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Evidence-Based Strategies for Treatment and

Referral of Chronic Pain in Primary Care

Morgan Ann Bateman

A scholarly paper submitted to the faculty of Brigham Young University in partial fulfillment of the requirements for the degree of

Master of Science

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College of Nursing

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ABSTRACT

Evidence-Based Strategies for Treatment and Referral of Chronic Pain in Primary Care

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Chronic pain is an ever present issue in the United States, with more people suffering from it than heart disease, cancer, and diabetes combined. Chronic pain is the most frequent complaint in primary care, and it poses significant challenges to both primary care providers (PCPs) and their patients. At the root of many of these challenges is the prescription and management of opioid prescription drugs used to treat chronic pain. Opiate misuse, abuse, and diversion are serious risks of opiate prescribing. Risk assessment tools are available to aid the PCP in determining the severity of risk for potential patient abuse, and include the Revised Screener and Opioid Assessment for Patients with Pain (SOAPP-R), the Opioid Risk Tool (ORT), and the Brief Risk Questionnaire (BRO). Patients who score "high" on these scales should be referred to pain specialty clinics; however, it is often necessary to manage these patients in the primary care setting. The CDC Guidelines for Prescribing Opioids for Chronic Pain—United States, 2016 serves as a protocol for prescribing opiate medications for chronic pain. Inherit in these guidelines is the utilization of urine drug testing and patient provider agreements, which although underutilized, have shown to improve patient and PCP outcomes. Such outcomes for the PCP include improved efficiency and time-management in the clinic, more accurate detection of medication adherence and possible diversion, and improved objectivity with prescribing decision-making. The outcomes for patients include reduced aberrant drug behaviors, which results in improved patient safety. This paper will address evidence-based strategies for PCPs to aid them in appropriate referral processes and provide guidelines for safe and effective prescription of opioid medication for patients with chronic pain.

Keywords: chronic pain, opioids

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Evidence-Based Strategies for Treatment and

Referral of Chronic Pain in Primary Care

One in ten Americans suffer from chronic pain (Dennis, 2015); in fact, more people suffer from chronic pain than from cancer, heart disease, and diabetes combined (National Institute of Health [NIH], 2013). Consequently, chronic pain is the most common complaint of patients in primary care (Matthias et al., 2010). Chronic pain is multifaceted, as evidenced by its various definitions. One definition describes chronic pain as persistent pain that is unresponsive to routine pain treatments (Leverence et al., 2011). Another definition explains it as pain associated with chronic pathologic processes that cause pain for months or years (Leverence et al., 2011). Regardless of the definition, chronic pain is an ever-present issue across the nation. It is estimated that the direct and indirect expenditures of chronic pain cost Americans \$635 billion annually (Gaskin & Richard, 2012). Along with its high prevalence and financial strain, chronic pain presents a variety of other challenges for the primary care provider (PCP).

The challenges of treating chronic pain in primary care exist ubiquitously across the nation. PCPs describe treating patients with chronic pain as "frustrating," "overwhelming," and "ungratifying" (Matthias et al., 2010, p. 1692). Nearly 80% of PCPs in one study agreed that pain management is a "burden" to their practice. Patients experiencing chronic pain also express concerns about treatment they receive in primary care with over 40% reporting suboptimal or unsuccessful control of pain (Leverence et al., 2011).

Prescription and management of opioid medications are at the root of many PCPs' concerns regarding treatment of patients with chronic pain. Since 1999, sales of hydrocodone and oxycodone have quadrupled in the U.S. Only 4% of the world's population reside in the United States, yet 80% of the world's opioid use occurs in the U.S. (Centers for Disease Control

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and Prevention [CDC], 2016). In addition to the barriers mentioned above, PCPs encounter other obstacles, including lack of standard tools to assess opioid use, fears of regulatory agencies, interactions with hostile patients, feeling pressured to prescribe opioids to patients, and the risks of diversion and overdose (Matthias et al., 2010).

Diversion occurs when a provider prescribes a medication to a patient, who then turns the medication over to another person for illegal use (National Conference of Commissioners on Uniform State Laws, 1994). In fact, 70% of physicians reported that they had a patient divert opioids, and 33% of patients prescribed opioids had a life-threatening event due to opioid use (Leverence et al., 2011). A possible solution to detecting diversion is urine drug testing—if presence of the opioid is not found in the patient's urine drug screen, this is highly indicative of diversion. As patients misuse and divert opioids, the consequences for their safety could be dire; as such, PCPs have an essential responsibility to assess patient needs accurately and prescribe opioid medications judiciously.

Without specific tools, it is not always easy to predict which patients might misuse opiates. Patients who misuse opiates "crush every stereotype," indicating vast differences in the misusing population—young, old, pregnant, healthy, chronically ill, homeless, multigenerational family, etc. (Binswanger & Gordon, 2016, p. 2). The unpredictability of so-called common stereotypes associated with opiate misuse highlights the importance of implementing risk assessment with standardized assessment tools. However, many PCPs report a lack of knowledge about implementation of standardized risk assessment tools and rely on "general impressions of risk" or a "gut feeling" to identify patients who may misuse opioids (Krebs et al., 2014, p. 1153).

Due to the challenges of assessing potential opiate misuse, many PCPs prefer to refer their chronic pain patients to pain management clinics. Specialized pain clinics, however, are not always readily available (Matthias et al., 2010). As a result, many PCPs manage patients with chronic pain (St. Marie, 2016). Treatment of chronic pain patients by PCPs may not be the best choice for some patients. PCPs are constrained by short appointments that do not provide adequate face-to-face time with patients and often have infrequent follow-up appointments resulting in delayed care (Krebs et al., 2014). As one physician stated, "These are complex patients with multiple problems..." and "... lack of time for important opioid prescribing decisions could lead to serious consequences" (Krebs et al., 2014, p. 1152).

Treatment of chronic pain is a challenge fraught with frustration for both PCPs and patients. PCPs need to learn and act on established principles of safety and best practice when treating patients with chronic pain. Therefore, the purpose of this paper is to provide evidencebased strategies for PCPs to aid them in appropriate referral processes and provide guidelines for safe prescription of opioid medication for patients with chronic pain. Important aspects of chronic pain management discussed in this paper include risk assessment for opiate misuse, guidelines for referral of a patient with chronic pain, the CDC Guidelines for Prescribing Opioids for Chronic Pain, urine drug testing (UDT), and patient-provider agreements (PPAs).

Risk Assessment for Opiate Misuse

One of the main concerns in treating patients with chronic pain is the potential for misuse of opioids. PCPs traditionally rely on patient history and previous patient interactions to determine patients who may misuse opioids. As a result, PCPs often underestimate their patients' potential to misuse opioids. An objective, standardized, risk assessment tool should, therefore, be the starting point for treating any patient presenting to primary care with chronic pain. While no single opioid risk predictor tool is validated across all populations to predict aberrant behavior, the risk factors addressed in these tools coincide with the risk factors of opioid misuse identified in the literature. Risk assessments identify the patients' potential for opiate misuse and aid the PCP in the decision to treat or refer the patient to a pain management specialist (Dowell, Haegerich, & Chou, 2016). Risk assessments may include but are not limited to questionnaires, pill counts, and urine drug testing (UDT) (Setnik, Roland, Pixton, & Sommerville, 2017). There

are multiple tools available (Table 1), including the following:

- Revised Screener and Opioid Assessment for Patients with Pain (SOAPP-R) (Butler, Fernandez, Beniot, Budman, & Jamison, 2008),
- 2. Opioid Risk Tool (ORT) (Webster & Webster, 2005),
- 3. Pain Medication Questionnaire (PMQ) (Holmes et al., 2006),
- 4. Brief Risk Questionnaire (BRQ) (Jones, Lookatch, & Moore, 2015),

Diagnosis, Intractability, Risk, and Efficacy score (DIRE) (Jones, et al., 2015).
 The SOAPP-R, ORT, and BRQ are described briefly below.

The Opioid Risk Tool (ORT)

The ORT (Table 2), a self-report tool designed for adult patients in primary care, can be administered prior to starting opioid therapy (Webster & Webster, 2005). The tool is short, simple and addresses five areas in which patients score themselves. The five areas included in the ORT are (a) a family history of drug abuse (alcohol, illegal drugs, prescription drugs); (b) personal history of drug abuse (alcohol, illegal drugs, prescription drugs); (c) age between 16 and 45 years; (d) psychological disease (attention deficit disorder, bipolar, depression, schizophrenia, obsessive compulsive disorder); and (e) a history of preadolescent sexual abuse. The scores in each of these categories are combined. Scores of three or less indicate a low risk for future opioid misuse; scores of four to seven indicate moderate misuse; and scores of eight or more indicate a high risk for future opioid misuse (Webster & Webster, 2005).

The Revised Screener and Opioid Assessment for Patients with Pain (SOAPP-R)

Similar to the ORT, the SOAPP-R is a simple, self-questionnaire that can be completed by patients prior to beginning opioid therapy (Table 3) (Butler et al., 2009). It entails 24 questions ranked by the patient on a 5-point Likert scale (never, seldom, sometimes, often, or very often). The questions address habits or characteristics, such as experiencing mood swings, smoking a cigarette within an hour of awakening, taking medication in a way other than how it is prescribed, participating in illegal drug use in past five years, having a family history of substance abuse, losing medications, craving medications, and having been arrested or having legal problems. After the responses are combined, a score of less than nine indicates low risk, with a score of 10-21 indicating moderate risk, and a score of 22 or more indicating high risk (Butler et al., 2009).

The ORT and SOAPP-R are useful to the clinician because they take the patient less than five and ten minutes to complete, respectively; and do not require staff to be extensively trained or occupy the PCP's highly valued time in clinic. However, patient honesty or accuracy is always a concern. In a comparison study between self-report questionnaires and a clinical interview between a health care provider and patient, a clinical interview had higher sensitivity and improved predictive accuracy of misuse. To combat the weaknesses of self-report questionnaires, an interview-based assessment tool, the Brief Risk Questionnaire (BRQ), was developed (Jones et al., 2015).

The Brief Risk Questionnaire (BRQ)

The BRQ consists of 12 questions adapted from the Brief Risk Interview (BRI) (Jones et al., 2015). The BRQ is used during a scheduled interview between the PCP and patient. The 12item questionnaire closely reflects the items addressed by the ORT and SOAPP-R. However, it

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also includes questions about the patients reading ability, need for another person to handle medications for them, and if the patient was previously discharged by a PCP from their medical practice. Scores are tabulated and the patient categorized into low, medium, or high-risk potential to misuse opioids. Authors claim this tool surpasses other tools because it predicts not only the potential for addiction, but also the potential for abuse, misuse, and diversion as well (Jones et al., 2015). The BRQ is also beneficial because it is a more detailed assessment allowing the PCP to use clinical judgment skills during the interview. However, its use in a busy primary care practice may be limited, as the interview may take up to 45 minutes.

In short, there is no perfect risk assessment tool—predicting human behavior is a challenging task (Jones et al., 2015). The PCP's decision regarding which assessment tool to use should be based on his or her time constraints in the clinic and individual preference. While these tools are not perfect, they are helpful, and serve as a useful entry point for treatment of patients with chronic pain in primary care. These tools, along with clinical judgment, can aid the PCP in categorizing patients with chronic pain into three different opioid misuse risk strata—low-risk, moderate-risk and high-risk and thereby help determine appropriate treatment (Kaye et al., 2017; Kirsh & Fishman, 2011).

Treatment of Low-, Moderate-, and High-Risk Patients

Once the PCP establishes the level of risk, they are able to determine appropriate treatment for the patient.

Low-Risk Patients

Low-risk patients are those who score less than three on the ORT, less than nine on the SOAPP-R, or rank "low" upon completion of the BRQ. These patients typically have no personal or family history of aberrant drug behaviors, lack behaviors associated with substance abuse, and

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lack medical or psychiatric comorbidities. These patients may be managed in primary care with consistent monitoring using screening tools, the Centers for Disease Control (CDC) Guidelines for Prescribing Opioids for Chronic Pain (Dowell et al., 2016), UDT, and PPAs (Cheatle, Gallagher, & O'Brien, 2018). A routine follow-up every three months is sufficient for these patients (Kaye et al., 2017). Low risk patients who are prescribed a low-dose, short-acting opioid, in conjunction with other adjuvant treatments, exhibit improved function and quality of life. A low-dose of a short-acting opioid (5 mg oxycodone or hydrocodone) is key—the higher the opioid dose, the higher the risk of aberrant behaviors (Cheatle et al., 2018). Although prescribed a low opiate dose, these patients still need close monitoring for atypical behavior, because progression to moderate-risk is possible (Kirsh & Fishman, 2011).

Moderate-Risk Patients

Moderate-risk patients are those who score between a four and seven on the ORT, score between a 10-21 on the SOAPP-R, and rank as "moderate" upon completion of the BRQ. The patient profile for moderate-risk patients may include the following: current cigarette smoker, personal or past family history of substance abuse disorder, and comorbid medical and or psychological conditions (Pagé, Saidi, Ware, & Choinière, 2016). Moderate-risk patients may be treated in primary care, but referral to a pain specialty clinic or consultation between the PCP and a pain specialist is encouraged (Kirsh & Fishman, 2011). These patients should be evaluated more frequently in the office—at least monthly—and use of UDT (to detect possible diversion and/or concurrent controlled substance use) and maintaining the stipulations outlined in the PPA should be strictly monitored (Kaye et al., 2017).

While consultation with a pain specialist for moderate risk patients is encouraged, there is limited evidence of its usefulness. Clark et al. (2015) compared outcomes between two groups of

patients: those who received the usual course of care and those who received the usual course of care combined with a PCP-to-pain-specialist telephone consultation. There was no statistical significance in reduction of pain or improvement in function between patients who had a pain specialist consultation and those who did not. However, despite the lack of positive patient outcomes, PCPs indicated they preferred the practice. Their reasons for supporting PCP-to-pain-specialist telephone consultations indicated that telephone consultation is an easy and widely accessible resource, which results in timely treatment for the patient and saves time and money compared to a conventional referral. It also offers reassurance to the PCP (Clark et al., 2015). If PCPs treat moderate-risk patients in their practices, a phone consultation may be an added resource in addition to the implementation of the CDC Guidelines, UDT, and PPAs. Similar to low-risk patients, the moderate-risk patient needs close monitoring, due to the possibility of transition to a high-risk level (Kirsh & Fishman, 2011).

High Risk Patients

High-risk patients are those that score an eight or more on the ORT, score higher than a 22 on the SOAPP-R tool, and/or are classified as "high" risk on the BRQ. High-risk patients commonly exhibit a family or personal history of addictive behavior; have coexisting psychiatric disorders, and have a history of drug abuse and/or drug diversion. Patients are especially complex when they have psychiatric comorbidities and a history of aberrant drug disorders and are prescribed opioids. Many PCPs lack the effective resources and clinic time to give these complex patients the care they need (Cheatle et al., 2018). Therefore, experts recommend that PCPs refer high-risk patients on long-term opioid therapy to a pain specialist in a pain speciality clinic (Kirsh & Fishman, 2011).

Guidelines for the Referral of the Chronic Pain Patient

There are two important aspects of chronic pain referral that are important in primary care: a thorough referral and managing patient expectations.

Quality of Referrals

High quality referrals help pain specialists prioritize patients and thereby provide high quality care. However, in a study of 256 referrals, only 2% of referrals from PCP to pain specialists included all of the information the pain specialists identified as important. Further, when questioned about referrals from PCPs, a group of neurologists and pain specialist physicians working in a large multidisciplinary outpatient clinic for back pain identified 12 items that should be included in a referral. These items include symptom duration, use of analgesics, alleviating and/or aggravating factors, occupational status, pain distribution, sensory symptoms, utilized treatment, deep tendon reflexes, motor function, sensory examination, and radiculopathy tests (Gulati et al., 2012). A referral complete with these items will enable the PCP and pain specialist to jointly work together in establishing the correct priority and treatment for the patient (Gulati et al., 2012).

Managing Patient Expectations of a Pain Clinic

Many patients may feel an array of emotions upon referral to a pain specialist disappointment, anger, frustration—as some may feel that they are being "abandoned" by their PCP. Effective communication and teaching of pain clinic expectations may ease these feelings. Communicating to the patient about possible treatment options and outcomes from treatment at a pain clinic may contribute to better patient satisfaction. PCPs should emphasize that many patients referred to pain specialty clinics report high satisfaction with their experience (Hadi, Alldred, Briggs, Marczewski, & Closs, 2016). It may also help manage expectations if patients

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understand that the pharmacological modality most commonly employed by pain specialists is the addition of a new drug or titration of previously established drugs. In addition, pain specialists' most common non-pharmacological treatment is activity management. This holistic approach along with the generous time spent with the pain specialist at each visit and specialized knowledge result in patients who feel like the provider listened to their needs and concerns. Additionally, patients managed in pain specialty clinics report decreased intensity of pain and improvement of physical functioning at three months following referral (Hadi, et al., 2016). PCPs should share these positive patient outcomes with patients they refer to pain specialists to help them manage their expectations and allay concerns.

Managing Patients with Chronic Pain in Primary Care

While it is preferred that patients with complex, chronic pain receive a referral to a pain specialist, this is not always feasible. Limited availability of specialized pain management clinics and sometimes PCP preference result in PCPs managing patients with chronic pain. In the event that a PCP must manage chronic pain, the PCP should employ the consistent use of set protocols; this is particularly important when treating patients with chronic pain who are on opioid therapy. Readily available protocols include the CDC Guidelines for Prescribing Opioids for Chronic Pain, the effective use of PPAs, and UDT.

Protocols for Managing Patients with Chronic Pain

Management of patients with chronic pain is often time consuming; hence, it is imperative for the PCP to have a set protocol in place for all chronic pain visits. As various tasks in a primary practice are analyzed (patient phone calls, medication refill requests, and other issues regarding patient care), 52% of all tasks are related to chronic pain, with 21% of tasks attributable to opioids and other controlled substances. As evidenced, treating patients with chronic pain takes a considerable amount of the PCP's time. The solution is implementation of a clear and consistent protocol for all patients with chronic pain (Khodaee & Deffenbacher, 2016).

The CDC has recognized the opioid prescription misuse problem since 2014 when it added prevention of opioid overdose to its list of the top five public health challenges (CDC, 2014). Established guidelines to prescribing opiates in primary care are found in the CDC Guidelines for Prescribing Opioids for Chronic Pain—United States, 2016 (Table 4). The intended professional audience for the guidelines include PCPs in outpatient care settings (physicians, nurse practitioners, physician assistants, and internists). Furthermore, the guidelines are specific to the treatment of patients over age 18 years with chronic pain lasting longer than three months that is not associated with cancer, palliative care, or end of life care (Dowell et al., 2016). While the CDC identifies that these guidelines are voluntary, it provides grade 'A' evidence (high certainty the benefit is significant) for 11 out of the 12 recommendations, with one recommendation receiving grade B evidence (high certainty the benefit is moderately significant). Implementation of the CDC guideline improves communication between patient and PCP about risks and benefits of long-term opiate treatment, reduces the risk of misuse and overdose of opiate medication, and improves safety and efficacy of pain treatment (Dowell et al., 2016).

The CDC guidelines form a foundation for treatment of patients with chronic pain. While all 12 items of the guidelines are self-explanatory, PPAs and UDT are two practices that warrant further exploration due to their limited use in primary care practice. Only 4-44% of primary care practices utilize PPAs (Sekhon et al., 2013), with only 8% of patients in one universityassociated chain of clinics receiving UDT (Krebs et al., 2014). In addition to the other 10 recommendations in the guidelines, PPAs and UDT are essential to the protocol for treatment of chronic pain to ensure PCP protection and patient safety.

Patient Provider Agreements (PPAs)

There are many terms used to describe a PPA, which include "contract," "treatment agreement," or "behavioral agreement" (Craig, 2012); however, despite the terminology used, all PPAs serve the same purpose. A PPA is "an explicit bilateral commitment to a well-defined course of action" (Craig, 2012, p. 511), and is an agreement in writing between the PCP and patient that communicates the expected standards of opioid therapy compliance (Collen, 2009). Because of its limited use in practice, as well as limited research presently available, many PCPs may be unaware of the potential benefit and use of PPAs.

There are four parts to a PPA: statements that are specific to the practice, educational statements, directive statements, and violation statements. Practice-specific statements are those that are unique to the practice, such as refill procedures and goals of treatment. Educational statements include the facts regarding opioid medication—the potential adverse effects and risks involved. Directive statements include instructions on proper use of the opioid medications. For example; do not combine with alcohol or illicit drugs. Finally, violation statements are those that outline the consequences if parameters of the contract are broken (Collen, 2009).

In addition to the four areas outlined above, PPAs should also include the following five provisions. First, patients should obtain opioid medication from only one prescriber and one pharmacy. Second, patients may be asked for random or routine UDT. Third, office visits for pain must occur at an established minimal interval. Fourth, the patient may be subject to pill counts. Fifth, prescription duration may be limited (biweekly rather than monthly.) Furthermore, a contract should serve as a form of informed consent as it outlines the risks and benefits of using

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opioid medication long term. The potential consequences of breaking the contract (discontinuation of medication or treatment) should be explicitly stated (Craig, 2012). The American Medical Association also outlines four requirements inherit in a PPA: (a) both patient and the PCP have unique responsibilities; (b) the PPA is consensual, not compulsory; (c) it is a negotiation between the PCP and patient; and (d) the consequences for breaking the contract are stated (Craig, 2012).

Despite the limited research regarding PPAs and patient safety, the narrow volume of literature on the topic indicates multiple benefits for both patient and prescriber. Benefits of PPAs include improved patient safety (Sekhon et al., 2013) and improved assessment of misuse for the PCP. While not an assessment tool itself, a PPA can aid the PCP in more accurately assessing possible misuse when patients do not uphold the agreed-upon guidelines of the contract (Ziegler, Compton, & Goldenbaum, 2011). The use of a PPA may contribute to better patient safety. In a sample of 800 veterans on chronic opioid therapy, half had an opioid contract agreement with their PCP. The use of a PPA was associated with a decreased risk of aberrant drug behaviors; specifically, overconsumption, mixing opioids with alcohol or other drugs, and crushing, chewing, or inhaling the opioid (Sekhon et al., 2013). A decrease in such behaviors translates to better patient safety.

In addition to improved safety for patients who chronically use opioids, PPAs may offer considerable benefits for the PCP. The use of a PPA enables the PCP to assess for misuse based on the patient's cooperation with established guidelines of the PPA. For example, patient behaviors, such as using more than one prescriber, frequently losing their prescribed opiate, or running out of their prescribed opiate early are behaviors that violate agreements in the PPA and indicate the potential for misuse (Ziegler, et al., 2011). In this sense, the PPA serves as a tool for

PCPs to assess for risk potential in their patients. Additionally, the PPA is a written consent in which patients acknowledge the risks of opioid therapy, which gives the PCP a sense of security. Some predict that PPAs will become a standard of care in the near future as governmental agencies aim to reduce opioid risk and misuse (Craig, 2012).

Urine Drug Tests

A stipulation regarding either random or routine UDT is an important component of the PPA. The use of UDT should not be underestimated, as it is recommended by nine of the ten most recent prescribing guidelines pertaining to opioids and chronic pain (Bauer, Hitchner, Harrison, Gerstenberger, & Steiger, 2016). Further, the CDC recommends UDT for all patients receiving long-term opioid prescriptions (Table 4, item 10). The consistent use of UDT for all patients on chronic opioid therapy serves multiple purposes: it aids in efficiency and time management in the clinic; it serves to monitor medication adherence; it helps to detect opioid diversion; and it assists to prevent PCP stereotypical thinking from patient to patient (Bauer et al., 2016).

The UDT serves as a useful tool to distinguish substance use disorders in their earliest stages (Krebs et al., 2014). Notwithstanding the lack of evidence regarding the usefulness of UDT in opioid overdoses, the UDT is a form of laboratory testing for medication monitoring. For example, PCPs order recurrent creatinine testing for their patients taking diuretics in order to protect them from potential harms of the drug. UDT with long-term opioid prescribing should be no different—laboratory monitoring serves as a way to detect substance misuse behaviors that may place patients at risk for potential adverse events (Krebs et al., 2014).

The results of the UDT will indicate to the PCP possible substance use disorder and/or diversion. The UDT is a qualitative test that can only screen for the presence (not the amount) of

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illegal substances, alcohol, and other prescribed controlled substances not reported by the patient. Additionally, a negative result for the prescribed opioid is highly indicative of diversion (Sekhon, 2013). To highlight this, in a study of 800 Veterans Affairs patients prescribed opioids for at least three months, 19.5% of patients tested positive for an illegal substance or an unreported opioid, and 25.2% of patients had negative UDT results for their prescribed opioid. Furthermore, among PCPs caring for patients with abnormal UDTs, only 28% of PCPs had documentation showing that they had addressed the abnormal UDT by stopping the opioid or even discussing the abnormal result with the patient (Sekhon, 2013). In short, UDT is essential for determining medication adherence and/or diversion. Additionally, it serves as a form of protection to PCPs, as they document their actions and medical decision making as it pertains to UDT and opioid prescribing.

As the PCP consistently utilizes both random and intermittent UDT for all patients on long-term opioids, it will help prevent stereotypical thinking that may lead to UDT only certain groups of patients. For example, Black patients received UDT twice as often as white patients did; however, evidence indicates that Black patients are less likely to misuse opioids and have a lower overdose rate when compared with White patients (Bauer et al., 2016). Other factors found to contribute to increased likelihood of random UDT included patients on Medicaid, patients with substance abuse disorder or history, and patients prescribed higher dosages of narcotic. While the latter two are indicative of potential for abuse, the PCP should not rely solely on these as indications to guide their UDT decisions. Conversely, patients with hypertension, or obesity, or those with a non-local addresses were selected the least amount for random UDT (Bauer et al., 2016). PCPs need to make it a priority to educate patients regarding the non-discriminatory practice of and importance of UDT. One patient stated, "It kind of made me feel like I was doing something wrong, which I wasn't, but I signed a contract... and I follow that contract to the letter because I know what it's like to not have the meds" (Krebs et al., 2014. p. 1152). With education, patients can understand how UDT relates to their safety. This patient further stated, "They asked me if I would urinate in a cup. I felt fine with that. I do not feel like they can do their job if I lie to them, and this way they know whether I lied to them or not. So I feel a lot safer" (Krebs et al., p. 1152). By helping patients understand this point of view, PCPs have an opportunity to reframe their patients' viewpoint about the use of UDT as a standardized tool for all patients on long-term opioids. In so doing, patient safety will be enhanced and PCPs will be able to implement an efficient form of monitoring that protects their prescribing power (Krebs et. al, 2014).

Conclusion

Chronic pain is a serious issue in primary care resulting in multiple challenges for the PCP. PCPs may choose to treat chronic patients in their primary care practice or refer them to a pain management specialty if available. A detailed, thorough referral to pain management aids in PCP communication and patient outcomes. Additionally, communicating to the patient about expectations of pain management improves patient outcomes. When referral to pain specialists is not feasible, there are many tools available to aid the PCP in treating chronic pain patients in practice. These include risk assessment tools, the CDC Guidelines for opioid prescribing, UDT, and PPAs. These tools help the PCP safely prescribe opioid medications; which in turn, provides improved safety and outcomes for the patient.

Table 1.Opioid Risk Screening Tools and Tested Populations

Opioid Risk Screening Tool	Tested Population
SOAPP-R	 Original validation study (2008), n= 207, patients selected from 3 states (MA, OH, and PA). All patients were on chronic opioids for noncancer pain. Cross-validation study (2009) n= 221, and patients were selected from 5 states (IN, MA, NH, OH, and PA). These patients were all being treated for noncancer pain (Finkelman et al.,
Opioid Risk Tool (ORT)	 2015). 1. Preliminary validation study (2005), n₌ 135, patients were referred to the author's pain clinic from January 2000 to May 2001 (Webster & Webster, 2005).
Pain Medication Questionnaire (PMQ)	 Original validation study (2004), n= 184, newly evaluated patients at a pain center in Dallas, Texas who were seen between October 2001 and May 2002 (Adams et al., 2004). Additional validation study (2009), n= 1,540, heterogeneous sample of chronic pain patients at an interdisciplinary pain clinic (Buelow, Haggard, & Gatchel, 2009).
Brief Risk Questionnaire (BRQ)	 Validation study (2015), n= 299, patients were referred to a psychology practice in association with a pain clinic (Jones, Lookatch, & Moore, 2015).
Diagnosis, Intractability, Risk and Efficacy Score (DIRE)	 Cross-comparison study (2009), n= 48, participants older than 18, English- speaking, and no evidence of altered mental status (Moore, Jones, Browder, Daffron, & Passik, 2009).

Table 2 *Opioid Risk Tool* (Webster & Webster, 2005)

Mark each box that applies	Female	Male	
Family history of substance abuse			
Alcohol	1	3	
Illegal drugs	2	3	
Rx drugs	4	4	
Personal history of substance	Personal history of substance abuse		
Alcohol	3	3	
Illegal drugs	4	4	
Rx drugs	5	5	
Age between 16 – 45 years	1	1	
History of preadolescent	3	0	
sexual abuse			
Psychological disease			
ADD, OCD, bipolar,	2	2	
schizophrenia			
Depression	1	1	
Scoring totals			

A score of 3 or lower indicates low risk for future opioid abuse, a score of 4 to 7 indicates moderate risk for opioid abuse, and a score of 8 or higher indicates a high risk for opioid abuse.

Table 3 *SOAPP-R* (Butler et al., 2009)

Please answer the questions using the following scale:

0 = Never, 1 = Seldom, 2 = Sometimes, 3 = Often, 4 = Very Often

1. How often do you have mood swings?	01234
2. How often have you felt a need for higher doses of medication	0 1 2 3 4
to treat your pain?	
3. How often have you felt impatient with your doctors?	01234
4. How often have you felt that things are just too overwhelming	0 1 2 3 4 0 1 2 3 4
that you can't handle them?	
5. How often is their tension in the home?	01234
6. How often have you counted pain pills to see how many are	01234
remaining?	
7. How often have you been concerned that people will judge you	01234
for taking pain medication?	
8. How often do you feel bored?	01234
9. How often have you taken more pain medication than you were	01234
supposed to?	
10. How often have you worried about being left alone?	01234
11. How often have you felt a craving for medication?	01234
12. How often have others expressed concern over your use of	01234
medication?	01024
13. How often have any of your close friends had a problem with	01234
alcohol or drugs?	01224
14. How often have others told you that you have a bad temper?15. How often have you felt consumed by the need to get pain	0 1 2 3 4 0 1 2 3 4
medication?	01254
16. How often have you run out of pain medication early?	01234
17. How often have others kept you from getting what you deserve?	01234
18. How often, in your lifetime, have you had legal problems or	01234
been arrested?	01254
19. How often have you attended an AA or NA meeting?	01234
20. How often have you been in an argument that was so out of	0 1 2 3 4
control that someone got hurt?	
21. How often have you been sexually abused?	01234
22. How often have others suggested that you have a drug or alcohol	01234
problem?	
23. How often have you had to borrow pain medications from your	01234
family or friends?	
24. How often have you been treated for an alcohol or drug	01234
problem?	
Total	

A score of 9 or less indicates low risk, a score of 10-21 indicates moderate risk, and a score of 22 or more indicates high risk for opiate misuse.

Table 4CDC Guidelines for Prescribing Opioids for Chronic Pain(Dowell et al., 2016)

1.	Nonpharmacological and nonopioid medications are the preferred treatment for chronic pain; and if used, opioids should be combined with these	7.	PCPs should assess benefits and harms of opioid therapy at 1-4 weeks of starting opioid therapy, every 3 months or more frequently if needed. If
2.	therapies as appropriate. Prior to beginning opioid therapy for chronic pain, realistic goals for pain and control and function should be established, in addition to how therapy will be stopped if the risks	8.	benefits do not outweigh the risks, efforts should be made to taper and discontinue opioids. PCPs should utilize strategies to minimize opioid-associated risks, such as prescribing
3.	outweigh the benefits. Known risks and realistic benefits should be addressed prior to initiation of therapy as well as periodically throughout.		naloxone for high-risk patients (history of overdose or substance abuse disorder, high opioid dosages, or concurrent benzodiazepine use.
4.	Immediate-release opioids should be prescribed for chronic pain, rather than extended- release/long-acting opioids.	9.	PCPs should consult the state prescription drug- monitoring program at a range of every three months to every prescription, to check for
5.	PCPs should prescribe the lowest effect dose; care should be taken when increasing to dosage to >50 morphine milligram equivalents (MME)/day and avoid increasing to >90 MME/day.	10.	potential pharmaceutical combinations. Urine drug testing to check for other controlled substances/illicit drugs should be completed prior to starting opioid therapy and periodically throughout treatment.
6.	When prescribing for acute pain, less than three days-worth of opioid medication is usually sufficient, and no more than 7 days-worth	11.	PCPs should avoid prescribing opioid medication with benzodiazepine medication whenever possible.
	should be prescribed.	12.	For patients with opioid use disorder, PCPs should offer medication-assisted treatment (buprenorphine/methadone along with behavioral therapies.)

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