



Safe Opioid Prescribing for Adults by Nurse Practitioners: Part 1. Patient History and Assessment Standards and Techniques

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ABSTRACT

Using an opioid to treat pain is the last component in a sequence of events that are documented and inform the provider and the patient about treatment choices, responsibilities of each person, and consequences that could result if there is misuse. The prescribing process begins with a comprehensive history and multiple assessments that use risk assessment and other tools, urine drug tests, prescription reviews, informed consents, and patient provider agreements. Nurse practitioners have a professional responsibility to follow state and national guidelines for safe opioid prescribing to protect patients, the public and themselves if they become the subject of an investigation.

Keywords: drug abuse, misuse, opioid risk assessment, safe prescribing

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INTRODUCTION

Opioid misuse, divergence, and overdose are public health problems in the United States.^{1,2} Increasing numbers of deaths each year are opioid related.³ Evidence supports that more people use opioids for nonmedical reasons and

become addicted.⁴ Increasing numbers of patients are seen in emergency departments with some level of opioid misuse.⁵ Outpatient clinics report increased numbers of patients seeking pain medications for multiple issues.⁶ More hospitals offer inpatient pain services to manage complex patients who are

This CE learning activity is designed to augment the knowledge, skills, and attitudes of nurse practitioners and assist in their understanding of history and assessment of the adult prior to opioid prescribing.

At the conclusion of this activity, the participant will be able to:

- Describe components implementation/treatment management phases leading to opioid prescribing
- Discuss nationally vetted standards of care specific to pain management and ongoing opioid prescribing
- Evaluate ongoing use of pain rating scales, opioid abuse risk assessment tools, urine drug tests, prescription drug monitoring programs, informed consent and patient provider agreements when treating patients with opioids

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The author do not present any off-label or non-FDA-approved recommendations for treatment.

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admitted for surgical or other interventions and who also have substance-abuse issues.

Evidence shows that > 50% of opioid prescriptions are written by primary care providers, including certified nurse practitioners (CNPs).⁷ Opioid prescribing is complex and both professional organizations and regulatory authorities have demonstrated interest in formulating prescribing standards and implementing safeguards to protect patients and the public from misuse and adverse outcomes. The purpose of this study is to provide CNPs with an overview of the current nationally vetted pain management and opioid-prescribing standards. A further aim is to present techniques and recommendations based on best practice experiences so that CNPs can assimilate them into practice for safe opioid prescribing and for protection of their own practice should they become the subject of a regulatory investigation. Treating pain patients is separated into 4 processes: (1) obtaining a comprehensive history; (2) using multiple assessment techniques; (3) implementing treatment; and (4) managing ongoing care. This part of the study (Part 1) details obtaining a comprehensive history and using multiple assessment techniques.

Common problems faced by clinicians are limited formal pain management education, a lack of familiarity using opioid misuse risk assessment tools, and a lack of awareness of techniques to mitigate opioid misuse when prescribing.⁸ Skill development is sporadic and is often based on the provider's own experiences learned by trial and error or the experiences of peers, who also lack formal pain education. Because this concern was widely identified, national organizations have implemented efforts to develop position papers and formal pain curricula, including the American Society for Pain Management Nursing.^{9,10} The National Institutes of Health Pain Consortium has begun a pain curriculum development process utilizing selected centers of excellence.¹¹ The US Food and Drug Administration's blueprint specific to extended-release and long-acting opioid analgesic management has been developed and implemented to impact provider education.¹²

Being knowledgeable about the nationally vetted standards of care and safeguards for treating patients with opioids is the professional responsibility of the

CNPs who prescribe opioids.¹³ Treatment begins with a comprehensive patient history that includes information specific to pain. The traditional physical assessment component should also include a pain evaluation. Assessments need to include formal opioid misuse risk tools, reviewing patient-specific profiles from state boards of pharmacy prescription drug monitoring programs (PDMPs), obtaining and assessing past records from other providers, and performing urine drug tests (UDTs). Having referral relationships in place for specialized pain management care of complex patients, whose needs may exceed the experience or comfort level of the provider, all serve to safeguard the patient and the public from harm and to positively impact the reduction of opioid misuse as a national health problem.

BACKGROUND

Understanding basic pain concepts can facilitate more effective patient specific pain management interventions. Clear definitions enhance effective communication between health care workers, patients, regulators, and the public.¹⁴ Addiction fear is concerning to both patients and CNPs and much research about opioid use and its implications was generated over the past 2 decades.¹⁵ An outcome has been clearer definitions and understanding about conditions related to opioid use such as: tolerance; physical dependence; psychological dependence; pseudoaddiction; and addiction.

Tolerance is not addiction. Tolerance exists when the expected and historic response to a drug is no longer achieved at the same dosage levels and increases become necessary. The patient presentation is focused on wanting more drugs because they are not pain-free due to physical adaptation at the current dose level. Health care professionals at all levels commonly see this as drug-seeking behavior.¹⁶

Physical dependence is a state of adaptation whereby the body functions normally only with the drug and withdrawal is manifested when the drug is removed. Dependent situations can occur with or without an addiction.¹⁷

Psychological dependence is related to using something because its ingestion becomes associated with the alleviation of mental duress, such as anxiety, depression, or other emotionally uncomfortable

states. The difference between psychological and physical dependence is that the cessation of discomfort is what reinforces and creates the psychological dependence and removal of the drug removes the emotional relief. Psychological dependence is associated with compulsive disorders, such as gambling and sexually compulsive activities. Substituting the term psychological dependence for addiction is not generally accepted because it covers a broader range of behaviors that often have nothing to do with addiction to a substance.¹⁸

Pseudoaddiction results from a fear of being in pain. Misinterpreting the relief-seeking behaviors as though they are drug-seeking behaviors is common. Pseudoaddictive behaviors are seen in postsurgical hospitalized patients and manifest as clock-watching, documenting when pain medicine was received to plan the next dose, and asking to be awakened to receive medication when the time interval allows. Pseudoaddictive behaviors resolve with effective pain medication treatment or with the resolution of the pain stimuli, such as the healing of a surgical wound.¹⁹

Addiction is defined as a primary, chronic, neurobiologic, relapsing disease that is characterized by behaviors that include compulsive drug seeking and use, despite harmful consequences to the individual or to others.²⁰

Understanding pain types leads to proper drug selections and better treatment outcomes. Pain can be categorized into 2 types: nociceptive and neuropathic. Nociceptive pain is exemplified by tissue damage, such as cuts and surgical incisions. It is the most common pain type and usually resolves with time. Neuropathic pain is caused by disease or damage to the nervous system. Examples are shingles, peripheral neuropathy, and fibromyalgia. Ability to differentiate pain types guides the assessment and investigations. Neuropathic pain becomes more difficult to manage over time and can benefit from multimodal therapies, including antidepressants and medications that act on neurotransmitters such as gamma-aminobutyric acid and glycine.²¹

ESTABLISHING STANDARDS: NATIONAL PROFESSIONAL ASSOCIATION'S AND REGULATION'S ROLES

Nationally vetted care standards have been established by public and professional organizations to help

guide effective pain management. They provide methodologies focusing on proper assessments and interventions that support safety methods to protect the patient and public from opioid misuse. They address techniques for treating pain in different settings like postsurgical short-term acute care and with conditions such as neuropathies, cancer, chronic pain, or addiction recovery.²²⁻²⁵ Standards are endorsed by nationally recognized authorities before becoming publically available.

The Joint Commission has established organizational pain management standards.²⁶ These standards require organizations to have mechanisms recognizing the rights of patients to have appropriate pain assessments, to have initial and ongoing pain screening, and to be educated about pain.

Regulatory agencies, such as boards of pharmacy, nursing, and medicine, have developed practice guidelines addressing pain management and safe opioid prescribing.^{27,28} Boards of nursing deal with 4 unique situations that impact the CNP: (1) CNP fails to meet the pain management care standard as endorsed by the board; (2) the CNP fails to appropriately prescribe pain medications; (3) the CNP's personal pain medication use affects their practice; and (4) the CNP in a recovery program requires pharmacologic pain management.

The role of a regulatory board is public protection. It is not the advocate for the licensee. The CNP needs to be aware of individual state-based rules and regulations specific to pain management and prescribing practices. Regulatory boards can endorse professional association practice standards, but some states choose separately developed care standards. The CNP has a legal imperative to uphold the standard in their state and their practice will be measured against that standard in an investigation. Awareness of state-based regulatory requirements and endorsements can help a CNP avoid investigative issues.²⁹

In 2012, the US Food and Drug Administration approved a Risk Evaluation and Mitigation Strategy (REMS) program to educate prescribers about national standards for using extended-release and long-acting opioids.^{12,30} The REMS project is a multidisciplinary collaborative that designed core content based on needs assessment, practice gaps, clinical competencies, and learner self-assessments.

REMS education programs are available nationally, and for CNPs they have been offered annually since 2013 at the American Association of Nurse Practitioner conference and at some state CNP meetings. The goals of the REMS collaborative is to demonstrate the key elements of safe prescribing practice and to educate prescribers about pain management standards to prevent adverse outcomes.³¹

USING NATIONAL STANDARDS: PATIENT HISTORY AND ASSESSMENT

National standards speak to documenting all patient interactions. Documentation begins with a patient history that includes pain history details and describes issues that relate to opioids, such as pulmonary disease, cognitive impairments, constipation, nausea, and hepatic or renal disease, which could impact metabolism and excretion. This includes an updated review of previously diagnosed conditions linked to current or historic substance abuse, such as psychiatric conditions, hepatitis, HIV, tuberculosis, cellulitis, sexually transmitted diseases, and trauma. Also included are treatment history, aggravating and relieving factors, and a pain intensity score rated by the patient using a formal tool.

Examples of tested pain intensity scoring tools are available for CNP use. Measurement relies on the patient's self-rating. Because pain is subjective, the patient's self-reporting provides the most accurate measurement. The limitation of these unidimensional tools is that they only measure intensity, and thus they cannot be considered as a substitute for comprehensive pain assessments.³² Tool choice depends on the setting, tool complexity, the administration time, as well as the patient's ability to understand and communicate.³³ Once a tool is selected, the same tool should be used consistently to allow for trend identification.^{33,34}

There are 7 commonly used tool scales: (1) The verbal rating scale asks patients to choose between 3 and 6 adjectives, ranging from no pain to severe pain. (2) The visual analog scale uses a line with the beginning indicating no pain and the end being severe pain. Patients identify their pain rating on the line. (3) The numerical rating scale has patients rate pain from 0 to 10, with 0 being no pain and 10 being the worst imaginable pain. It is the most consistent

and useful way to measure response to medication administration. The limitation is that few validation studies have used this scale, and the few that do exist investigated chronic pain. (4) The behavior rating scale is qualitative, whereby patients describe how their pain affects performance of activities of daily living. The limitation of this scale is the easy confusion between pain intensity and pain interference with activity. Depression also impacts results. (5) The picture scale uses 5 facial expressions indicating increasing levels of anguish. Patients identify which face represents them. The tool is easy and fast to use. It is effective with children, cognitively impaired adults, and when language barriers exist. (6) The box scale is a combination of the numerical and visual scales, with 10 boxes in a row numbered 1-10. Box 1 represents no pain and box 10 represents the most severe pain. Patients put an "X" in the box representing their level of pain. (7) The descriptor differential scale uses 12 adjectives describing pain and the patient rates each adjective from 0 to 10, with 0 being no pain and 10 being severe pain. This tool is the most reliable and has the most retest consistency. The disadvantage is that its completion takes longer.³³

Additional pain assessments specific to patients who use or will be prescribed opioids include: (1) a social history; (2) a drug history; (3) an alcohol use history; (4) a depression screening; (5) a completed opioid abuse risk assessment tool; (6) a UDT; (7) a review and evaluation of the PDMP; and (8) a copy and review of previous medical records from other providers. These should all be documented in the medical record.

Social, alcohol, and drug use histories should be assessed. Social history includes an indication of the patient and family socioeconomic level, education level, employment history and current employment status, marital status, living situation, dependent responsibilities, and any resolved or ongoing legal issues, such as driving violations related to alcohol use or being listed as a sex offender. Any psychiatric history or diagnosis in the patient or family needs to be detailed. Tobacco use, including the type being pipe, chew, or cigarette, the age that smoking began or ceased, the number of daily cigarettes, and any use of nicotine patch should be detailed. The alcohol review includes: family use history; patient age when

alcohol use began; type of alcohol as spirits, wine, or beer; and use frequency, as well as any history of alcohol-related legal issues or treatment and recovery program participation and success or recidivism should be discussed. The drug history includes all prescription, over-the-counter, and illicit drug use. This provides insight about opioid tolerance and physical dependence and can guide drug selection. Social and drug histories also alert a provider of potential misuse. Three factors having a significant association with substance misuse are: (1) personal or family history of alcohol or drug abuse; (2) younger age; and (3) current psychiatric condition.^{35,36}

The majority of patients with chronic pain also have depression as a comorbidity.³⁷ CNPs provide most mental health and pain services to their patients without the benefit of referral because mental health and formal pain clinics with mental health specialists are limited. Managing chronic pain is sufficiently challenging, but adding depression to the patient condition increases the importance of evaluating whether the patient is becoming less stable and is a risk for suicide. Indications of this instability can be reports of increased pain, sleep disturbances, increased functional limitations, and deterioration in grooming. Chronic pain patients are twice as likely to commit suicide as non-pain patients.³⁸

Depression screening tools are valid and reliable. Because of the high prevalence of chronic pain patients who are depressed, depression screening should be considered with each visit. Two tools, the Beck Depression Inventory and the Profile of Mood States, have been determined as most appropriate for the chronic pain population.³⁹

Predicting opioid misuse behaviors by using risk assessment tools should be considered with every patient, but the decision to use these tools is individualized. Cases such as a pain patient in a long-term or acute-care setting who will have professional nurses administer the medications may not require a risk assessment. In other settings, formal risk assessment tools can be completed by the patient or the clinician before treatment is started. Tool selection is based on the reason for pain management, a history of current or past substance abuse, psychiatric treatments, sexual abuse, tobacco use, or a family history of substance abuse or psychiatric disorders. These

tools are widely used and evidence supports their accuracy.⁴⁰⁻⁴²

Risk tools were developed before the current laws making recreational marijuana use legal in some states. Tool scoring based on illicit marijuana use has not changed.⁴³ Patients with scores indicating high risk should be considered for referral to pain management or addiction specialists. The results should be in the clinical documentation.

There are multiple tools available online.⁴⁴ Examples include: (1) the Opioid Risk Tool (ORT)⁴⁵; (2) Screener and Opioid Assessment for Patients with Pain (SOAPP)⁴⁶; (3) Current Opioid Misuse Measure (COMM)⁴⁷; (4) CAGE and CAGE-adapted to include drugs (AID) Questionnaires⁴⁸; and (4) Diagnosis, Intractability, Risk, and Efficacy (DIRE).⁴⁹ Tool selection is CNP-dependent with the CNP understanding the purpose of the tool and being comfortable interpreting the results and discussing results with the patient. Some CNPs use multiple tools, whereas others are guided by group practice decisions or their existing electronic medical record. No tool has 100% accuracy all of the time. The purpose of an opioid risk assessment tool is to help alert the CNP that a potential problem may exist and that further investigation is indicated.

The ORT is a 5-question tool whereby the patient checks the box that applies to their situation and a number score for men or women is applied. Questions address personal and family history of substance abuse, age, preadolescent sexual abuse, and psychological disease, including depression. Scoring 4-7 indicates moderate risk and > 8 is high risk.⁵⁰

The SOAPP is appropriate for use with chronic pain patients who have difficulty modulating their opioid use. Four versions are available, with 5, 14, or 24 questions or the SOAPP-Revised. This tool can provide the CNP with assurance that the patient can adequately manage their treatment.⁴⁶

The COMM is a 17-item self-assessment chronic pain tool designed for patients who take opioids. Scoring is based on a 5-point Likert scale from 0 (never) to 4 (very often) with questions about signs and symptoms of drug misuse, psychiatric disorders, evidence of lying, provider visitation patterns, and medication noncompliance. A score > 9 is a positive

indicator for misusing medication and needing additional monitoring precautions.⁴⁷

CAGE and CAGE-AID Questionnaires use 2 initial questions about drug and alcohol use, followed by questions about personal impact of drug and alcohol use. Each positive response is 1 point. More than 2 points indicates a problem that requires further investigation.⁴⁸

DIRE is a tool aimed to determine suitable candidates for long-term opioid use. It scores 4 areas, each from 1 to 3. A score of 7-13 implies the patient is not a suitable candidate for long-term opioid use.⁴⁹

The UDT is an important assessment in initial screening and intermittently throughout the course of treatment, especially when opioid diversion or misuse is suspected. UDTs are reliable but false positives do occur because of immunoassay technologies being susceptible to interfering substances and cross-reactivity with drugs having similar chemical structures.

The CNP needs to understand testing issue results and to be cautious with judgments until completing full assessments. Hydration, drug dose, metabolism, body mass, urine pH, duration of use, and the individual drug pharmacokinetics all impact drug detection times. Result cautions include: hydromorphone has been shown to be a minor metabolite with higher doses of oral morphine; hydrocodone has been detected in results of patients using codeine; hydromorphone, as a metabolite of hydrocodone, has been detected in results of patients using hydrocodone; small hydrocodone amounts may be evident with oxycodone administration due to manufacturer impurities; ingestion of poppy seeds or herbal teas containing *Papaveris fructus* may show positive morphine results, and heroin is metabolized to morphine. UDTs cannot quantify drug doses. The toxicology laboratory that conducts the UDT can provide assay technologies and result parameters based on their testing techniques and reagents that detail the length of time drugs can be detected under normal conditions.⁵¹

How can the CNP use UDT results? If the patient takes a drug, the CNP would expect to see it reported. If a negative result is obtained for a prescribed or reported drug, it should be considered whether the

patient was: (1) not taking the drug; (2) taking a lower dose; or (3) taking the drug as instructed but with false results. The opposite can also happen. A positive result for a nonprescribed drug needs evaluation. It should be determined whether the patient: (1) was taking a nonprescribed drug; (2) had a false positive due to immunoassay; or (3) had a positive result for the drug because it is a metabolite of a prescribed drug. Interpreting the differences between menu panels and opioid metabolism may explain the presence of apparently unprescribed drugs.⁵² If a UDT returns positive for THC or THC-COOH, indicating marijuana use, the explanation should be documented, especially if recreational use is legal.

The cost of a UDT is a consideration and needs to be discussed with the patient and included in the preferred provider arrangement. Often patients do not account for this unplanned cost and it can pose a burden on them.

Ethical considerations about UDTs are important. Outside of the cost issues, documenting illicit drug use and its impact on the patient and family and decisions about continuation of treatment should be discussed. Unfortunately, information that can guide handling the complex situation of an unexpected positive UDT is rare. CNPs need to seek resources that help them prepare to have difficult and direct conversations with patients about preferred provider arrangement compliance based on the hard evidence of a positive UDT. Techniques using open-ended inquiries that are scripted in advance, such as “tell me how you are taking your medicines,” or “tell me what I should know about why this urine result came back positive,” can facilitate a nonthreatening conversation.⁵³

Historic information about patient-specific prescription use is available using the PDMP. It is available in 49 states, Washington, DC, and Guam Territory. Programs vary regarding who can access them, which drug schedules are monitored, what agency administers the program, if PDMP prescriber registration is required, if accessing the program is required for certain drug prescriptions, and who can receive reports.⁵⁴ Even with PDMP availability, the information provided may not represent a complete prescription history due to rural access issues and because some federal agencies are just beginning to

participate, such as the Veterans Administration and the Indian Health Service.⁵⁵ As pharmacies begin to participate, their historic records may still be lacking and only services from the time of program entry may be accessible. CNPs should make efforts to obtain records, prescription, and medication lists from previous providers.

Based on information gathered from the history-taking phase and the assessment components, a physical examination that includes a pain-specific evaluation should be conducted. A functional assessment based on pain location is indicated. Most patients have 2 or more sites of pain, making it important to ask the patient to identify their pain location for inspection.³⁸

CONCLUSION

History and assessment are the first 2 components in the process leading to using an opioid to treat pain. Using pain care standards and best practice principles can aid the CNP in meeting their professional responsibilities for safe opioid prescribing and protecting patients, the public, and themselves if they become the subject of an investigation. **JNP**

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