Buprenorphine and Addiction: Challenges for the Pharmacist

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Abstract and Introduction

Abstract

Objective: To present an analysis of the Drug Addiction Treatment Act of 2000 (DATA) and its impact on the practice of pharmacy.

Data Sources: Statutes, codes, regulations, newspaper articles, journal articles; search of articles posted on MEDLINE identified using the search terms methadone, buprenorphine, treatment, opioid abuse, and opioid addiction.

Study Selection: Not applicable.

Data Extraction: Not applicable.

Data Synthesis: DATA and Food and Drug Administration approval of sublingual tablets of buprenorphine and buprenorphine with naloxone (Reckitt and Benckiser) will dramatically expand opioid addicts’ access to treatment and increase the number of opioid addicts receiving prescriptions for buprenorphine and buprenorphine with naloxone. The availability of buprenorphine will pose unique challenges to pharmacists and suggests the need for education on addiction and greater awareness of the unique needs of patients recovering from addiction.

Conclusion: The stage is being set to expand access to treatment and reach more untreated opioid addicts in the United States. Professional organizations such as the American Pharmaceutical Association should work with the U.S. Department of Health and Human Services and its Substance Abuse and Mental Health Services Administration to develop training materials, curricula, and guidelines for pharmacists on substance abuse with a special focus on outpatient opioid treatment. Such materials could be used in continuing education programs and materials and in pharmacy schools.

Introduction

Public Law 106-310, the Children's Health Act of 2000, was enacted on October 17, 2000. Title XXXV of this law, Waiver Authority for Physicians Who Dispense or Prescribe Certain Narcotic Drugs for Maintenance Treatment or Detoxification Treatment, is better known by the short title Drug Addiction Treatment Act of 2000 (DATA).[1] DATA allows physicians to prescribe narcotics in Schedules III, IV, and V of the Controlled Substances Act (CSA) that have been approved by the Food and Drug Administration (FDA) for the purpose of narcotic maintenance or detoxification. At this point in time, the drug buprenorphine is the substance most likely to be approved by FDA for this purpose.

As a result of DATA and a projected favorable FDA action on buprenorphine, pharmacists will find themselves presented with prescriptions for narcotic medications for the purpose of detoxification and maintenance. For the majority of community pharmacists, this will prove to be a new situation and a new challenge.

Objective

The primary intent of this article is to present an analysis of an important change in federal law and its implications for pharmacy practice. Implementation of this new law will require pharmacists to make administrative and clinical changes. Knowledge about addiction, addicts, and the outpatient treatment context can help community pharmacists function in a new capacity as dispensers of therapeutic narcotics for treatment of opioid-addicted individuals. In this article I explore the opportunities and challenges that pharmacists will face.

Background
During the early 1960s, as rates of heroin addiction increased in the United States, it became clear that the prevailing nonpharmacologic models of treatment were often inadequate. The medical community had little involvement in the direct care of opioid-dependent patients. Dole and Nyswander's[2] groundbreaking work with methadone as a therapeutic alternative to the illegal use of heroin demonstrated that the medical community could play, and should be playing, an important role in the treatment of opioid abuse and dependence.[3]

The introduction of methadone as a form of therapy for addiction inspired controversies that persist today. Philosophical objections were raised to using a legal narcotic to treat addiction to an illegal narcotic; some felt that this was immoral and subverted the goal of abstinence. Furthermore, observations that methadone was being diverted and sold on the street suggested that patients and providers could not be trusted to conform their behavior to what was legally expected.[4]

Despite the problems associated with methadone therapy, society recognized that heroin addiction is a life-threatening condition. Although the danger of human immunodeficiency virus transmission was not known during the 1970s, and the association of hepatitis C with injection drug use was not clearly understood, the public health benefits of stabilizing a patient on oral methadone were clearly appreciated. Well-stabilized patients were healthier and less likely to commit drug-related crimes.

However, the Schedule II narcotics methadone and, later, levo-alpha acetyl methadol (LAAM) used in the treatment of heroin and similar addictions could only be administered at authorized methadone clinics or in licensed substance abuse programs. This restriction was intended to reduce abuse and diversion while permitting access to needed care. However, narcotic treatment facilities were concentrated in urban areas; patients living in rural areas often had to travel great distances to obtain their medication. In addition, it was difficult for some methadone patients to maintain employment because they had to show up at the methadone clinic daily. Furthermore, many patients refused treatment at narcotic treatment centers because they feared stigmatization.

Physicians prescribing these drugs operated under stringent administrative guidelines, including having to register annually with the Drug Enforcement Administration (DEA). Also, these physicians operated within opioid treatment programs that directly dispensed either methadone or LAAM using nonpharmacist clinicians. Consequently, the role of pharmacists prior to DATA has been extremely limited.

According to the National Institute of Drug Abuse (NIDA), the regulatory burden involved in delivering methadone to opioid-dependent individuals has been so heavy that it has prevented expansion of the system. The result has been a "treatment gap," which NIDA defines as the difference between the total number of opioid-dependent persons and those in treatment.[4]

In an effort to close the treatment gap, NIDA explored other strategies and studied the use of other drugs to treat opioid addiction.

Drug Abuse Treatment Act of 2000

DATA will lead to dramatic changes in the way opioid-dependent patients are treated by the medical community and will carve out a substantial role for the community pharmacist. Section 3502 of DATA amends CSA to allow "qualifying physicians" to prescribe and dispense Schedule III, IV, and V narcotics that have been approved for use in maintenance or detoxification treatment. Such physicians must have the capacity to refer the patients for appropriate counseling, and they can prescribe these drugs to no more than 30 patients at a time.[5]

Basically, DATA loosens the requirements on physicians prescribing narcotic drugs for heroin addiction, requiring only self-certification, and moves the treatment of addiction from the clinic to the private physician's office and the patient's own pharmacy. In other words, an addict may now go to any qualified physician, receive a prescription for a drug to treat his or her addiction, then have the prescription filled at the pharmacy of his or her choice.

In 2000 the U.S. Office of National Drug Control Policy reported that there were an estimated 983,000 heroin users in the United States.[6] A household survey of drug abuse in 2000 revealed that 6.5 million people had used prescription pain medications (most of which were opioids) for nonmedical purposes.[7] According to the American Medical Association, approximately 812,770 physicians were practicing in the United States in the year 2000.[8] It is reasonable to assume that at least 1% of these physicians will obtain certification to prescribe Schedule III, IV, and V medications for opioid addiction based on public demand and professional interest. One percent of 813,000 is 8,130 physicians; if each of these physicians prescribes these drugs for 30 patients, then community pharmacy can anticipate approximately 243,900 new narcotic prescriptions and, potentially, 243,900 new patients within 1 to 2 years periodically presenting prescriptions for their maintenance or detoxification medication to the pharmacy.

DATA requires that physicians who prescribe a Schedule III, IV, or V drug approved by FDA for the purpose of treating addiction have a unique identification number from DEA in addition to the usual DEA registration number. The unique
identification number is intended to preserve the confidentiality of patients for whom the physician has written the prescription under the waiver from the CSA.\[9\]

During a 3-year period starting October 17, 2000, no state may prevent a physician from dispensing or prescribing an FDA-approved Schedule III, IV, or V drug for maintenance or detoxification treatment unless the state enacts such a law before October 17, 2003.\[10\] This portion of the statute places the burden on states to act to prevent a qualified physician from treating addicts using buprenorphine. From the perspective of the pharmacist, this provision applies to narcotic prescriptions presented for dispensing.

Therefore, DATA preempts any state law intended to prevent the dispensing of a prescription for use of a controlled substance in the treatment of an addiction. For example, California law states, "No person shall prescribe for or administer, or dispense a controlled substance to an addict or habitual user, or to any person representing himself as such."\[11\] The only exception in California law is that certain designated facilities or authorized addiction treatment programs can use methadone or LAAM to treat drug addiction.\[12\] Thus, under DATA, unless a state acts affirmatively, the federal law supersedes the state law. Hence, the pharmacist must follow the federal law and not the state law once buprenorphine is approved.

DATA eases the rules and regulations that restrict prescribing and dispensing of Schedule III, IV, and V substances used for treatment of opioid dependence in an attempt to close the treatment gap. This is, in some part, a result of the failure of LAAM, the last new product introduced to treat opioid dependence, to close the treatment gap because of the continued application of the same restrictive rules and regulations.\[4,13\]

Two drug products recently developed to treat opiate addiction are buprenorphine hydrochloride and buprenorphine with naloxone tablets. In the following sections I discuss the general properties of buprenorphine and its interface with DATA as well as technical, competence, and ethical issues for pharmacists dispensing buprenorphine.

**Buprenorphine Hydrochloride**

Buprenorphine hydrochloride is a Schedule V synthetic opiate partial agonist with analgesic and opiate antagonist activities.\[14\] Numerous studies have supported the safety and efficacy of buprenorphine or buprenorphine with naloxone for the treatment of opioid dependence.\[4,15-19\] Currently, buprenorphine is only available commercially as a parenteral injection (0.3 mg/mL). Reckitt and Benckiser Pharmaceuticals has submitted a New Drug Application to use buprenorphine products in the treatment of opiate or opioid dependence, and the application is in the final stages of FDA review.\[20\]

**Buprenorphine as an Opioid Dependence Treatment**

A sublingual formulation of buprenorphine is being evaluated by FDA for use in the treatment of opioid dependence. Two tablet formulations, plain buprenorphine and buprenorphine with naloxone, will be evaluated. Although buprenorphine is not well absorbed through the gastrointestinal tract, it is readily absorbed sublingually, yielding plasma concentrations that are 60% to 70% of parenteral doses.\[21\] The tablet form would make buprenorphine more portable and convenient; this advantage, plus the specific indication for outpatient detoxification or maintenance, will probably cause the tablet form of buprenorphine to be designated Schedule III or IV, unlike the Schedule V liquid form.

The tablet form of buprenorphine alone is already available in Europe and is used widely in France.

**Buprenorphine and FDA**

While FDA has not yet made a final decision as to the safety and efficacy of buprenorphine for treatment of opioid dependence, current studies indicate that it is effective for this purpose and offers many advantages over methadone.\[4\] Usually, partial opioid agonists, such as buprenorphine, have better safety profiles than full opioid agonists, such as methadone, morphine, or heroin, because they cause less respiratory depression, reducing the chance of accidental or intentional overdosage, and because withdrawal is less severe.\[21\]

Unlike methadone, buprenorphine mixed with naloxone has little potential for diversion for illicit use. One could go further to say that the combination actually "protects" heroin addicts because if they attempt to dissolve the tablets and inject the resulting solution, they will experience withdrawal due to competitive blockade of opioid receptors or a diminished buprenorphine effect. While buprenorphine may have a decreased abuse potential, it may not have such an effect on opioid-naive individuals. Thus, there is a possibility that non-opioid addicts may acquire buprenorphine from illicit dealers for the purpose of getting high. The issue of diversion will have to be monitored carefully, and community pharmacists must play a role here.

Finally, buprenorphine has a long half-life and, for some patients, can be dosed only three times weekly; methadone is dosed daily. In other countries where buprenorphine is available, some deaths have occurred from the mixture of buprenorphine and tranquilizers, especially benzodiazepines, but that number is significantly lower than the number of deaths associated with opiate addiction.\(^{22,23}\) Of course, the possibility exists that addicts will experiment with mixing buprenorphine with other nonopiate street drugs, such as Ecstasy (MDMA), leading to dangerous drug interactions, including synergy or antagonism.

The stage is thus being set to expand access to treatment and reach greater numbers of untreated addicts. Now, those who were unwilling or unable to seek treatment from traditional methadone clinics have another potentially less stigmatizing, less demanding, and more convenient option. Congress proposed DATA in hopes that it would encourage greater numbers of patients to seek treatment.

**Opioid Treatment, Buprenorphine, and Pharmacists**

Most community pharmacists and pharmacies have little experience with opioid-dependent patients periodically presenting prescriptions for scheduled drugs for the purpose of detoxification or maintenance. In fact, many pharmacists and pharmacies have had negative experiences with addicts presenting forged, altered, or false prescriptions for controlled substances. Traditionally, laws have required that the pharmacist not fill a suspect prescription for a controlled substance. But with FDA approval of medications in the Schedule III, IV, or V category for the treatment of opioid addiction, pharmacists will have to modify their worldview and practice. In this situation, addicts will be presenting legal prescriptions for scheduled drugs approved for the treatment of the addiction.

However, the issue of diversion of buprenorphine for nontherapeutic purposes is not resolved by the presentation of a prescription that is not forged, altered, or otherwise false. It will be possible for an opioid user to present to multiple qualified physicians for prescriptions for buprenorphine. A person may present two such prescriptions to a pharmacist in the same general period for the same therapeutic period. Similarly, a person may present to a pharmacist working at a pharmacy with a shared network after having had a prescription for buprenorphine filled at another pharmacy on the network. In both of these situations, the pharmacist has a legal duty to recognize that this use is probably not therapeutic and represents a potential threat for diversion. He or she should notify the involved physicians and refuse to fill the second prescription.

**DATA's Unique Identifier**

Once FDA approves the use of a Schedule III, IV, or V drug for opioid detoxification or maintenance, physicians who possess waivers under DATA will have to include a unique identifier on prescription orders. Since buprenorphine and buprenorphine/naloxone are the two drugs furthest along in the NDA process, this section focuses on how this requirement will affect dispensing of buprenorphine. The unique identifier will alert the pharmacist that a patient has been seen by a physician who has a CSA waiver and thus can legally write a buprenorphine prescription. The corollary is that pharmacists cannot dispense prescriptions for sublingual buprenorphine when prescription orders include a DEA number but no unique identifier as called for by DATA. The sole exception to this corollary has created an administrative problem for pharmacists and pharmacies.

DATA states that while a physician's application for a waiver is being processed, which can take up to 45 days, the physician can notify the U.S. Department of Health and Human Services (DHHS) and the Office of the Attorney General of his or her intent to treat "an individual patient" immediately by either dispensing or prescribing a Schedule III, IV, or V drug approved by FDA for the purpose of opioid detoxification or maintenance.\(^{24}\) The problem for the pharmacist is how to determine whether a patient who presents with a prescription without a unique identifier is being seen by a physician who is truly eligible for a waiver and who has applied for the waiver. This could be an administrative nightmare if not handled carefully by the federal authorities. One possible solution would be for the federal government, either through DHHS or DEA, to create a Web site on which lists of physicians who have submitted applications are posted.

**Confidentiality, Unique Identifiers, and Additional Duties**

DATA requires that prescriptions for buprenorphine be tagged with a unique identifier to preserve the confidentiality of patients being treated for narcotic addiction. But do pharmacists have any additional duty to the patient under these circumstances? If buprenorphine tablets are prescribed only for the treatment of addiction, then it will be automatic that any patient who presents with a buprenorphine prescription is being treated for addiction. This clearly raises a major confidentiality question for pharmacists. On the other hand, no unique identifiers would be necessary for new buprenorphine formulations used off-label for the treatment of pain, and no assumption about the status of presenting patients can be made; the corollary is that errors can be made by pharmacists or pharmacy staff about patients' status, inferring patients are addicts when they are not.

Given the fiduciary relationship that pharmacists have with patients in general, it is possible that no new record protection measures are needed by the pharmacy in this situation because all medical information managed by pharmacists is

confidential. On the other hand, if there is any question about preserving the confidentiality of a presenting addiction patient, then additional special steps may have to be taken to protect his or her records. For example, federal regulations require physicians to take special steps to protect substance abuse records. The mandatory requirements may extend to pharmacists, as well, given pharmacists’ obligation to provide therapeutic consultation and to maintain medication profiles. The exact nature of the protective measures, however, is left up to the pharmacists and pharmacies.

In the case of chain pharmacies with large computer networks, special attention should be given to patients who present prescriptions for drugs intended to treat addiction. Patients being treated for other conditions and who present to an affiliated pharmacy with prescriptions for nonscheduled drugs deserve special attention. For example, patients suffering from addiction who also suffer from hypertension may use different pharmacies in the same chain. Patients may not realize that their information is available to any pharmacy in the network; hence, maintaining confidentiality is a potential issue. Alternatively, patients with prescriptions for buprenorphine from different physicians may not realize that each pharmacy in the network has access to their information, creating counseling burdens for pharmacists in advising patients that their behavior is clinically dysfunctional and administrative burdens for pharmacies in notifying all physicians prescribing buprenorphine of multiple prescriptions.

Also, community pharmacies will need operational software that will accept unique physician identifiers. This requirement may complicate the processing of individual prescriptions. Some pharmacies will be able to make the transition quickly, but others will have to wait until they can afford software upgrades. This delay may discourage some pharmacies from dispensing buprenorphine products.

From a practical point of view, community pharmacists will encounter a number of administrative situations, including stocking buprenorphine or any other FDA-approved controlled substance used for treatment of addiction, dispensing the FDA-approved controlled substance, being compensated by addicts for the FDA-approved controlled substance, and providing medication counseling to recipients of the FDA-approved controlled substance. These issues are examined in the following subsections.

Stocking Controlled Substances for Treatment of Addiction

Given the current limits on the use of buprenorphine, many community or outpatient pharmacies do not stock the agent. Once the tablet formulations are available, the decision to stock may be made on the basis of demand. Some physicians may opt not to prescribe it to treat addiction. Physicians with waivers may contact neighboring pharmacies, advising them of this change in their practice. However, some physicians will want to prescribe buprenorphine for pain, and this will increase the demand for the medication. Pharmacies will simply have to wait until patients present prescriptions for the medication to make stocking decisions.

Patients who present to their physicians in withdrawal from opioids such as heroin or semisynthetic medications may need their medication sooner rather than later. Delays may be perceived negatively by patients. Instead of believing pharmacists who say the drug is out of stock, patients may feel that pharmacists are passing moral judgment and refusing to fill the prescription. Patients may think that pharmacists fail to appreciate the emergent nature of their need for the medication.

Another issue is the potential for an increased risk of robbery. While some popular synthetic opioids have been associated with an increased rate of pharmacy robbery and prescription fraud, this should not be a problem with buprenorphine. Once the drug is approved by FDA for the treatment of addiction, patients need only get a prescription from a physician who has a waiver. Furthermore, buprenorphine does not produce the euphoric effects associated with other popular synthetics, such as hydrocodone or oxycodone.

Dispensing Opioids for Treating Opioid Addiction

Since one of the purposes of DATA is to allow office-based physicians to prescribe buprenorphine to opioid-dependent patients for detoxification or maintenance, state law must permit physicians to prescribe sufficient medication to facilitate outpatient treatment. Common detoxification practice protocols call for treatment ranging from 28 days to 6 months. In California, for example, no prescription for a Schedule III, IV, or V drug can be refilled more than 6 months after the date it is written. No prescription for a Schedule III or IV drug may be refilled more than five times; furthermore, no amount may be dispensed for refills that, taken together, exceed a 120-day supply. With a 1-month detoxification protocol, there would be no barrier to a 30-day prescription under California law.

For a detoxification protocol lasting up to 6 months or for a maintenance protocol, the amount that can be initially prescribed in California in a given period of time is that amount that is reasonably necessary, as long as that amount does not exceed the limits described above. Thus, the initial prescription can be for 30 days’ worth of doses, 60 days’ worth of doses, or for any amount that is deemed reasonable. Theoretically, a physician could write an initial prescription for 6 months or more, but practically that would be neither reasonable nor defensible. What is more likely is that a physician will prescribe 30 days’
worth of doses, requiring the patient to return for reassessment once a month; in this situation, only one refill would be 
written, to prevent the patient from running out of the medication. Other physicians may prescribe for the initial 30 days, with 
a maximum of four refills. Given that the outpatient treatment of narcotic addicts with buprenorphine tablets will be a new 
enterprise, most physicians will likely be cautious, favoring a more conservative therapeutic approach.

Patients Paying the Pharmacy

The cost of buprenorphine has not been determined at this time. While middle-class patients may be able to pay for 
buprenorphine, it is not clear whether low-income patients will be able to do so. In some situations, insurance coverage, 
including Medicaid coverage, may be available. It is expected that buprenorphine will cost at least $5 per dose; a 30-day 
supply would cost $150. If per-day dosing costs $10, the 30-day cost would increase to $300. Thus, some patients may seek 
partial fills for a prescription for buprenorphine and return to the pharmacy several times in the course of a prescription period 
of 30 days. In this situation, the pharmacy will have to cope with record keeping associated with both partial fills and refills, 
increasing the administrative burden.

Pharmacists’ Views of Addicts

Changing Profiles

It was once thought that drug abusers came exclusively from the ranks of the poor or the disenfranchised, or represented the 
“unsavory” elements of society; addiction implied a lack of personal responsibility, a moral weakness, or a failure of 
character. However, society's thinking is evolving on this issue, and addiction is now becoming recognized as an illness that 
needs to be treated as such. A NIDA report[4] states that narcotic addiction is spreading from the cities to the suburbs, 
affecting both rich and poor. The report also states that the purity of heroin has improved to the point that it can be snorted or 
smoked instead of injected. This route change has made it easier for more people, particularly affluent young people, to 
experiment with the drug. [4]

Meier and Petersen, [31] reporting in the New York Times on the use of OxyContin (Purdue Pharma), a sustained-release form 
of oxycodone, wrote that abuse of and addiction to the synthetic opioid painkiller was rapidly spreading. Crushing the 
sustained-release tablet “disarms” the sustained action of the drug, and it can then be swallowed, inhaled, or injected for a 
powerful, euphoric high. The writers quoted a narcotics investigator as saying, “Nobody is immune from this.... I’m seeing 
housewives; I’m seeing loggers, nurses, mechanics.” The authors also mentioned that OxyContin abuse had caused 
overcrowding in a Virginia methadone clinic. [31]

Thus, pharmacists must exercise care in deciding who is or is not an addict. The changing profile of heroin users and the 
phenomenon of OxyContin abuse demonstrate that anyone can suffer from addiction. Legal opioids can be and are being 
abused, highlighting the need for therapeutic intervention. Buprenorphine may prove to be helpful in treating iatrogenic as 
well as noniatrogenic addiction. A stereotypic view of addicts may lead some community pharmacies to decide to not stock 
buprenorphine for outpatient use, only to be surprised by the people who present for such medications.

Providing Medication Counseling to Addicts

Counseling patients is a primary component of pharmaceutical care. Great care must be taken when counseling addicts, 
especially since many pharmacists are poorly trained to address the needs of this group. For example, counseling 
information and procedures must be carefully arranged to ensure patient safety and privacy. In addition, addicts in withdrawal 
may be irritable and short on patience, making interactions difficult.

Buprenorphine is relatively safe when taken alone. However, when it is combined with benzodiazepines, the risk for 
respiratory depression, overdose, and death increases substantially. There are other known potential drug-drug interactions 
between buprenorphine and fluoxetine, fluvoxamine, and ritonavir.[21] Concerns also exist about the use of buprenorphine in 
patients with hepatic dysfunction;[32] with the high prevalence of hepatitis among injection drug users, prescribers and 
pharmacists must be knowledgeable about the implications of medication use and hepatic dysfunction.

Does the counseling pharmacist have an obligation to counsel beyond the drug effect? If so, what would that obligation be? 
Since most pharmacists have little training in the science of addiction, their potential for providing behavioral counseling in 
this area is quite limited. However, common sense counseling should surely proceed. The case of the patient who is 
intoxicated with alcohol when she picks up her buprenorphine is clear, because of the immediate risk of respiratory 
depression when buprenorphine is combined with alcohol. Counseling a patient requiring behavioral care, however, may be 
outside the experience of many pharmacists.

Any substance abuse counseling would have to be undertaken with respect for patients’ privacy. The information that a
patient is being treated for addiction is particularly sensitive, and pharmacists should carefully consider the location of the counseling area.

When counseling, a pharmacist's stereotypic views of addicts may become problematic. Some pharmacists may actually fear or loathe addicted patients, and these attitudes can clearly interfere with the counseling process. Therefore, it is important that pharmacists surmount negative attitudes about these patients so that they can properly fulfill their role in treatment.

Conclusion

The enactment of DATA was the first step in narrowing the gap in treating opioid addiction. The imminent availability of buprenorphine will provide health care professionals a powerful tool for helping patients overcome opioid addiction.

Pharmacists who dispense buprenorphine to opioid addicts will face a number of technical challenges, including maintenance of adequate inventory, provision of a confidential setting for consultation, and administrative burdens. Some pharmacists may need to rethink their attitudes toward drug abusers so they can provide pharmaceutical care in an empathetic, nonjudgmental manner that is in the best interest of the patient seeking treatment for addiction. Professional pharmacy organizations, such as the American Pharmaceutical Association, should work with DHHS and its Substance Abuse and Mental Health Services Administration to develop pharmacist-oriented training materials, curricula, and guidelines on substance abuse with a special focus on outpatient opioid treatment.

DATA and the prescribing of buprenorphine or buprenorphine with naloxone will bring changes to community pharmacy practice. Pharmacists can and should meet these challenges with determination and embrace the opportunity to provide pharmaceutical care to a population in great need of their knowledge and skills.

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