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COMMENTARY

# A Protocol to Evaluate Drug-Related Workplace Impairment

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## ABSTRACT

The dramatic increase in the use and abuse of prescription controlled substances, cannabis, and a rapidly evolving array of legal and illegal psychotropic drugs has led to a growing concern by employers about workplace impairment, incidents, and accidents. The Federal Workplace Drug Testing Programs, which serve as a template for most private sector programs, focus on a small group of illicit drugs, but disregard the wider spectrum of legal and illegal psychotropic drugs and prescription controlled substances. We propose a protocol for the evaluation of workplace impairment, based on comprehensive drug and alcohol testing at the time of suspected impairment, followed expeditiously by a comprehensive physician evaluation, including a focused medical history with an emphasis on controlled substance use, physical and mental status examinations, evaluation of employee adherence to prescription medication instructions, additional drug testing if indicated, use of collateral sources of information, and querying of state prescription monitoring databases. Finally, we propose suggestions for optimizing the evaluation of drug-related workplace impairment.

**KEYWORDS** drug abuse, drug impairment, drug testing, workplace

## INTRODUCTION

The increase in the use and abuse of prescription controlled substances, cannabis ("medical" and otherwise), and a rapidly evolving array of other—legal and illegal—psychotropic drugs has led to growing concern by employers over impairment, incidents, accidents, and diminished productivity related to these substances. Employers have discovered that addressing workplace impairment requires more than forensic drug testing, which focuses on the illegal use of a very small number of illicit drugs and prescription controlled substances.

The focus of this article is the evaluation of employees who are suspected of workplace impairment. These "for-cause" situations are distinct from suspicionless random drug testing and should be treated more comprehensively. We propose a protocol to address workplace impairment, including an expanded drug testing panel, the use of complementary drug testing matrices, and identification and implementation of reasonable, objective criteria for evaluation of employees with regard to their fitness to work in a safe and effective manner.

## BACKGROUND

The Federal Workplace Drug Testing Programs, which also serve as the template for most private sector drug testing programs, were initiated in the late 1980s in response to public, industry, and government concerns over drug abuse. The narrow focus was on the most prevalent illegal drugs of the era—amphetamines, cocaine, heroin, marijuana, and

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PCP (MDMA was added more recently). It ignored the wider spectrum of (usually) illegal drugs and most of the now-ubiquitous prescription controlled substances. Although workplace drug testing programs have an important role in mitigating the adverse impact of this small group of drugs, these impairment prevention programs were intended to address very different problems than the ones employers face today.

The widespread use and abuse of prescription medications, which often meet the definition of "legal use," and the abuse of other psychotropic drugs, many of which are not currently tested for (or even federally scheduled), present a growing risk to workplace safety and productivity.

With regard to prescription controlled substances, the limitation on employment action is not only an analytical one. There are also important legal limitations imposed by the Americans with Disabilities Act (ADA) and similar laws. Federal and state disability laws, and the social policies on which they are based, generally disallow the prohibition of prescription controlled substances by employers. Most individuals who administer stable doses of opioids and other prescription medications can do so without significant psychomotor impairment. Indeed, in some cases, their function may be improved. Thus, disability laws require employers to articulate a business necessity to test and/or perform medical examinations and, more important, require individual assessments of employees' ability to perform their jobs in a safe and effective manner. The legal handle on all these issues with respect to employer policies and management is, however, "impairment."

Recent cases demonstrate the legal risks to employers who have tried to limit or ban the use of opioid analgesics and benzodiazepine sedatives.[1,2] The cases also highlight the frustration of employers who collect reports of poor performance and impairment, watch accidents and incidents increase, and witness workers' compensation costs grow as a result of the misuse or abuse of prescription controlled substances.

The law does entitle employers to reasonable assurances that their employees are capable of performing their jobs in a safe and effective manner. The U.S. Equal Employment and Opportunity Commission (EEOC) states in its guidance that in most instances an employer's need to conduct disability-related inquiries or medical examinations will be triggered by evidence of current performance problems or observable evidence suggesting that a particular employee poses a direct threat.[3]

Negligence law creates a legal duty for employers to intervene in situations in which employees performing safety sensitive tasks appear to be impaired. "Legal use" of medications does not authorize or excuse impairment on the job, just as it does not excuse impaired driving. Thus, the difficult question with regard to prescription drug use is: what are the objective criteria for evaluating workers' fitness for duty?

Federal and private drug testing programs do not ignore impairment or fitness, but the regulatory and policy language assigns responsibility for "safety concerns" to an examining physician. For example, medical review officers (MROs) in traditional drug testing programs, who verify non-negative drug test results, are instructed to use their professional judgment as to whether medication use presents a safety concern. Also, the current federal manual for MROs states that they must use their judgment as to what to do with the information they have;[4] judgment on top of judgment. In the U.S. Department of Transportation (DOT) program, MROs who have safety concerns about prescription medications are directed to inform an employer designee to have the employee evaluated. It sounds prescriptive, but there is no standardized protocol or guidance provided by regulators on how a physician should make a clinical determination of "fitness," which involves the competent performance of the employee's safety sensitive job.

It is vital for the employer to have access to medical professionals who are familiar with both substance use disorders and the occupational requirements of the employee. To be compliant with the Americans with Disabilities Act (ADA), the Equal Opportunity Employment Commission (EEOC) stipulates that the clinical evaluation must be "job related and necessary for the business." However, employers are permitted to require medical examinations when there is "evidence of a job performance or safety problem."[5] This is a key issue when dealing with prescription drug abuse and not simply illegal drug use. Unfortunately the ADA does not specifically address prescription drug abuse because it emerged as a national issue only after the passage of the ADA and its revision in 1992.

## PRESCRIPTION DRUG USE AND ABUSE AND SAFETY

Over the past two decades, an imperative to treat chronic pain has emerged, and with it a change in the standard of medical practice for its management. A direct consequence has been the dramatic growth in the prescribing of long-term, often high-dose opioid analgesic therapy. An unintended consequence has been a parallel increase in the development of opioid use disorders and their consequences, including

opioid-related motor vehicle crashes, emergency room visits, and unintentional deaths.

The current prescription drug problem is not limited to opioids. For example, alprazolam (Xanax), a benzodiazepine sedative medication with significant impairing potential, is the most prescribed—and most abused—psychiatric medication in the United States.[6,7] Muscle relaxants, particularly carisoprodol (Soma), can also be highly impairing and highly abusable. It is not uncommon to see the prescribing of various combinations of opioids, benzodiazepines, and muscle relaxants to the same employee.

The greatly increased use of potentially impairing medicines has important implications in the workplace. According to the most recent National Survey on Drug Use and Health, of the 19.9 million current non-medical drug users aged 18 or older in the United States, 13.1 million—or two thirds of all drug users—were employed full or part time.[8] Workplace-specific effects of substance use disorders include absenteeism, diminished productivity, poor morale, injuries, and an increase in health insurance claims.

## THE STATUS QUO

At the inception of the Federal Workplace Drug Testing Programs, opioid therapy for chronic, non-cancer pain was uncommon. Those involved in developing the drug testing guidelines were reticent to insinuate workplace testing into medical practice, and the political focus was on the deterrence of illicit drug abuse. The result was reflected in the exclusion of the most commonly prescribed potentially impairing medications—the benzodiazepines and the synthetic and semi-synthetic opioids—from the standard testing panel. (The heroin metabolites, 6-acetylmorphine and morphine, and the common heroin contaminant, codeine, remain the only opioids on the current government testing panel. The omission of other opioids reflected the clear intent to focus on heroin abuse.)

For the employee with a confirmed *positive* urine drug test result, who produces a valid prescription for the drug, the MRO generally rules this a *negative* result. This type of negative result is not by itself sufficient to verify that the medication use is safe—or even that the medication is being used for legitimate medical purposes. For example, according to the National Survey on Drug Use and Health, more than 20% of people at an age of 12 years and older, who reported non-medical use of opioids in the previous year, stated that they procured their opioids through valid prescriptions from one (18.1%) or more (1.9%) physicians.[8] Thus, individuals who are using prescription controlled substances for non-medical purposes can both procure their drugs from legitimate channels and use these drugs under the cover of medical legitimacy. Furthermore, while it is unclear what percentages of prescription controlled substance users who possess valid prescriptions supplement their consumption with prescriptions from multiple providers, or by obtaining additional drugs through non-medical channels, it is clear that this practice is not uncommon.[9]

The issue of medication-related impairment at work is important for all employees, but it is especially important for those in safety sensitive positions and industries. Thus, notwithstanding valid prescriptions, the MRO and the prescribing physician have the additional responsibility of determining whether the employee has the capacity to perform his or her job while taking the medication(s). Precisely, how this determination is to be made is not specified in current regulations. The fact left unacknowledged is that neither MROs nor most other physicians have the expertise to perform this type of evaluation. Moreover, there are no validated instruments, expert opinions, or guidelines for determining context-specific impairment due to prescription medication.

## ADDRESSING SUSPECTED WORKPLACE IMPAIRMENT: A PROPOSED FOR-CAUSE EVALUATION PROTOCOL

Suspected workplace impairment should trigger an immediate assessment for an acute medical condition, the evaluation and management of which should take priority. Next, it should prompt "for-cause" blood alcohol determination and comprehensive urine drug (and, possibly, oral fluid) testing. Finally, it should elicit an expeditious (e.g., within two weeks), focused evaluation by a non-treating physician, such as an MRO, an occupational medicine physician, or an addiction medicine physician.

A confirmed, MRO-verified, positive test for any drug or metabolite (i.e., a test result with no valid medical explanation) or a positive blood alcohol result should constitute *per se* evidence of a violation of the drug-free workplace standard, as is the case in all federally regulated drug testing programs.

An MRO-verified urine (with or without oral fluid) drug test result for prescription controlled substance(s) for which the employee has valid prescription(s) should be followed by an expeditious, focused, cost-effective evaluation. The employer should provide the evaluating physician with an explanation of the behavior or incident that prompted the evaluation and the confirmed results of urine/oral fluid testing

done at the time of suspected impairment. The goals of the evaluation should include, if possible, (1) characterization of use of potentially impairing substances (e.g., therapeutic use, abuse, addiction, or other forms of misuse), (2) the acceptability of continued use of the prescription medication(s) in the workplace, and (3) recommendations for follow up on medical conditions that raise safety concerns.

The focused medical evaluation should include the following components:

1. *Medical History with an Emphasis on Use of Controlled Substances*
   The evaluating physician should elicit a comprehensive medical and psychiatric history. The medical history should include a current drug history (i.e., prescription and over-the-counter medications and illicit drugs). For each medication, the evaluating physician should note the indication for use, duration of therapy, the dosage (including recent dosage changes), and the pattern of use (i.e., regular, time-contingent use versus irregular, symptom-contingent use; as per prescription instructions versus otherwise), including use during working hours, and employee-subjective reports of medication(s) effects on cognitive and psychomotor function.
   The evaluating physician should also elicit a past alcohol, drug, and prescription controlled substance history, including history of abuse or addiction, treatment episodes, and consequences, including driving under the influence of alcohol (DUI) or drugs (DUID) arrests.
   To the extent possible, the evaluating physician should determine whether the employee has an ongoing medical (e.g., cerebrovascular disease; sleep apnea; incompletely controlled seizure disorder; poorly controlled diabetes mellitus) or psychiatric (e.g., mood, anxiety, or thought disorders) illnesses that might manifest as workplace impairment. Communication with treating physicians(s) is essential.
2. *Focused Physical and Mental Status Examination*
   The evaluator should look for evidence of drug use by intranasal, intravenous, and inhalational routes. The physical examination should include a thorough neurological examination. A Folstein minimental state examination (MMSE) should be performed to identify cognitive deficits that may not be apparent during the course of the medical interview.
3. *Employee's Management of and Adherence with Prescriptions*
   Examination of prescription bottles and their contents, particularly those containing controlled substances, will allow the evaluator to identify the date of prescription dispensing, the prescribing physician, and the medication (including strength, dosage instructions, and numbers of dosage units dispensed and remaining). "Pill counts" allow the evaluator to determine whether the employee has been adherent with prescription instructions and, if not, the extent of overuse (or underuse). The date of dispensing, particularly if filled in the distant past (e.g., more than six months prior to index event), might be pertinent to the issue of current legitimate medical need.
4. *Drug Testing*
   As part of the safety evaluation, the evaluating physician has the discretion to repeat the drug test, expand the testing panel, or to collect specimens from complementary testing matrices (e.g., hair, fingernails). Complementary matrices provide wider windows of drug or drug metabolite detection. The purpose of this testing is to obtain as comprehensive a diagnostic picture as possible of the employee's recent drug use.
5. *Collateral Sources of Information*
   The employee, even if aware of a substance use disorder or substance-related impairment, is likely to dissemble about his drug use because of the high stakes involved in the outcome of the evaluation. If the employee is willing to provide the evaluating physician with authorizations, information from treating physicians, family members, friends, co-workers, and supervisors can help the evaluator in determining whether a problem exists, and if so, can help clarify the nature and extent of the problem.
6. *State Prescription Drug Monitoring Program (PDMP) Data*
   Prescription drug monitoring programs are state-specific databases that link patients to the dispensing of certain classes of controlled substances. The type of prescription information collected, the specific federal drug schedules that are reported, and the accessibility to physicians vary widely by state. Data might include prescribing physician; medication name, strength, and number of dosage units dispensed, date of dispensing, and pharmacy name. The database may reveal evidence of multiple providers for the same class of drugs (which constitutes "doctor shopping") as well as the prescribing of unsafe combinations of psychotropic controlled substances.

Many states limit access to the database to treating physicians. An evaluating physician might request that the employee authorize access, or the employee may authorize a prescribing physician to

access the database, and this authorization is a form of cooperation with the employer's program. The key here is to determine how many "treating physicians" are prescribing the same medications or other psychotropic drugs. Currently, 42 states have operational programs, and seven states and one territory have PDMP legislation.[10]

If the above focused medical evaluation leads to a reasonable suspicion of a substance use disorder, the employer must understand that this finding might meet the legal definition or criterion for a covered disability. When there is a disability in respect to legal use of prescription drugs, the employer must consider the situation in terms of whether or not a reasonable accommodation can be achieved without undue hardship.[11] The ADA, however, also permits employers to require that an employee not pose a *direct threat*, defined as significant risk of substantial harm to his/her or others' health or safety. This assessment must be based on "reasonable medical judgment that relies on the most current medical knowledge and/or the best available objective evidence."[12]

If the evaluation does not lead to reasonable suspicion of a substance use disorder, case-specific consideration should be given to (1) a more comprehensive evaluation for neurocognitive effects of medication(s), (2) specialist consultation to rule out medical or psychiatric causes of impairment, or (3) a trial of tapering and discontinuation of potentially impairing medications, with or without substitution of non-impairing medications.

## SUGGESTIONS FOR ACTIONS FOR MOVING FORWARD

1. Employer policies should include a *per se* prohibition of non-prescription psychotropic drugs.
2. "For-cause" drug testing panels should be updated and expanded to reflect current trends in prescription and illicit drug use and advances in drug testing technology. We recommend testing for—at minimum—amphetamines, barbiturates, benzodiazepines, buprenorphine, cannabis metabolite, carisoprodol, cocaine metabolite, methadone, methamphetamine, and opioids (including 6-acetylmorphine, buprenorphine, codeine, hydrocodone, hydromorphone, meperidine, methadone, morphine, oxycodone, oxymorphone, tapentadol, and tramadol). Consideration should be given to testing for cannabinomimetics, cathinones (bath salts) and other empathogens, and hallucinogens. Testing panels should reflect local and regional drug use patterns. Rather than beginning the drug testing process with a screening immunoassay, consideration should be given to screening and confirmation of the aforementioned array of drugs by means of state of the art liquid chromatography—tandem mass spectroscopy (LC-MS/MS).
3. Identify physicians who are capable of performing these comprehensive impairment evaluations. One logical pathway would be the creation of an enhanced MRO-type training program to create a group of Medical Review and Evaluation Officers to fill this niche. MRO and non-MRO addiction medicine and occupational medicine physicians bring pertinent skill sets to these evaluations.
4. Employ validated instruments for detecting prescription medication-related impairment. For example, chronic benzodiazepine use is associated with a broad range of cognitive impairments. The impact of chronic opioid therapy on cognitive functioning is more variable, but some studies have found impairments in executive functioning and psychomotor speed.[13]
   For individuals with equivocal (or normal) results on the MMSE, but who are still suspected of impairment due to prescription medication use (or misuse), formal neurocognitive testing, an established evaluative tool for the detection of subtle cognitive impairment may be warranted.[14] The advantages of objective neurocognitive testing include standardized administration, demographically corrected norms, known rates of error, and computerized administration and scoring for some test batteries (e.g., CogState WorkPlace, ImPACT, MicroCog, etc.). The use of neurocognitive testing and consultation with a qualified neuropsychologist can assist the evaluating physician in better understanding the employee's work-related cognitive demand characteristics, level of cognitive functioning, and ability to return-to-work in an unmodified or modified capacity.
5. State prescription monitoring program databases should be made accessible to physicians performing workplace impairment evaluations. A common observation of MROs is that individuals suspected of impairment due to prescription controlled substances frequently have valid prescriptions for these medications. Querying state prescription monitoring databases often reveals prescriptions for the same or similar medications from multiple providers. It is a remarkably effective method to identify drug seeking behavior.

## SUMMARY

Impairment due to prescription medication, cannabis, and other psychotropic drug use and

abuse has become an important workplace issue. It diminishes safety, productivity, morale, and competitiveness. Individuals who are substance-impaired in the workplace are almost certainly substance-impaired on the roads and highways and in other major life spheres. Thus, identification of substance-impaired employees both improves workplace metrics and offers an opportunity to identify these individuals and offer them assistance before they create irreparable damage to themselves or others. An often overlooked or discounted rationale for drug testing programs is the support they provide to individuals at risk for or in recovery from substance use disorders. The cognitive awareness of the possibility of drug abuse being discovered, and concern over the consequences, can play an important role in maintaining drug-free behavior.

Current drug testing guidelines and practices in response to suspected prescription medication-related workplace impairment are egregiously inadequate. Employers, regulators, and legislators are encouraged to bring workplace drug testing into line with the most prevalent potentially impairing drugs, and with up-to-date drug testing techniques and technologies.

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