FAST FACTS AND CONCEPTS #244
SCREENING FOR OPIOID MISUSE AND ABUSE
Rene Claxton MD and Robert Arnold MD

Background
Opioid analgesics are often effective in relieving both cancer and chronic non-malignant pain but can be misused and abused by patients and others (1, 2). Clinicians need to identify patients at risk of misusing prescribed opioids in order to prescribe and monitor opioid therapy safely. This Fast Fact discusses how clinicians can screen for risk of misuse. See Fast Facts #68, 69, 110, and 127 for further discussions about differentiating pain complaints from abuse, urine drug testing, and substance use disorders in palliative care patients.

Definitions
Medication misuse is the intentional or unintentional use of a prescribed medication other than as directed. Misuse can include a patient taking more pain medicine than prescribed to control otherwise inadequately controlled pain as well as abusive and addictive behaviors. Abuse refers to the intentional self-administration of a medication for non-medical purpose or the use of an illegal drug. Addiction is a primary, chronic disease defined by one or more of the following behaviors: impaired control over drug use, compulsive use, continued use despite harm, and craving (4). Aberrant behavior is a research term defined differently by various investigators which typically includes activities of misuse and abuse.

Benefits of Screening
Opioid therapy is a safe and effective treatment for pain in many patients. However, opioid misuse carries the risk of development of addiction, overdose, and death which require providers to balance individual patient’s pain and risk levels. Patients with high risk for opioid misuse should not necessarily be denied opioid therapy but should be followed under closer supervision than those patients with lower risk estimates. In patients with short life expectancies, clinicians may be willing to accept greater risk in prescribing opioids than in patients with chronic non-malignant pain. However, providers should remember that opioids do not improve quality of life for patients who misuse them as a remedy for other symptoms such as anxiety or existential suffering, and that active substance abuse is as devastating to terminally ill patients and families as it is to others (5).

Risk Factors
Risk factors for misuse can be grouped into three categories: biological, social and psychological. Biological risk factors include family history of drug abuse and male gender. Social risk factors include poor social support and history of convictions related to drugs or driving while impaired by substances. Psychological risk factors include a personal history of substance abuse (including alcohol or tobacco), pre-adolescent history of sexual abuse, and co-morbid psychiatric illness (i.e. major depression, bipolar disorder, personality disorder) (6).

Screening for Misuse
No screening tests have been developed to screen for opioid misuse specifically in cancer patients. However, several screening tests predict the potential for opioid misuse in patients with chronic non-malignant pain. Common instruments include the Screener and Opioid Assessment for Pain Patients (SOAPP) and the Opioid Risk Tool (ORT). While these tools can be applied to patients seen in palliative care settings (such as cancer patients or patients with advanced illnesses), clinicians should be aware they have not been validated in these patient populations. Clinicians should always keep in mind that these are screening tools used to identify high-risk patients appropriate for close monitoring and further assessment, but are not diagnostic tools to diagnose substance use disorders or to definitively identify patients who should not be prescribed opioids for pain. In addition, they do not assess the risk of diversion of drugs by family or community members.

• The SOAPP predicts risk potential for aberrant drug behavior via a 14-item self-report. Items included in the SOAPP cluster into categories of: antisocial behavior, substance abuse history, doctor/patient relationship, medication-related behaviors, and psychiatric and neurobiologic need for medicine. Responses are based on a 5 point Likert scale (possible score range 0-56). Using 7 as cut off, this test had a sensitivity of 91%, specificity of 69%, positive predictive value (PPV) of 71% and negative predictive value (NPV) of 90% (7) to predict aberrant drug behavior. It is important to note that while a score of 7 maximizes this test’s sensitivity, i.e. identifies most patients with a risk of...
opioid misuse, it will also result in a large number of false positive tests given the lower specificity at this cut-off.

• The ORT is a 5-item yes/no tool which predicts the probability of opioid misuse or abuse among patients being considered for opioid therapy for chronic pain. This measure is based on several risk factors including: family history of substance abuse, personal history of substance abuse, age (16-45 years is a risk factor), history of pre-adolescent sexual abuse, and psychological disease. This tool categorizes patients as low, medium or high risk for aberrant behavior. The sensitivity and specificity for the test for patients who score at least ‘medium risk’ is 99% and 16%, respectively. For those with ‘high risk’ scores, the test sensitivity is 53% and specificity 96% (8). Because clinicians administering the ORT could be misled by patients with a history of opioid use who downplay past behavior, it is best to apply the tool in lower-risk clinical settings such as primary care rather than in higher risk settings.

Which method is the best way to predict opioid misuse or abuse? In a study of 48 chronic pain patients, the sensitivity of predicting aberrant behavior was compared using three different methods: a trained psychologist’s clinical interview, SOAPP and ORT. The clinical interview showed highest sensitivity (77%). SOAPP showed a sensitivity of 73% (score ≥6 as cut-off). ORT showed sensitivity of 45% (score ≥4 as cut-off) (9).

Bottom Line Given the limited number of studies comparing and validating these instruments, it is reasonable to choose a measure based on practicality such as familiarity, ease and time of completion or patient versus provider administration (both the SOAPP and ORT can be completed by patients in less than 10 minutes). Regardless of whether one uses a tool, a thorough history including personal and family history of psychiatric conditions, substance abuse, and sexual abuse is key to identifying patients who need closer assessment and monitoring.

Additional Resources

References

Author Affiliation: University of Pittsburgh Medical Center, Pittsburgh, PA.

Version History: Originally published August 2011; Copy-re-edited August 2015.

*Fast Facts and Concepts* are edited by Sean Marks MD (Medical College of Wisconsin) and associate editor Drew A Rosielle MD (University of Minnesota Medical School), with the generous support of a volunteer peer-review editorial board, and are made available online by the Palliative Care Network of Wisconsin (PCNOW); the authors of each individual *Fast Fact* are solely responsible for that *Fast Fact’s*
content. The full set of Fast Facts are available at Palliative Care Network of Wisconsin with contact information, and how to reference Fast Facts.

**Copyright:** All Fast Facts and Concepts are published under a Creative Commons Attribution-NonCommercial 4.0 International Copyright (http://creativecommons.org/licenses/by-nc/4.0/). Fast Facts can only be copied and distributed for non-commercial, educational purposes. If you adapt or distribute a Fast Fact, let us know!

**Disclaimer:** Fast Facts and Concepts provide educational information for health care professionals. This information is not medical advice. Fast Facts are not continually updated, and new safety information may emerge after a Fast Fact is published. Health care providers should always exercise their own independent clinical judgment and consult other relevant and up-to-date experts and resources. Some Fast Facts cite the use of a product in a dosage, for an indication, or in a manner other than that recommended in the product labeling. Accordingly, the official prescribing information should be consulted before any such product is used.