed” testing model, assessing whether as needed testing is used with patients of color at different rates than white patients, for example. We also believe that additional research focused on patients’ experiences with UDS is warranted. Our experience providing treatment to OUD patients during the COVID-19 pandemic has shown us the incredible value of a trusting clinician-patient relationship, particularly when either or both parties are functioning in the face of adversity. Preserving the therapeutic nature of such a relationship must be prioritized over blind adherence to outdated and potentially harmful clinical habits, such as the reflexive UDS.

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References

- Ainscough, T. S., McNeill, A., Strang, J., Calder, R., & Brose, L. S. (2017). Contingency management interventions for non-prescribed drug use during treatment for opiate addiction: A systematic review and meta-analysis. *Drug and Alcohol Dependence, 178*, 318–339.
- Biondi, B., Zheng, X., Frank, C. A., Petrakis, I., & Springer, S. A. (2020). A literature review examining primary outcomes of medication treatment studies for opioid use disorder: What outcomes should be used to measure opioid treatment success? *The American Journal on Addictions, 1–19*. <https://doi.org/10.1111/ajad.13051>.
- Brunet, N., Moore, D. T., Wischik, D. L., Mattocks, K. M., & Rosen, M. I. (2020). Increasing buprenorphine access for veterans with opioid use disorder in rural clinics using telemedicine. *Substance Abuse, 1–7*. <https://doi.org/10.1080/08897077.2020.1728466>.
- Carlson, S. (2019). *Trauma informed urine drug screens*. Trauma Informed Oregon. <https://traumainformedoregon.org/trauma-informed-urine-drug-screens/>.
- Davis, C., & Samuels, E. A. (2020). Continuing increased access to buprenorphine in the United States via telemedicine after COVID-19. *International Journal of Drug Policy, 102*. <https://doi.org/10.1016/j.drugpo.2020.102905>.
- Donovan, D. M., Bigelow, G. E., Brigham, G. S., Carroll, K. M., Cohen, G. S., Brigham, A. J., ... Wells, E. A. (2012). Primary outcome indices in illicit drug dependence treatment research: Systematic approach to selection and measurement of drug use endpoints in clinical trials. *Addiction, 107*(4), 694–708. <https://doi.org/10.1111/j.13600443.2011.03473>.
- Jakubowski, A., & Fox, A. (2020). Defining low-threshold buprenorphine treatment. *Journal of Addiction Medicine, 14*, 95–98. <https://doi.org/10.1097/ADM.0000000000000555>.

Khatri, U., Viner, K., & Perrone, J. (2018). Lethal fentanyl and cocaine intoxication. *New England Journal of Medicine*, 379, 1782. <https://doi.org/10.1056/NEJMc1809521>.

Walter, K. N., & Petry, N. M. (2016). Motivation and contingency management treatments for substance use disorders. *Current Topics in Behavioral Neurosciences*, 27, 569–581. https://doi.org/10.1007/7854_2015_374.

Witkiewitz, K., Montes, K. S., Schwebel, F. J., & Tucker, J. A. (2020). What is recovery? *Alcohol Research*, 40(3), 01.