Biological testing in drug and alcohol treatment

A good understanding of the usefulness and limitations of biological testing (eg, of urine, blood, breath and oral fluid samples), can help managers and keyworkers to plan, review and optimise treatment for service users.

This briefing looks at testing's role as an integral part of treatment. It can help keyworkers and services make best use of the most appropriate tests and use test results effectively to improve treatment and outcomes. The content is drawn from published evidence and guidance, and service provider feedback. (NB There are specific issues around confidentiality and information sharing, consent and capacity to give consent, and safeguarding for under-18s in relation to testing.)^{1 2}

USING BIOLOGICAL TESTING

Alongside self-reported drug use or tools such as the Treatment Outcomes Profile (TOP), biological testing is a useful way to monitor illicit drug use and to confirm that users are sticking to their treatment or are abstinent. However, it does not confirm dependence or tolerance so always interpret the results with care.³

Prompts

- 1. Does your service have protocols for when to test, which tests to use and how to use the results?
- 2. Does your service use testing as part of initial assessments and during key review points with service users?
- 3. Does your service use tests to monitor drug-specific treatment goals?
- 4. When testing in the context of an abstinence-focused contingency management programme, do staff make clear to users how tests will be used, the link to the behaviour being achieved, and to them receiving the incentive (or not)?
- 5. Do you use results from regular drug testing to inform the clinical decision to make any changes to supervised consumption regimes?
- 6. Do you use breathalyser readings as part of the assessment for alcohol problems?
- 7. Do you use drug testing to confirm service users are sticking to their treatment for example, taking prescribed medication, such as methadone?
- 8. Do you use different types of tests, with their different costs and accuracy, according to clinical judgement? For example, do you use urine dipstick testing when instant feedback is needed or clinically advantageous; more costly laboratory testing when a high level of accuracy or substance differentiation is needed (such as chain of custody cases, child custody cases, and other cases where important impacts may follow test results); or oral fluid testing more routinely as it is less intrusive for the user?

West Essex Community Drug and Alcohol Team

Before starting a prescribing regime, service users at West Essex CDAT are tested as part of their initial assessment. Test results are used alongside other information to create a 'history' of the user. The focus is on creating a therapeutic alliance and is never punitive or done to catch people out. The service finds testing useful when trying to establish patterns of use – eg, users might use (or use more) at certain times, such as when they get paid. Testing is particularly useful when service users can't accurately self-report their drug use (eg, they can't remember).

Staff at the service explain to users how testing will work at the very start of treatment – including what the test is, what it identifies, what the aims are, as well as what might cause unexpected results (eg, the use of over-the-counter or other prescribed medications).

COLLECTING AND STORING SPECIMENS

Tests intended for planning and reviews should usually be given at specified, regular intervals or randomly over a specified period. It is standard practice to have written procedures for collecting and

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storing drug test samples. These procedures should aim to ensure the integrity of specimens. Staff should also take steps to limit opportunities for service users to tamper with specimens.⁴ **Prompts**

- 1. Do you clearly discuss with service users at the start of treatment the procedures and reasons for testing?
- 2. Do you have appropriate resources and facilities for collecting samples, storing and refrigerating them, and disposing of them?
- Does your service have instructions on storing test devices, calibrating equipment, recording results, infection control, and disposing of biological fluids?
- 4. Do staff note the time of the sample collection, as well as the reported consumption of both prescribed and illicit drugs (and some foods) over the previous few days?
- 5. Is there a protocol on what to do when a user refuses to take a test?
- 6. Following a specified period in treatment, does your service reduce the frequency of testing for users who have a series of negative test results, and increase the frequency for those who lapse or relapse?
- 7. Do you have measures to limit opportunities for adulteration such as asking users not to take coats, bags and other personal belongings into the cubicle when giving urine samples; not storing cleaning agents (products containing ammonia, bleach and toilet cleaners) in public spaces; and checking that users taking saliva tests have nothing in their mouths for at least ten minutes before testing?
- 8. Do staff check the integrity of samples eg, if urine samples are the right temperature, colour and smell?

Westminster Drug Project, London

The Westminster Drug Project has a written protocol that provides step-by-step instructions to all staff conducting drug testing. For oral swab testing, this includes asking service users if they have had anything to eat or drink in the last ten minutes and instructing workers to wait ten minutes before testing anyone who has.

The protocol also includes asking service users about their drug use over the past seven days and making a record of it. Finally it reminds staff to check that the details of the test have been entered correctly and are consistent with how they are recorded in other records before sealing the testing bag – all of which is done in view of the service user.

UNDERSTANDING AND USING TEST RESULTS

Staff conducting the tests need to have a good understanding of the testing process, equipment, its limitations and how to make use of test results.⁵ For example, a positive drug test does not in itself indicate problematic use or dependence. Similarly a negative test result does not indicate abstinence from a substance. All tests have a small proportion of false positives and false negatives, and each has different levels of sensitivity and windows of detection. A single test only provides a snapshot of an individual's recent drug use. Repeated testing over time reveals a pattern of drug use or abstinence.⁶ Always interpret test results alongside other clinical information and methods of assessment, particularly when results are unexpected.

Prompts

- 1. Do staff who conduct tests have a good understanding and knowledge of testing, as well as the sensitivity and windows of detection of the method used?
- 2. Have staff been trained to spot and deal with suspected false negatives and false positives?
- **3.** Do staff use drug test results alongside other clinical information, stability markers (such as appointments with keyworkers, taking part in group work, and attending outpatient appointments) and assessment methods when making decisions about a user's treatment?

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- 4. Do staff use other sources of information as well as testing to help explain unexpected results? Do they use their expert judgement to consider all the information when they need to modify care plans and treatment goals?
- 5. Do staff use test results to develop, review and improve recovery care plans? When test results show continued illicit drug use do they optimise treatment in line with adaptive treatment models, such as enhancing psychosocial interventions?
- 6. Do you consider test results when developing care plans, in a SMART goal framework, indicating achievable care plan goals?

Telford and Wrekin CDT

At Telford and Wrekin CDT, staff who conduct drug tests are thoroughly trained in all aspects of the process. They are shown how to conduct tests and how to use testing equipment during practical demonstrations.

The training also focuses on the efficacy of different testing methods and samples, understanding the testing process, ensuring the accuracy and reliability of test results, testing detection periods, interpreting results (including false negatives/positives and samples that have been tampered with), and concerns around confidentiality.

PROVIDING FEEDBACK

Staff should discuss test results with service users in a positive, encouraging way that enhances their motivation.⁷ They should also use the information as an additional layer of intelligence for planning, reviewing and optimising service users' treatment.

Prompts

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- 1. Do staff make time to discuss test results with service users, as they relate to the reason for taking the test?
- 2. Do staff praise service users who demonstrate progress, as a means of enhancing motivation?
- **3.** Do staff follow a recognised strategy for giving feedback to service users on test results, such as in a brief intervention or motivational framework, to enhance their motivation?
- 4. When there are unexpected positive results, do staff explore why the service user did not volunteer this information during keyworking sessions?

Bridge Project, Bradford

The Bridge Project has found that providing consistent feedback to service users following drug test results enhances their motivation, improves engagement and contributes to better treatment outcomes. When a service user tests negative, drug workers offer praise, framed using motivational interviewing techniques, to highlight the progress he/she has made. Motivational letters are also sent to users, recognising their achievements and offering further encouragement. When service users test positive for illicit drug use, drug workers incorporate this information into motivational discussions, with dose optimisation positively encouraged.

Lifeline, Kirklees

Lifeline in Kirklees has found that service users who aren't receiving a prescribing intervention (where drug testing is routine) can also benefit from random testing. Service users say they can find additional motivation from unannounced tests and often use the results to show family members or friends the progress they've made. This can help rebuild trust and even relationships – something that will help improve users' recovery capital and contribute to their overall recovery.

GROUNDS FOR TESTING AND SELECTING AN APPROPRIATE TEST

Staff who conduct tests need to understand what they are testing and why. It is also important they have a good reason for using their chosen method. This not only helps ensure that testing is useful, but also that it is cost-effective.⁴

Prompts

- 1. Do staff undertake each test with a clear and specific reason and do they explain this fully to service users each time?
- 2. Is there a process for assessing whether testing is appropriate and cost effective, based on the individual circumstances of the service user?
- 3. Does your service compare testing methods and weigh up the respective pros and the cons (accuracy, cost, ease of use and result turnaround times) to ensure the most suitable tests are used and that testing is fit for purpose?
- 4. Are staff aware of the different technologies for testing and how to select the most appropriate, based on individual circumstances eg, in the case of urine testing, the difference between dipstick and lab testing?
- 5. Do staff know how they will use the results before doing a test?

Torbay Primary Care Drug Service

Torbay Primary Care Drug Service use oral swab testing with their service users, as samples are easier to collect and harder to adulterate. However, they prefer to use on-site urine dipstick testing with service users who are on low doses of methadone and buprenorphine (particularly where the test result will have an impact on clinical decisions made that day – eg, on dosing or collection arrangements), as they have found this test is more sensitive compared to the oral swab.

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