Exploring the role of urine drug screening in opioid agonist therapy

Opioid agonist therapies (OAT) are highly effective treatments and are central to the reduction of harm associated with illicit opioid use, but access to and retention in treatment is made difficult by burdensome rules and requirements.[1-3] A prescriber of OAT needs to be confident that the risks of prescribing OAT to a person with a moderate or severe opioid use disorder are outweighed by the benefits thereof. The major risk pertaining to OAT is opioid overdose, which tends to occur in complex environments and often involves multiple drug toxicity.[4,5] The benefits of OAT, however, might include a reduction in the lifetime risk of overdose and reduced injecting-related harms, and also improved physical, psychological and social wellbeing.[6,7] Individuals who are engaged in OAT might experience a reduction in harms associated with opioid use without necessarily changing their substance use.[8] Abstinence from opioids or other substances may be the goal of a particular individual, but it is not a universal goal and it should not be a condition of OAT.

Given the broad range of benefits associated with OAT it is important to be critical of any systemic factors that exclude people from treatment.[9] The regulatory environment relating to OAT varies substantially between both different Australian jurisdictions and international settings.[10] The relaxation of requirements for supervised dosing related to the coronavirus disease 2019 (COVID-19) pandemic, urine drug screening (UDS), and regular face-to-face review have catalysed reconsideration of the possibility of health services to do away with needlessly stigmatising practices and move towards more patient-centred care.[11] Locally, New South Wales data illustrate that a model of care that requires fewer UDS and increases access to unsupervised dosing of OAT is not associated with an increase in harms.[12] Internationally, clinicians in OAT programs have reflected on the safety of prescribing OAT based on clinical history, examination, and observation of health and wellbeing outcomes rather than relying on UDS.[13,14]

The 2014 *National guidelines for medication-assisted treatment of opioid dependence* identify UDS as a means to (i) enhance the validity of patients' self-reported use of substances; (ii) identify substances not reported by the patient that may assist in the diagnosis and management; and (iii) assist in determining eligibility for takeaway or unsupervised dosing.[15] Those guidelines acknowledge the fallibility of UDS in providing accurate information, given rates of false positives and false negatives, and also highlight that UDS can threaten therapeutic relationships with people seeking assistance with opioid use disorder.[15] The guidelines suggest that the frequency of UDS is based on the judgment of the prescriber of OAT.[15] As the guidelines leave much to clinician discretion, Australian rates and rationales for UDS vary between clinicians. The authors have encountered some OAT clinics that request UDS for every episode of patient contact, and other services that safely prescribe OAT without ever requesting a UDS for certain individuals.

Individuals in receipt of OAT experience UDS as highly paternalistic and stigmatising.[16] UDS can expose or encourage an absence of trust in a therapeutic relationship, incite anxiety or distress in people on OAT, and make continued treatment intolerable for an individual.[17,18] Changes to the conditions of treatment in response to the results of urine drug samples is experienced as punishment, and discourse regarding provision of "clean" or "dirty" urine samples positions cleanliness alongside abstinence and shames individuals who continue to use substances.[19,20] In recognition of the patient experience of UDS, efforts have been made to understand the implications of UDS on treatment retention, with mixed results.[18,21]

There is no evidence that demonstrates an association between UDS and health outcomes for people receiving OAT.[22,23] Although there are circumstances where a UDS might be a useful clinical tool, a detailed, non-judgmental clinical history is likely to provide sufficient information to inform the safe prescribing of OAT. A meta-analysis has confirmed that when there are no negative consequences arising from honest accounting of recent substance use, people who use alcohol and other drugs volunteer substance use histories that correlate to their UDS.[24] Interpretation of UDS requires detailed consideration of pharmacology and an understanding of the specificity and sensitivity of the assays used by local laboratories and what they can or cannot test.[25,26] A 2021 New South Wales analysis of qualitative UDS among people on supervised sublingual buprenorphine found a negative result for buprenorphine in 57% of tested samples, demonstrating the fallibility of UDS for confirming compliance to treatment.[25] UDS immunoassays for methadone are similarly challenging, as high rates of false positives (including when there are quetiapine metabolites present) necessitate confirmatory testing with gas chromatography–mass spectrometry, sometimes at the expense of the patient.[26,27]

Instructive guidelines relating to the judicious use of UDS might reduce the stigma and alienation experienced by people engaged with OAT without compromising clinical safety. Decisions regarding OAT prescribing should be primarily informed by recent alcohol, drug and other medication and medical history as provided by an individual and other clinicians they would like involved in their care. Most Australian jurisdictions now have real-time prescription monitoring systems that provide additional information regarding the safety of commencing OAT and highlight risks while on

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doi: 10.5694/mja2.52628

treatment. Where there is insufficient clinical evidence of opioid tolerance, a UDS might be used to support assessment for treatment commencement. Once OAT has been commenced, there are limited contexts where UDS might usefully inform OAT prescribing or the provision of takeaway doses of OAT. UDS are less likely to provide useful information with regards the monitoring of treatment for individuals prescribed long-acting injectable buprenorphine, as treatment is directly observed. Safe prescribing of OAT in the context of ongoing use of substances that might increase risks relating to OAT requires careful assessment of an individual's clinical history and of their treatment goals. Frank and constructive explorations of substance use and related harm minimisation opportunities are most likely to take place in a healthy therapeutic environment where an individual feels confident of a non-judgemental response.

Clinical scenarios in which OAT prescribers might consider discussing the use of UDS with a patient include:

- at commencement of OAT to confirm recent opioid use;
- at the request of a patient (eg, to provide to employers or child protection services, or to inform assessments regarding fitness to drive);
- to confirm adherence to prescribed OAT if there are significant concerns around diversion;
- where a presentation of altered conscious state cannot be explained by recent medical or substance use history; and/or
- to support prescribing decisions where there is marked clinical risk.

The current Australian guidelines for medication-assisted treatment of opioid dependence are in need of review, not least because of their lack of reference to either long-acting injectable buprenorphine or real-time prescription monitoring.[15,28] The generation of evidence to both better describe local UDS practices and identify opportunities to optimise their use could usefully inform an update of these guidelines. Any update of current guidelines should incorporate feedback and perspectives from people with lived experience of accessing OAT and from clinicians, including those represented by the Royal Australian College of General Practitioners, the Royal Australian and New Zealand College of Psychiatry, and the Royal Australasian College of Physicians and its Chapter of Addiction Medicine. There is also likely to be a role for the creation of professional development resources to support clinicians to ensure their use of UDS is consistent with best practice.

Improving the accessibility of OAT is critical to reducing harms associated with opioid use disorder. Current restrictive and punitive practices around supervised dosing and UDS present barriers to treatment engagement and retention, without evidence that these practices promote patient safety. Instructive guidelines about the appropriate indications for UDS during OAT might minimise unnecessary tension on the therapeutic relationship between prescribers and recipients of OAT.

Acknowledgement: Open access publishing facilitated by Monash University, as part of the Wiley - Monash University agreement via the Council of Australian University Librarians.

Competing interests: Thileepan Naren has received speaking honoraria from Camurus.

Provenance: Not commissioned; externally peer reviewed. ■

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