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The **Benefits** of Including Methadone Treatment in Illinois' State Medicaid Plan

A White Paper prepared by

The Illinois Association for Medication
Assisted Addiction Treatment

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Executive Summary

Methadone is an inexpensive medication approved by the U.S. Food and Drug Administration for the treatment of heroin and other opioid dependence. Studies indicate that methadone reduces relapse, emergency department visits and hospital admissions. In general, the stability methadone provides helps patients better manage their overall health.

Including methadone treatment in Illinois' State Medicaid Plan will reduce healthcare costs and help the state address the growing epidemic of opioid dependence. Patients can only access methadone treatment for their opioid dependence through the highly regulated Opioid Treatment Program (OTP) system. The system requires programs be registered with the Drug Enforcement Administration, certified by the federal Health and Human Services' Center for Substance Abuse Treatment and licensed by the Illinois Department of Human Services' Division of Alcoholism and Substance Abuse.

OTPs utilize a multidisciplinary team comprised of physicians, nurses, and counselors to address the bio-psycho-social needs of each individual patient. This holistic approach to treatment has been in place in OTPs for more than 40 years, long before most other systems embraced the health home model. The strong positive relationships between patients and professionals in OTPs helps patients feel empowered to address their own health needs.

Numerous studies have documented the cost savings generated by stabilizing opioid dependent individuals on methadone and helping them manage their comorbid conditions. Emergency department visits and hospital admissions are significantly reduced because patient health is carefully monitored and addressed. In spite of medical evidence documenting the effectiveness of methadone treatment and the cost savings achieved, some health plans have excluded this treatment modality. Patient advocates have suggested this is largely due to the stigma related to heroin addiction.

Untreated opioid dependence in Illinois leads to unnecessary emergency department visits and hospital admissions. Some of these visits are due to drug overdoses or attempts to seek treatment for withdrawal symptoms. However, others are due to the multiple unmanaged comorbid conditions, such as diabetes and hypertension, which are highly prevalent in opioid dependent individuals.

Illinois' administrative leadership has demonstrated its commitment to resolving Illinois' fiscal crisis. The cost savings achieved by covering methadone treatment in Illinois' State Medicaid Plan can be part of this solution. In addition to saving taxpayer dollars in unnecessary hospitalizations, providing increased access to treatment aligns with three core objectives of Illinois' Budgeting for Results initiative: 1) to improve the overall health of Illinois residents; 2) to meet the needs /improve the quality of life for the most vulnerable persons; and 3) to increase individual and family self-sufficiency.

Introduction

Including methadone treatment in Illinois' State Medicaid Plan is sound public policy. U.S. healthcare costs related to opioid dependence have been estimated at \$25 billion per year (Birnbaum & White 2011). Healthcare costs for opioid dependent individuals are lower when patients are enrolled in opioid treatment programs (OTPs). The greatest cost savings come from decreased emergency department visits and hospital admissions (Stein & Anderson 2003).

OTPs are very successful at patient engagement and retention; long-term methadone maintenance effectively addresses the symptoms of opioid dependence and stops the progression of the disease of addiction (Kling et al. 2000; Kreek 2000; Schluger et al. 2001). Further, patients maintained long term on methadone have better overall health outcomes at lower cost than do opioid dependent individuals who do not have access to methadone treatment or who are involuntarily discharged from treatment (Simpson et al. 1997). OTPs provide the extra benefit of reducing HIV, hepatitis C, and other infectious diseases in the communities they serve, resulting in decreased public health costs (NIH 2008b).

Medication Assisted Addiction Treatment Reduces Healthcare Costs

Methadone maintenance is a highly cost-effective treatment modality which decreases opioid use and improves the overall health of opioid dependent individuals. Healthcare costs for individuals enrolled in methadone treatment are as much as 62% lower than costs for opioid dependent individuals *not* enrolled in treatment (\$7,163/year vs. \$18,694/year) (McCarty et al. 2010).

Empirical data show that individuals with untreated opioid abuse/dependence have higher than average rates of emergency department visits and hospital admissions (Stein & Anderson 2003). Emergency department visits for opioid dependent individuals *not* enrolled in OTPs are 12 times the rate of average commercial health plan members (McCarty et al. 2010).

The National Institute on Drug Abuse (2012) reports that medication-assisted treatment of opioid dependence makes good economic sense; every dollar invested in methadone treatment generates an estimated \$4 to \$5 return. In use since the 1960s, methadone remains an excellent treatment option as a slow-acting oral medication effective in preventing opioid withdrawal symptoms (NIDA 2012).

Comorbid Health Problems Among Opioid Dependent Individuals

Nearly all opioid dependent individuals are at increased health risk. Data from Illinois OTPs indicate that, depending on the specific program (its geographical location and payment source), between 50% and 90% of patients have two or more of the following comorbid conditions:

- diabetes
- hypertension
- high cholesterol
- obesity

- psychiatric disorders
- nicotine dependence
- chronic obstructive pulmonary disease (COPD)
- asthma

Since many of these conditions are impacted by a patient's environment, behavior, and medication compliance, OTPs are uniquely poised to help patients manage these conditions as they manage their opioid dependence.

Addiction treatment can prevent opioid dependent individuals from developing cardiovascular disease (CVD) and stop the progression of already existing CVD. Studies show that CVD is 51% more likely to progress in individuals who do not receive treatment for their addiction (Mancuso, Shah, Huber, & Felver 2011).

Untreated opioid dependence complicates other chronic diseases as well. Life-threatening asthma symptoms can be triggered by inhaling/snorting heroin (Krantz et al. 2003). Opioid use can similarly increase complications among Type 1 diabetics, leading to severe diabetic ketoacidosis (Lee, Greenfield, & Campbell 2008) and more frequent and costly hospital admissions (Saunders, Democratis, Martin, & Macfarlane 2004).

Public Health and Safety Benefits of Medication Assisted Addiction Treatment

OTPs address critical public health issues by reducing the spread of infectious diseases and the costs related to treating those diseases. Heroin and other opioid use, and the related behaviors, place individuals at increased risk for HIV/AIDS and other infectious diseases such as hepatitis C, tuberculosis, and sexually transmitted infections. For these individuals and their communities throughout Illinois, addiction treatment is also disease prevention. The daily oral administration of methadone decreases injection drug use, thus reducing the spread of HIV, the hepatitis C virus (HCV), and other bloodborne infections (Sullivan et al. 2005). Opioid dependent individuals without access to treatment are up to six times more likely to become infected with HIV (NIH 2008b).

Medication Assisted Treatment Using Methadone is an Effective Evidence-Based Practice

The use of methadone to treat opioid dependence is one of the most studied addiction treatment methods. The creation of a nationwide, publically funded OTP system became a major public health initiative under the leadership of the White House Special Action Office for Drug Abuse Prevention in the early 1970's (CSAT 2005).

Medication-Assisted Treatment (MAT) includes a pharmacologic intervention as part of a comprehensive substance use treatment plan with the ultimate goal of patient recovery with full social function (SAMHSA 2013). Methadone maintenance, the most researched form of MAT, is currently listed on the Substance Abuse Mental Health Services Administration's National Registry of Evidence-Based Programs and Practices. It has been proven to be an effective

treatment for helping patients maintain long-term recovery from addiction. Years of research prove that methadone treatment significantly reduces healthcare, criminal justice, and other social welfare costs associated with opioid dependence (Masson et al. 2002, White et al. 2005, McCarty et al. 2010, Stein & Anderson 2003).

Methadone, a very inexpensive FDA-approved medication, is an opioid agonist that binds to the opioid receptors in the body to relieve withdrawal symptoms and block the euphoric effects of heroin and other opioids. It works as a slow, long-acting oral medication that helps a person discontinue the abuse of heroin or other opioids by addressing the area of the brain that is occupied by drugs of abuse and controlling withdrawal symptoms (Lowinson et al. 2005).

A prescribed therapeutic dose of methadone does not produce a high. Patients feel normal, able to parent, work or attend school, and perform the routine activities of daily living including attending to their individualized healthcare needs. Methadone tends to normalize many aspects of the hormonal disruptions found in addicted individuals (Kling et al. 2000; Kreek 2000; Schluger et al. 2001). It moderates the exaggerated cortisol stress response that increases the danger of relapse in stressful situations. Methadone treatment:

- reduces relapse rates
- facilitates behavioral therapy
- enables patients to maintain stable employment and personal relationships
- helps patients manage their health and health conditions

A 1997 National Consensus Development Panel on Effective Treatment of Opiate Addiction found methadone maintenance to be the most effective treatment for opioid dependence. However, even with more than 40 years of use and overwhelming evidence documenting its effectiveness, the value of this treatment modality is often overlooked (Kleber 2008). Most commercial health plans and some state Medicaid plans have omitted methadone maintenance as a covered benefit despite evidence of its effectiveness. These decisions seem to be based more on bias and stigma than on data (McCarty, Frank & Denmead 1999). The 2008 passage of the Paul Wellstone and Pete Domenici Mental Health Parity and Addiction Equity Act has led the architects of some commercial and Medicaid plans to reconsider the treatments they offer for opioid dependence (McCarty et al. 2010).

Clearly, research demonstrates that methadone treatment benefits society, is cost effective, and pays for itself in basic economic terms. As with other chronic diseases, continued access to care leads to improved health outcomes. The benefits of long term methadone maintenance are well documented; short term treatment episodes are not as cost-effective as longer term treatment approaches (Barnett and Hui 2000).

The Growing Problem of Opioid Dependence in Illinois

The epidemic of untreated opioid dependence in the United States puts a significant financial strain on our healthcare system (Addiction Treatment Forum 2011). The American Medical

Association (2012) emphasizes that opioid addiction and prescription drug abuse place a great burden on patients and society; the number of fatal opioid overdoses more than tripled between 1999 and 2006. Opioid overdose is now a national epidemic, second only to motor vehicle accidents as the leading cause of accidental death in the United States (Nosyk et al. 2013).

The availability of heroin has increased not only in urban areas like Chicago, but in communities throughout the state of Illinois. The Will County Coroner reports a 700% increase in fatal heroin overdoses between 1999 and 2012 (Pratt 2013).

The Drug Enforcement Administration found that an increasing supply of less expensive, higher purity heroin from Southeast Asia and South America has led to increased use. The purity of heroin in Chicago increased nearly tenfold from the early 1980's to 1995 with an average purity of 2-4% in the early 1980's rising to 25-30% in 1995 (National Drug Intelligence Center 2001).

The increased supply has led to a dramatic price decrease for a single dose bag (100 mg) from \$50 in 1983 to \$10 or less since 1995 (National Drug Intelligence Center 2001). This dramatically lower price point for heroin has made initiation of use more accessible to teens and emerging adults (Schmitz & Kane-Willis 2010). The recent proliferation of pain clinics has also contributed to the increased number of Illinois residents whose health is compromised due to opioid dependence. Many who develop a dependence on prescription opioids end up using heroin because it costs less and is more readily available than pharmaceutical opioids.

Admissions for heroin dependence to Illinois' publically funded addiction treatment system increased nearly fourfold from 1998 to 2008, according to a Roosevelt University study. Hospital discharge data on Illinois patients for whom heroin/opioids led to the admission increased nearly 50% (from 23,000 to more than 34,000) between 1998 and 2007 (Schmitz & Kane-Willis 2010). While exact costs related to this increase were not included in the study, the toll these largely avoidable hospital admissions took on the State's finances surely contributed to Illinois' current fiscal challenges.

Opioid Dependence: A Chronic Brain Disease

The National Institutes of Health (NIH) (2008a) defines addiction as a chronic disease with relapse rates similar to those for other well-characterized chronic medical conditions such as diabetes and hypertension, which also have both physiological and behavioral components. Opioid use leads to lasting changes in the brain that can affect survival instinct, learning, memory, and stress responses (Miller 2013).

For the addicted patient, difficulty in discontinuing drug use or lapses back to drug use indicate that the patient's dosage and other treatment needs should be re-evaluated and the treatment plan adjusted accordingly. Long-term treatment can limit the disease's adverse effects and improve the patient's day-to-day functioning and overall health (Kosten & George 2002).

Pharmacological interventions for opioid addiction are highly effective; however, given the complex biological, psychological, and social aspects of the disease, they must also be accompanied by appropriate psychosocial treatments. Illinois' OTP system is well designed to

respond to the complex needs of opioid dependent residents who are likely to present with multiple comorbid conditions. Investing in this cost-effective treatment modality makes good public policy; it saves taxpayer money, improves public health, and reduces health disparities.

Opioid Treatment Programs are part of a Highly Regulated System of Care

Although methadone is FDA-approved for the treatment of pain, in order for a physician to prescribe methadone to treat opioid dependence, the patient must be enrolled in an Opioid Treatment Program. There are currently 63 OTPs in Illinois. OTPs are required to be registered by the Drug Enforcement Administration, certified by the federal Health and Human Services' Center for Substance Abuse Treatment (CSAT) and licensed by the Illinois Department of Human Services' Division of Alcoholism and Substance Abuse (IDHS/DASA). Additionally, the Center for Substance Abuse Treatment (CSAT) requires that each OTP become accredited by a nationally approved accrediting body such as the Joint Commission, the Commission on the Accreditation of Rehabilitation Facilities (CARF) or the Council on Accreditation (COA).

Many patients in OTPs have complex comorbid physical/mental health and social conditions. They often present a number of health risks/conditions including smoking, obesity, poor nutrition, risky sex practices, high rates of sexually transmitted infections, hypertension, heart disease, diabetes, COPD, HIV, hepatitis C, and psychiatric disorders. Many have experienced childhood trauma, domestic violence, poverty, low levels of education, and unemployment (CSAT 2005). It is common for patients in OTPs to have a distrust of medical professionals and cultural beliefs that promote fatalism. As a result, many patients underestimate the benefits of preventative medicine, screening, vaccination and personal health management. While most OTPs in Illinois and across the country have inadequate staffing patterns to fully implement the Health Home model under current funding constraints, nearly all OTPs operate with a multidisciplinary team. These teams have been approaching patient care from a holistic perspective for years with a "skeletal health home" model long before the term "health home" became part of our vernacular.

OTPs are uniquely suited to help manage the care and reduce healthcare costs of opioid dependent patients, particularly by reducing the overuse of emergency departments for overdose management, the treatment of withdrawal symptoms and routine healthcare visits which are more appropriately and cost-effectively addressed in primary care settings. Patients in OTPs generally have strong relationships with and high levels of trust in the nurses, physicians and counselors who treat them. These relationships, and the patient's individualized treatment plan, are useful in addressing his/her specific bio-psycho-social needs. As dictated by federal and state statute, OTPs are staffed by medical and counseling personnel and generally have contact with patients six days per week in the first nine to twelve months of treatment.

Physicians in OTPs are required to follow strict guidelines in assessing patient needs and determining appropriate treatment planning. Under the Illinois Administrative Code 77 Part 2060.417 and 2060.423, all licensed substance abuse treatment programs must utilize the American Society of Addiction Medicine's (ASAM) criteria for patient placement and continued stay review (ILGA:JCAR 2003). The ASAM criteria require that clinicians evaluate patients using six core dimensions (ASAM 2001):

1. acute intoxication and/or withdrawal potential
2. biomedical conditions and complications
3. emotional/behavioral/cognitive conditions and complications
4. readiness to change
5. relapse/continued use/continued problem potential
6. recovery environment

Use of this criteria helps to ensure that each individual is placed in the appropriate level of care and that the decision to keep a patient in treatment is based on specific patient need.

Clinical Decision-Making Criteria for Health Plans

The stability of being enrolled in an OTP helps patients manage their other health conditions. Like many other chronic conditions, opioid dependence is related to a genetic predisposition, environmental conditions, and lifestyle factors. Left untreated, opioid dependence leads to additional medical complications and costs (Miller 2013).

Despite the fact that addiction has been defined by the American Medical Association as a chronic disease, many people still think of it as an acute problem that should have a short term solution. Additionally, the stigma that addiction carries leads some decision makers to view opioid dependent individuals as “undeserving of care.” This results in decision makers limiting access to treatment despite the scientific data that demonstrate the significant system cost savings achieved by keeping patients enrolled in long term methadone maintenance treatment.

There are some who recommend ejecting opioid dependent patients from treatment if their symptoms persist, even though this is not how our healthcare system treats other chronic conditions. An individual prescribed a statin for high cholesterol is not ejected from care if lab results indicate continued high levels of low-density lipoproteins (LDLs). The prescribing physician would typically consider a dosage increase or adding other medications and/or behavior changes to the treatment plan. This is similarly the case for a type 2 diabetic who continues to register high blood sugar levels despite the provision of oral medications and support from a diabetes educator. Why then would policy makers or managed care organizations, despite the cost savings associated with retaining an opioid dependent patient in treatment, elect to eject a patient from methadone treatment because of lab results indicating the need for a possible dosage adjustment or increase in counseling or other support?

Data suggest that health plans should purchase methadone maintenance services for members who are opioid dependent because estimated healthcare costs are 50% lower among individuals receiving methadone treatment than among those who are not (McCarty et al. 2010). At the current rate, a year of methadone treatment in Illinois costs about \$3,600.

Even in patients whose lab results indicate continued opioid use, we see improved management of their other health conditions largely due to regular access to medical professionals at the OTP

and the stability provided by being enrolled in addiction treatment. Destabilizing a patient by prematurely ejecting him/her from treatment is likely to increase visits to emergency departments for relief from withdrawal symptoms if the patient does not return to regular heroin use, or for overdose treatment if the patient does return to heroin use. Patients with comorbid conditions including diabetes, hypertension, heart disease, depression, anxiety disorders, hepatitis C and HIV are likely to have increased hospital admissions due to the instability in their lives and resulting stressors that premature ejection from methadone treatment will cause. Discontinuing treatment increases a patient's risk of death by 240% (Nosyk et al. 2013).

Health plans and managed care entities can utilize the clinical decision making skills of the treating physician to determine continued need for treatment; the Illinois Administrative Code 77 Part 2060.417 and 2060.423 requires that at least every 90 days a physician at the OTP recertify a patient's need for continued methadone treatment, utilizing the American Society of Addiction Medicine's (ASAM) criteria (ILGA:JCAR 2003).

Medicaid Coverage for Methadone Treatment will Expand Access and Reduce Costs

The majority of patients enrolled in Illinois' publically funded OTPs are non-disabled adults without dependent children who traditionally have not been eligible for Medicaid. The federal government will be paying at least 90% of the Medicaid costs for these newly eligible individuals under the Affordable Care Act. Because present funding for OTPs in Illinois comes almost exclusively from the federal block grant and state general revenue funds, the OTP treatment capacity has largely remained stagnant in spite of Illinois' growing heroin epidemic. With Medicaid coverage, the treatment capacity and related cost savings can increase for both existing and newly eligible Medicaid recipients.

Conclusion

Providing Medicaid recipients access to medication assisted addiction treatment aligns with three core objectives of Illinois' Budgeting for Results initiative: 1) to improve the overall health of Illinois residents; 2) to meet the needs /improve the quality of life for the most vulnerable persons; and 3) to increase individual and family self-sufficiency.

Opioid dependent Illinoisans who are enrolled in treatment are more likely to be able to manage their other health conditions. Investing in treatment will also save Illinois money in the budgets of other code departments since opioid dependent patients enrolled in OTPs are less likely to be unemployed, involved in the child welfare system, homeless, involved in the criminal justice system or to end up incarcerated than those whose opioid dependence is left untreated.

Methadone is a relatively inexpensive treatment for a condition that, left untreated, has the potential to significantly drive up healthcare costs. Stabilizing opioid dependent patients in community-based OTPs will save in avoidable emergency department visits and hospitalizations. Even individuals who turn a blind eye to the science of addiction and have an emotional knee-jerk reaction that individuals struggling with addiction do not deserve access to medical care cannot deny the wisdom of the cost-savings achieved for Illinois' overburdened budget. Simply stated, including methadone treatment in the Illinois State Medicaid plan is good fiscal policy.

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