



Published in final edited form as:

J Opioid Manag. 2009 ; 5(4): 219–227.

Overcoming obstacles to implementing methadone maintenance therapy for prisoners: Implications for policy and practice

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Abstract

More than 2.4 million people are currently incarcerated in the United States, many as a result of drug-related offenses. In addition, more than 200,000 active heroin addicts pass through the correctional system annually. New evidence suggests that both providing prisoners with referrals for community-based methadone programs and providing methadone prior to release reduces recidivism and adverse health and social consequences associated with drug use. This article reports the programmatic challenges associated with initiating methadone treatment in the Rhode Island correctional system. Significant obstacles to implementing methadone treatment include: stigma associated with pharmacological treatment, misconceptions regarding the nature of opioid addiction, logistics of control and storage of methadone, increased work load for nursing staff, and general safety and control concerns. The authors discuss strategies to address these barriers and conclude that providing methadone prior to inmate release is a feasible intervention with the potential to mitigate drug-related health and social harms.

Keywords

methadone; incarceration; prisoner health; opiate replacement therapy

Introduction

Today, more than 7 million people are under the jurisdiction of US correctional authorities¹ and 2.4 million individuals are incarcerated in state, federal, and local correctional facilities.² These are the highest numbers to date in a precipitous 30-year rise in incarceration rates. This

increase in incarceration can be attributed to lengthier sentences and “get tough on crime” legislation that commenced in the 1970s and continues today.³

A major contributor to the rise in incarceration rates is substance use and the so-called “war on drugs.”⁴ According to the 2004 Survey of Inmates in State and Federal Correctional Facilities, one fifth of state and more than half of all federal inmates were incarcerated for drug law violations, with approximately half of all prisoners meeting Diagnostic and Statistical Manual of Mental Disorders 4th edition (DSM-IV) criteria for drug dependence.⁵ Approximately 23 percent of state inmates had injected heroin at some point during their lives, 13 percent had injected heroin regularly and 8 percent had injected heroin in the month prior to incarceration.⁵ Among state prisoners dependent on drugs or alcohol, 53 percent had at least three prior sentences.⁵ We recently estimated that 24-36 percent of all heroin addicts, more than 200,000 individuals, pass through the correctional system each year.⁶

Methadone is a long-acting opiate that can block the euphoric effects of opiate use and prevent or relieve withdrawal symptoms and cravings.⁷ Opiate replacement therapy (ORT) with methadone or buprenorphine is a highly effective treatment modality for opiate dependence.⁸ Methadone maintenance therapy (MMT) is the most widely available effective pharmacological treatment for opiate addiction in the United States. Numerous studies of MMT demonstrate its effectiveness in reducing heroin use,⁹⁻¹¹ HIV transmission,¹²⁻¹⁵ mortality,¹⁶ criminal behavior,¹⁷⁻²¹ and recidivism.^{13,15,22,23} The large numbers of HIV-infected and at-risk individuals who are incarcerated and released provide a unique public health opportunity for preventive interventions in correctional settings, including reducing HIV risk through linkage to and/or initiation of ORT.^{24,25} Hundreds of thousands of hard-to-reach individuals who might otherwise not have access to prevention services can be reached in prisons and jails,^{6,26,27} and many individuals have their first adult contact with healthcare while incarcerated.²⁸ Most individuals who relapse to substance use after incarceration do so within 1 month of release.²⁹ The time immediately before and after release represents an ideal time to implement opiate addiction relapse prevention. However, despite evidence of methadone's many benefits and evidence that initiating ORT prior to release from incarceration reduces heroin use³⁰⁻³² and reincarceration,³³ providing methadone to those inmates who want to begin or remain on methadone while incarcerated is not widely practiced.

Even among medical staff at US correctional facilities, ORT generally is viewed unfavorably, and methadone is often provided only to pregnant women, if provided at all. In a survey of medical staff and case managers at the Connecticut Department of Corrections, the majority of respondents viewed ORT as substituting one addiction for another and did not believe that ORT programs for inmates should be expanded or that ORT reduces criminal behavior.³⁴ A 2003 survey of US state and federal prison medical directors found that only 30 percent of responding medical directors believed that methadone was beneficial to inmates dependent on opiates, with 35 percent reporting that methadone was not beneficial and 35 percent reporting uncertainty or not responding to the question.³⁵ In our 2008 survey of prison medical directors, 55 percent reported providing methadone to inmates, though more than half of those providing methadone did so only for pregnant women. The most commonly reported reason for not offering ORT to opiate-addicted inmates was that drug-free detoxification was preferred by the directors to medication-assisted detoxification.³⁶

In the summer of 2006, we began implementing a randomized, controlled trial (RCT) to determine the effects of prerelease initiation of MMT on reducing HIV risk behaviors, reducing recidivism, and increasing drug treatment attendance. This study received IRB approval from the Miriam Hospital IRB with a prisoner representative, the Rhode Island Department of Corrections' (RIDOC) Medical Research Advisory Group and the federal Office of Human Research Protection (OHRP). As we were conducting this research, the vast majority of

potential participants expressed an interest in receiving methadone during incarceration. All participants had previously been incarcerated, previously been in treatment, and had struggled with addiction for years. Inmates described being confronted with drug sales as they left the prison grounds on the bus and feeling cravings as their release date neared. They were well aware of the environment they faced on release and felt that beginning treatment before release would provide support.

In spite of our long-standing collaborative relationship with correctional management and staff spanning nearly two decades, and long-term institutional support to implement these projects, we have experienced formidable difficulties in providing MMT inside the correctional facilities. These institutional challenges represent important obstacles to implementing methadone in the correctional setting. Here, we describe some of the barriers to providing MMT in correctional settings, highlight lessons learned through our experiences in initiating MMT during incarceration, and review the implications for other correctional settings.

Rhode Island Experience

The RIDOC is located on a single campus and functions as both a jail and a prison, with an average census of nearly 4,000 inmates and 17,000 commitments per year.³⁷ The policies and guidelines regulating the use of methadone treatment at RIDOC has evolved over the years. Prior to 2001, all opioid-dependent inmates on MMT at the time of incarceration (except pregnant women) underwent a rapid detoxification from methadone over the course of approximately 1 week. However, in 2001 the RIDOC Medical Director revised the protocols to allow individuals who were incarcerated while on MMT to remain on their current dosage for one week (some jailed inmates are released in this time frame, which allows continuity in treatment) before undergoing detoxification over the course of approximately 30 days. Methadone is not provided to assist with detoxification in incarcerated individuals withdrawing from heroin or other opiates. RIDOC guidelines state that all inmates on methadone for addiction be detoxified unless the inmate is pregnant or under special circumstances at the discretion of the physician. Therefore, only the male and female intake (or pretrial) facilities are set up to permit methadone administration, which amounts to two out of the eight facilities on campus. All methadone at RIDOC is coordinated through the community based CODAC Behavioral Healthcare program, which is the largest, oldest and only nonprofit provider of methadone treatment services in Rhode Island.

Currently, we are conducting a National Institute of Drug Abuse (NIDA) funded randomized controlled study with the primary goal of assessing the effects of initiating MMT prior to release from incarceration. The target population for this study is people with documented opiate addiction with prior drug-related incarceration who are not in active opiate withdrawal at the time of consent (to avoid possible coercion). This study builds on our longstanding relationship with the RIDOC and our past experience working with correctional staff. For more than a decade, we have implemented a highly successful model of intensive case management for HIV-positive inmates leaving incarceration to enhance follow-up with primary care appointments on reentry.³⁸ This effort has been facilitated by the fact that patients are able to see the same physicians both while incarcerated and after release at the nearby Miriam Hospital's Immunology Center.

Another noteworthy example of a reciprocal project between the RIDOC and The Miriam Hospital is our Project MOD, a Center for Substance Abuse Treatment (CSAT) funded service initiative that linked opiate addicted individuals leaving incarceration to community MMT. Between June 2003 and March 2008, we successfully enrolled 487 clients in community MMT after release from incarceration. At the time of initiating this project, there was considerable skepticism toward MMT among correctional staff. To address this, we spent several months

meeting with discharge planners, counselors, and probation and parole officers to listen to concerns and provide information regarding MMT as a viable treatment option. As a result of this process and our continued presence at the RIDOC, we began receiving regular referrals from correctional staff within a period of 6-9 months. Despite the stigma toward medication therapy for opiate addiction, the reality of limited residential treatment beds and inadequate funding for other treatment modalities reduced opposition to our efforts. Senior level staff and discharge planners were well aware of the lack of treatment options as well as the rate of relapse for opiate addicted individuals leaving incarceration. Additionally, the assistance provided by Project MOD complemented the work of the discharge planners and eased their work load. Project staff regularly attended discharge planning and rehabilitative services meetings. We offered in-service trainings on medication assisted therapy and heroin addiction. A notable shift occurred in 2006 when the Parole Board reversed its long-standing policy of not permitting parolees to be on MMT.

At the time that the RCT was funded, we had been implementing Project MOD for 3 years. The study had institutional support from the Department of Corrections Director and Medical Director. Nonetheless, once we began the logistical arrangements to initiate methadone treatment within the correctional setting, it became clear that this represented a considerable ideological shift from providing detoxification for people already on MMT or encouraging linkage to community MMT after release from incarceration. Many individuals, including medical staff, wardens, correctional officers, and counselors, raised concerns and objections to initiating MMT in the correctional facility.

Implementing Methadone in Correctional Settings

Logistical barriers

We encountered several logistical barriers to implementing methadone at the RIDOC. The RIDOC was in a good position to institute wider use of methadone treatment. It had an established relationship with a community methadone provider, so it was not required to have special licensing for methadone dispensation. Protocols and routines were in place for handling methadone for detoxification in the two intake facilities. Nonetheless, initiating methadone for maintenance therapy, as opposed to using methadone for detoxification, represented a shift in practice, ideology, and workload in those two facilities. Dispensing methadone in facilities that had no previous experience handling and storing methadone presented an even greater challenge and required considerable preparation and education.

Shifting from detoxification to treatment—RIDOC nurses in the two facilities that already dosed methadone reported being comfortable providing methadone detoxification and viewed it as a straightforward and routine process. Initiating methadone for opiate-dependent inmates not receiving ORT during incarceration was technically more complicated. During ORT initiation, the nurses assessed patients for signs of intoxication and decided if the dosage needed to be adjusted. Most inmates lose their hepatic tolerance to opiates placing them at increased risk for overdose from methadone, especially given the prolonged half-life of methadone and daily dosing. Though the dose and rate of increase under these circumstances was generally low, due to biologic variability some incarcerated patients required a more rapid increase. We were cautious in slowly increasing the dosages inmates received to minimize methadone's sedating effect. We typically initiated methadone at 5 mg and increased the dose by 2 mg per day. Others have used a dosing schedule that also starts low, but increases by 5mg every 8 days to reach a minimum dosage of 60 mg.³⁰

Nursing time and effort—Nurses were reluctant to commit to extra work in an already understaffed environment. Nursing time and effort was required to pick up the methadone on a daily basis when it was delivered to the control desk—an involved process that required

passing through multiple security doors. The medication was counted, recorded, and then stored in a doubly locked cabinet. Administering each dose took a few minutes. The nurse observed the inmate taking the dose of liquid methadone and engaged the inmate in conversation, which was necessary to lessen the possibility of the methadone not being swallowed and subsequently diverted. After completing the medication line, any missed dose was documented and returned to the locked cabinet. Nursing staff also tracked patient response to the medication and coordinated with the physician to adjust dosing. Likewise, nurses were responsible for treating side effects of the medication. Prior to initiating this daily routine, staff underwent training and education to develop a protocol and new routines to accommodate the additional responsibilities.

Transportation and storage of a controlled substance—There is considerable liability in storing a highly regulated, controlled substance such as methadone. In the facilities not accustomed to handling methadone, nurses were concerned about having sufficient locked storage space. They were concerned about liability issues and their licenses if a dose was misappropriated. One nurse commented:

“Why should I put my license at risk for giving someone this medication? It's extra work, it's an extra hassle, and it's a political liability—what's going to happen with the union and the politicians? The general public may be opposed to this ...”

Security concerns and institutional control

One critical challenge we faced in implementing MMT prior to release was the correctional staff's concern with safety and security. Wardens worried about methadone being diverted to the general population. Diversion would represent a loss of control and the possibility that inmates may get “high” or even overdose. This was both a liability as well as a public health, medical, and public safety concern.

Nurses and correctional officers were concerned about appropriately managing the medication line. For instance, they worried that inmates being detoxified from methadone might feel resentment toward inmates being initiated to methadone treatment, thereby posing a security risk.

Another safety concern raised by administrators and wardens was whether inmates could safely operate machinery or do their jobs while initiating methadone treatment. While an individual's body is adjusting to methadone dosing, there can be side effects of intoxication or drowsiness. This raised both safety and liability concerns (ie, the injured party might sue the RIDOC for allowing someone to perform a dangerous task while being prescribed an intoxicating substance).

Staff expressed concern about who would be eligible for initiating treatment. Correctional staff viewed methadone as something prized by inmates and saw the provision of methadone as a privilege and not something all inmates deserved. One officer commented, “You really think this methadone project is going to work? You know, we don't like to give [the prisoners] *any* drugs. You know we even charge them for Tylenol, right?” Accustomed to controlling both rewards and punishments, and viewing methadone therapy as a reward, wardens saw distribution of methadone by medical staff as a threat to their control over inmates. Wardens felt uncomfortable about the potential diversion of methadone doses to inmates not in methadone treatment, both because of the possibility that an inmate's safety might be put at risk and because the “reward” of becoming intoxicated might be distributed without their control.

Perceptions about methadone maintenance treatment

As is the case with much of the general population, many correctional staff regarded drug use as a moral failing. This is in line with national policies that view drug use as a crime to be punished. Abstinence, without medication assistance, is seen as the appropriate approach to overcoming addiction. This approach is reinforced because correctional staff see an individual in an artificial setting—one in which abstinence is imposed. Although drug use occurs in prison and jail, it occurs much less often than in the community. It is not infrequent that an inmate, without the influence of drugs or alcohol and with three meals a day and basic healthcare needs met, improves his or her health status during incarceration. In other words, incarceration can “clean up” the inmate—thus many believe that he or she is no longer addicted. Once “clean,” many believe that the legitimate approach in maintaining abstinence after leaving incarceration is will power, avoiding negative influences, and finding support, whether through friends, family, 12-step programs, or counseling.

In proposing the idea of initiating methadone maintenance therapy during incarceration, we were met with questions such as, “Why would you want to retox somebody after they have been detoxed?” and “Why would you re-addict someone after we've cleaned them up?” Many of the comments from correctional and medical staff reflected misunderstandings about the chronic, relapsing nature of opiate addiction, and the efficacy of ORT. One member of the medical staff, expressing faith in the efficacy of forced detoxification in the correctional setting, stated plainly, “We clean them up and then they're no longer addicted.” Some correctional and medical staff saw medication assistance as “re-toxing” or “re-addicting” inmates after they had been “cleaned up.” While some staff thought that ORT might have been necessary after an inmate was released and relapsed to opiate use, introducing ORT while inmates were still incarcerated appeared to some to assume that the inmates would fail. Many viewed the use of medication-assisted therapy as simply substituting one addiction for another.

Some nurses expressed an understanding of how difficult it is for inmates reentering the community and the odds they face in integrating into society. They saw opiate addiction as symptomatic of poor housing, unemployment, availability of drugs, and poor living conditions. When faced with these conditions, provision of medication-assisted therapy was viewed as wholly inadequate. One nurse stated, “Well, if you can't take care of their housing and you send them back into the same environment, of course they're going to use drugs and commit crimes, and giving them methadone won't have any effect on that.” This point reflects the complexity of the issues of substance use and criminal behavior as well as the difficulty of breaking the cycle of addiction and reincarceration.

There is no question that former prisoners, especially those with opioid addiction, face considerable barriers to societal reintegration. However, MMT is often a necessary ingredient in stabilizing the lives of individuals addicted to opiates. In the incarcerated setting, correctional staff do not see individuals who are stable on medication assisted therapy and leading productive lives. They encounter individuals on methadone or buprenorphine who have been reincarcerated, most likely after relapsing to drug use. Rather than viewing relapse as a symptom of a chronic disease, it is viewed as a failure of ORT.

Importantly, the medical staff showed empathy toward inmates dealing with addiction, and it was clear that many of their comments reflected what they saw to be in the best interests of the inmates.

Overcoming Obstacles to Implement Methadone for Prisoners

In spite of the aforementioned challenges, we overcame significant barriers to implementing methadone in correctional settings. We enrolled 100 incarcerated individuals in our randomized controlled trial. We attribute our successes to several factors.

Leadership

Most importantly, the prison director, medical director, and other top staff supported both the service intervention and the randomized controlled trial. Executive level leadership helped us overcome many staff barriers. By setting a positive institutional tone for methadone treatment programs and mandating staff participation in training programs, senior management helped sensitize the staff to the importance of methadone therapy.

Connecting with staff

Addressing the primary barrier to initiation of MMT inside a correctional setting required addressing stigma and the underlying belief that addiction is a moral failing rather than a disease. Although correctional staff often encountered individuals with opiate addiction, very few had formal training in addiction and recovery. Beginning with the service initiative and continuing with the RCT, we engaged staff in various discussions and in-service trainings at all levels.

These efforts ranged from formal presentations to informal discussions to maintaining a regular presence at various staff meetings. Much of our effort was aimed at helping staff to understand the chronic relapsing nature of addiction and the fact that forced abstinence is an ineffective approach to treating opiate addiction. An example of formal training was when we partnered with the Rhode Island Nurses Association to conduct in-service trainings on MMT, including offering continuing education units for nursing staff. Likewise, we collaborated with a pharmaceutical partner to provide multiple information sessions on buprenorphine. More informal efforts included meeting with various groups, including parole, probation, discharge planning, wardens, and medical staff for information exchange during staff meetings. Importantly, a single training in a department was insufficient. Updates about the project on a periodic basis provided an opportunity to refresh staff about ORT and addiction.

In addition to educational efforts, maintaining a consistent presence in the facilities was crucial to gaining acceptance from correctional staff. Regular attendance at meetings—for instance, we regularly attended discharge planning meetings—played a role in normalizing our work. Daily interactions with rehabilitative and corrections staff formed relationships and facilitated acceptance. Discharge planning staff wanted to see results of our work, such as whether we followed through and made all appropriate arrangements for linkage, whether individuals enrolled in treatment when released, and whether staff collaborated in making discharge plans. Corrections staff needed to see professionalism and respect for their institution and their individual roles. Study or project staff selection was essential to assuring that these connections were made and maintained.

Negotiating security issues

To implement methadone treatment in the correctional setting, we had to negotiate many issues with correctional staff, including concerns about diversion of narcotics, inmate behavior, medical liability, and overdose. We agreed to additional security oversight for study participants to prevent diversion. We also agreed to strict terms of methadone administration and storage.

Security concerns were most complex in facilities that had not provided methadone previously. In these facilities, nurses were reluctant to assume more responsibility that might cause security breaches, and many initially refused to provide inmates with methadone. To overcome this barrier, we contracted with outside agencies to provide methadone in those RIDOC facilities. We contracted research nurses from CODAC, the same methadone treatment facility that provided methadone for inmates being detoxified. Bringing in research nurses with expertise in methadone treatment provided the opportunity for RIDOC nursing staff to ask questions and observe procedures. These interactions may have broadened the perspective of RIDOC nursing staff. Despite initial concerns, the research nurses reported feeling comfortable and well treated.

Embracing Incremental Change

We were most successful in implementing MMT in facilities that already provided methadone for detoxification purposes, including the men's and women's intake facilities (predominantly jails), where prisoners were held until they were sentenced. Although enrollment in the jails was low since the vast majority of eligible inmates were housed elsewhere, successful implementation there helped us to provide an evidence base to introduce methadone treatment to the other RIDOC facilities. Also, though we faced a number of barriers to initiating MMT in prison, our efforts were enhanced by our experience implementing an MMT linkage project and the fact that the principle investigator, Dr. Rich, was a medical consultant providing on-site clinical care on a weekly basis for 15 years.

Implications for Implementing Methadone Treatment in Other Correctional Settings

Pharmacological treatment for opiate addiction in an incarcerated setting is still viewed skeptically by many. Our findings nevertheless highlight the fact that implementing methadone is possible in correctional settings, which can be a critical first step in linking individuals to treatment in the community after release. However, it requires both prison leadership and ongoing staff sensitization to a pharmacological approach to treating substance dependence. Staff must also be sensitized to the fact that substance users' health needs may be different from those of other offenders. Ongoing staff training and education about addiction treatment may help mitigate the stigma associated with pharmacological approaches to substance use treatment and can highlight the evidence base for methadone. Additionally, it may be important to report positive results of local MMT programs back to prison staff; this may help overcome fatalistic attitudes about MMT and promote a local evidence base for successful programs.

Given staff concerns about security, prison leadership may also want to take steps to ease nurses' concerns about punitive measures for methadone-related security breaches. In our setting, nurses were generally reluctant to take on an additional responsibility with potential security implications. We were only able to overcome this barrier by financing an outside agency to come to RIDOC to dispense methadone. This serious staff and financial barrier may also hinder implementation of other methadone projects in correctional settings in other parts of the country.

Methadone implementation is also most likely to be successful if staff are appropriately compensated for the time and energy they expend on dispensing methadone. This may require additional compensation for some staff or appropriately integrating information about MMT into job descriptions and training programs. These steps may be necessary to integrate MMT programs into staff routines and to guarantee that methadone programs are not viewed as standalone projects, but are considered as part of daily responsibilities. In some cases, as in Rhode Island, this may require negotiations with prison unions. In other settings, this may

require negotiations with contract organizations responsible for delivering health services to inmates.

Some correctional facilities have their own licenses to dispense methadone for addiction, rather than utilizing an outside vendor to bring in methadone. This is a viable option for many facilities and should be explored as perhaps a more efficient and cost-effective way to provide methadone. It does require certification and an additional layer of regulation, but the National Commission on Correctional Healthcare has a program to assist correctional facilities interested in becoming accredited to dispense methadone for opiate addiction. If a facility has few inmates on methadone treatment, it may be more cost-effective to have an outside MMT program dose the inmates. Another advantage to having a local MMT program administer methadone on their license is improved continuity of care for those patients who follow up with the same MMT program after release.

Many of the obstacles outlined in this article may also apply to the use of buprenorphine/naloxone therapy to treat individuals addicted to opiates in an incarcerated setting. Buprenorphine/naloxone, is a relatively new treatment that is not subjected to the same regulatory restrictions as methadone, may have less stigma and be more readily accepted by corrections staff. This approach is promising³⁸ and the use of buprenorphine/naloxone at the time of community re-entry needs to be further researched.

Research with Vulnerable Populations

Prisoners are treated as a vulnerable population by federal regulators and are afforded additional protections within a research context. These protections are necessary due to concerns regarding voluntary consent and coercion in a limited choice environment. Coercion is overt influence by correctional staff or, more subtly, a perception by offenders that research participation will benefit the outcomes of their release. Given their very controlled environment, possible advantages accrued by research participation cannot be so substantial that the inmate's ability to weigh the risks are compromised. The scope of considerations for prisoner research can be found at www.hhs.gov/ohrp/special/prisoners.

Conclusion

There is increasing evidence that beginning methadone maintenance therapy prior to release from incarceration reduces recidivism and substance use postrelease. In spite of considerable staff obstacles to implement methadone treatment for opiate addiction in correctional settings, providing methadone prior to release is a high-impact intervention with the potential to reduce drug-related health and social harms. The formidable challenges can be mitigated through offering appropriate and ongoing staff education and sensitization, relying on external staff to help dispense methadone, providing adequate compensation for staff time, and having executive leadership that sets the institutional tone for implementing methadone in correctional settings. Although challenges may differ somewhat when initiating buprenorphine/naloxone in an incarcerated setting, many of the strategies outlined here will apply.

Acknowledgments

This research was supported by grant number 1 R01 DA 018641 from the National Institute on Drug Abuse, National Institutes of Health (NIDA/NIH) and grant number T114562 from the Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment (SAMHSA/CSAT). Partial support was provided by grant number P30-AI-42853 from the National Institutes of Health, Center for AIDS Research (NIH/CFAR) by training grant T32DA13911-08 from the National Institute on Drug Abuse.

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Table 1
Recommendations for implementing methadone therapy for opiate addiction in the correctional setting

Determine which services to provide: methadone detoxification, methadone maintenance, or linkage to community MMT on release.
Determine eligibility. We considered inmates with a documentable history of >1 year of opiate addiction and reported active opiate use within 30 days of incarceration eligible for MMT (Documentation included: previously in detoxification or treatment for opiate addiction, criminal history of heroin possession, documentation by physician, etc).
Build a relationship with facility management.
Provide ongoing education for staff at all levels.
Maintain a consistent presence in the facility.
Share research results and clinical outcomes with correctional staff.
Work with management to resolve liability issues related to methadone security breaches.
Work with community methadone agencies if correctional medical staff is unwilling or unable to provide methadone.
Present cases of local patients who have done well; correctional staff only see offenders.
Begin at a low dosage, increase dosage slowly, carefully monitor for toxicity.