INTRODUCTION

Economic Considerations for the Treatment of Opioid and Alcohol Dependence: A Managed Care Perspective

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This supplement to *The American Journal of Managed Care* reports the results of several studies analyzing the economic impact of treating opioid or alcohol dependence. While there is a clear need to address and treat substance abuse, effective management with limited resources is a common challenge for managed care professionals and individual practitioners. The information in this supplement may help those who are charged with administering benefit design or disease management programs identify treatment options that can improve outcomes and reduce costs.

Opioid Abuse: A Multi-Edged Burden

Estimates of the prevalence of patients with chronic pain in primary care settings are between 5% and 33%.[1] Studies demonstrate that over 25% of US adults have some form of persistent or chronic pain, and that 50 million Americans have chronic pain.[2] In 2004, $13.8 billion was spent on outpatient prescription analgesics, and the associated pain was estimated to cost more than $60 billion for each year of lost productivity. Treatment of chronic pain is a clear and significant clinical burden and cost driver for managed care plans, and an area where inappropriate utilization of opioids is a great concern.

While opioids are an effective cornerstone in the treatment of chronic pain, abuse and diversion are common and increasing, and opioids are associated with significant morbidity and mortality. From 1999 to 2007, the annual death rate attributed to prescription pain medication poisoning increased substantially. Moreover, prescription pain medication addiction, abuse, and diversion have increased dramatically in the past 2 decades. In 2009, nonmedical use of pain relievers was a leading form of drug abuse in the United States, second only to marijuana.[3] Patients who are dependent on prescription opioids represent 80% of the overall population dependent on opioids; street drugs, such as heroin, represent the balance.[4] In 2009, there were an estimated 2 million opioid-dependent adults in the United States.[3]

Connecting these points—high utilization of opioids, increasing potential for inappropriate use, burden of overall opioid abuse, and need for interventions—provides a clear need for cost-effective and cost-saving strategies in these areas. Although most of these discussions are outside the scope of data presented in this publication, there are approaches that can be taken to improve outcomes and reduce costs in patients dependent on opioids.

The information presented in the article by Baser and colleagues on opioid dependence,[5] which is purported to be the largest analysis in this area to date, used data from over 23,800 patients and assessed the impact of the 4 medications approved by the US Food and Drug Administration for the treatment of opioid dependence. Interestingly, these agents represent a full spectrum of, and even opposite, mechanisms of action (MOAs) (ie, opioid receptor agonists, partial agonists, and antagonists). Despite the wide variance in MOAs, use of any of these treatments for opioid dependence was associated with significantly lower treatment-specific utilization and total healthcare costs (including inpatient, outpatient, and pharmacy costs) compared with no pharmacologic treatment. The differences in cost among the treatment groups was greater than the cost of the medications themselves, suggesting that budgeting based on pharmacy costs alone may be counterproductive in addiction treatment, as total cost savings may result from reduced resource utilization.

Alcohol Abuse: Treating the Tip of the Iceberg

The remaining articles in this supplement describe results from health economic studies on the treatment of alcohol dependence. According to the National Institutes of Health, alcoholism (ie, alcohol dependence) and alcohol abuse are 2 different forms of problem drinking. Alcohol dependence "occurs when a person shows signs of physical addiction to alcohol (for example, tolerance and withdrawal) and continues to drink, despite problems with physical health, mental health, and social, family, or job responsibilities. Alcohol may come to dominate the person's life and relationships. In alcohol abuse, a person's drinking leads to problems, but not physical addiction." The prevalence of problem drinking and related consequences is rising. Data indicate that approximately 15% of people in the United States are problem drinkers, and 5% to 10% of male drinkers and 3% to 5% of female drinkers could be diagnosed as alcohol dependent.[6] All heavy drinkers are at greater risk of hypertension, gastrointestinal bleeding, sleep disorders, major depression, hemorrhagic stroke, cirrhosis of the liver, and several cancers.[7] This mandates that alcohol abuse and treatment be a focal point for managed care.

Unfortunately, heavy drinking often goes undetected. In a study of primary care practices, patients with alcohol dependence only received the recommended quality of care (including assessment and referral to treatment) approximately 10% of the time. This is important because even brief interventions can promote significant reductions in drinking.[8] Furthermore, repeated alcohol-focused visits with a healthcare provider can lead to marked improvements, and dependent drinkers can be referred to addiction treatment programs.[9,10] Again, managed care can play an important role in this process.

As demonstrated in the alcohol dependence article by Baser et al,[11] patients receiving medication to treat alcohol dependence had lower total healthcare costs (including inpatient, outpatient, and pharmacy costs) compared with those not receiving medications. In addition, use of extended-release naltrexone was associated with fewer admissions and longer persistence on therapy compared with other treatments (oral naltrexone, disulfiram, or acamprosate calcium), at no greater total expense.

The impact of treatment persistence in alcohol dependence was analyzed in 2 studies.[12,13] Persistence has been identified as a problem in alcohol treatment programs; it relates to drug therapy and abstinence from alcohol. In the study by Bryson et al,[12] there were significant differences in compliance with specific drug therapies, potentially related to frequent and complicated dosing schedules, a lack of patient education about the need for continuous treatment, and side effects. Jan and colleagues[13] described the economic impact of treatment adherence. Although noncompliance was a clear problem, even patients who did not adhere to treatment (ie, received <6 months of drug therapy) had reductions in alcohol-related hospitalization costs, total medical costs, and total pharmacy costs. Taken together, this information establishes the importance of active treatment. It also provides support for health plans to integrate an evidence-based approach to the screening and treatment of opioid and alcohol dependence.

Although further research is needed to confirm the cost-effectiveness of medication for alcohol dependence, results from these 3 studies[11-13] were consistent across populations represented in the claims databases from different managed care organizations. These studies also highlight the importance of treatment persistence in this disorder and suggest that medications associated with greater adherence may lower costs and improve outcomes.

Managed care is in a unique position to help provide consistent, integrated, best-practice processes for treating chronic pain and alcoholism, and avoid (or treat when necessary) the complications of inappropriate opioid utilization and alcohol abuse. Managed care can, and should, help support this integrated approach through the provision of clinical evidence and resources, and monitor for changes in treatment and prescribing patterns. Several programs that managed care has implemented include the use of databases to track members using multiple prescribers and multiple pharmacies (for opioid prescriptions). Plans can coordinate the use of plan-provider-patient contracts for an invested physician and 1 pharmacy for prescription and dispensing of pain medications. This should direct care to healthcare professionals who are more intimately aware of a member's situation. Resultant use of opioids should improve, overall costs should decrease, and better outcomes should be achieved. Plan-sponsored care management should be a component of this integrated approach in the treatment of pain. Care management should also be a part of any alcohol intervention and monitoring plan. If dependence and abuse of opioids or alcohol is an issue, plans should take a role in coordinating addiction treatment, because they are the ultimate payers. Furthermore, plans should have a detailed history of medication use patterns and compliance data, which can be used to help educate providers involved in the treatment of opioid addiction and alcohol abuse.

In summary, access should be provided for medications used to treat opioid and alcohol addiction, but they should also be supported by an integrated treatment approach that can be coordinated by managed care. This approach should improve outcomes and lower overall costs.

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