

## COMAT 1—The Business of Addiction Treatment

### Introduction

# The business of addiction treatment: A research agenda

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#### Abstract

The social and economic costs of addiction are substantial and of great concern to society. Research in the past decade has led to promising therapies that appear to be highly effective but not widely diffused. This leads one to wonder if there is something about the structure, dynamics, or structure and dynamics of the addiction treatment industry that is getting in the way. However, there has been very little research in the areas of organization, finance, or management practices within the substance abuse treatment field—the kinds of issues that reduce the potential impact of addiction treatment industrywide. With this as background, this article introduces the Center for Organization and Management in Addiction Treatment (COMAT) and a special section on research in the “business of addiction treatment.” Many other industries have experienced significant problems that are similar, in many respects, to those seen in substance abuse treatment, but research in leadership, innovation, investment, organization, and consolidation strategies has helped to overcome those problems. COMAT is dedicated to implementing and testing evidence-based methods from other industries to improve the outcomes performance and, ultimately, the clinical effectiveness of service providers in the addiction treatment field. © 2006 Elsevier Inc. All rights reserved.

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#### 1. Introduction to the special issue

Substance abuse and addiction are seemingly permanent features of the social order not only in the United States but around the globe. The manufacture and sale of licit and illicit products to which people become addicted are very big businesses, with billions of dollars at stake. The cigarette, beer, wine, and distilled-spirits industries, the heroin industry, and the cocaine industry have all been studied extensively by academic researchers, investigative reporters, and legal scholars, and a good deal is known about their structure, organization, and competitive dynamics.

Curiously, much less is known about the “industry” that has grown up around the treatment of addiction to these products. This gap is curious for two reasons. First, the

social and economic costs of addiction are enormous; thus, one might expect that research on efforts to treat addiction would be a high priority for federal, state, and local governments, as well as for employers. Second, recent developments in the treatment of addiction appear to have resulted in therapies that are highly effective but not widely diffused (see National Academy of Sciences Institute of Medicine [NAS-IOM], 1995, 1998, 2005), leading one to wonder if there is something about the structure, dynamics, or structure and dynamics of the addiction treatment industry that is getting in the way.

This special issue of the *Journal of Substance Abuse Treatment* begins to systematically study the business aspects of the addiction treatment industry and suggests a research agenda to advance this area. Although the business of addiction treatment has been around for a long time (see Musto, 1973; White, 1998), it has developed in relative obscurity and is currently very much in transition, as significant amounts of private capital have begun to be invested

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in certain segments of the industry (see Jackson, 2005, 2006). Thus, the time appears to be right for serious research on the structure and dynamics of the industry aimed at improving its efficiency and, ultimately, its effectiveness. To appreciate the need for research on these topics, one needs only to consider the impact of substance abuse on public health and safety and the potential of treatment.

## 2. The impact of substance abuse on public health and safety

Abuse of alcohol and drugs is associated with serious public health and public safety problems, including transmission of infectious diseases, disproportionate use of medical and social services, traffic accidents, and street crimes (National Academy of Sciences Institute of Medicine (NAS-IOM), 1990, 1997, 1998, 2005). These problems not only reduce the safety and quality of daily life but also become a source of substantial expense and concern to society (Harwood, Fountain, & Livermore, 1998; McKusick et al., 1998; Philbbs, Batena, & Schwartz, 1991; Rice, Kelman, & Miller, 1999).

For example, service institutions such as the welfare system, the criminal justice system, emergency medical care centers, foster home placement centers, employee assistance programs, and family violence centers come into contact with alcohol and drug abuse problems in the course of their responsibility for handling medical, social, and employment problems (Cherpitel, 1994; Edelman, 2001; Field, Claasen, & O'Keefe, 2001; Morgenstern et al., 2001; Weisner, 1994). Finally, Americans, in general, and those living in urban areas, in particular, have become increasingly worried about crime. As many as 60% of federal prisoners meet diagnostic criteria for substance dependence disorders (see National Center on Alcohol and Substance Abuse [CASA], 2003), and as much as 50% of all property crimes are committed under the influence of alcohol, drugs, or alcohol and drugs, or with the intent to obtain alcohol, drugs, or alcohol and drugs with the crime proceeds (see CASA, 2003; Goldkamp, 2000; Inciardi, Martin, Butzin, & Hooper, 1997).

## 3. The potential of treatment

The impact and costs of drug and alcohol problems—coupled with the acknowledged failure of, and expenses associated with, incarceration as a solution to these problems (see Goldkamp, 2000; Inciardi, 2001)—have brought renewed interest in addiction treatment as part of the solution to substance-related health and social problems. Two relatively recent developments underlie the rationale for this interest in treatment. First, significant advances in the treatment of addictions have been made in the past two decades (see NAS-IOM, 1995, 2005; Science, 1997; *The Lancet*, 1996). For example, research sponsored by the

National Institutes of Health has now produced four safe and effective medications for the treatment of opiate addiction: four for the treatment of alcohol addiction, three for the treatment of cocaine addiction, and one for the treatment of marijuana addiction (for reviews, see McLellan, 2002; McLellan & McKay, 2002). New behavioral therapies, such as cognitive-behavioral therapy (Carroll, 1996), motivational enhancement therapy (Miller & Rollnick, 1991), and 12-step facilitation therapy (Project MATCH Research Group, 1997), have also shown evidence of effectiveness in the rehabilitation of alcohol-dependent, opiate-dependent, and cocaine-dependent individuals. Finally, certain programmatic interventions combining therapies with social and family services, such as the matrix model (Rawson et al., 1995), multisystemic family therapy (Henggeler, 1991), and community reinforcement and family training (Meyers & Miller, 1998), have been shown to produce sustained improvements in patterns of substance abuse and in reductions in the associated health and safety problems of those affected (for a review, see McLellan, 2002).

The second reason for optimism regarding a treatment-oriented approach to addressing society's health and social problems with substance abuse is that a fundamental change has occurred in the way addiction has been conceptualized. Addiction is increasingly being seen by researchers and treatment providers as a chronic illness rather than an acute condition (see Anglin, Hser, & Grella, 1997; McLellan, O'Brien, Lewis, & Kleber, 2000; White, 1998). Traditionally, addiction has been treated as an acute condition with time-limited, often residential, forms of care designed to teach the affected patient a lesson or to produce an insight leading to continued abstinence without continuing care. These types of treatments have not produced sustained abstinence, and this has been true since the early 1960s (see Hunt, Barnett, & Branch, 1971). In the past decade, there has been an accumulation of a substantial amount of research indicating that many of those with serious addiction problems have a chronic condition, perhaps due to the now well-established role of genetic heritability (for a review, see Uhl, 2004) and due to enduring brain changes that accompany the sustained use of alcohol and most drugs (Volkow, Fowler, & Wang, 2003; Volkow et al., 1992). Like other chronic illnesses, there is now reason to believe that even severe chronic cases of addiction should respond well to medications and therapies, but only as long as care is provided.

The implications of this change in perception have not been lost in the treatment field. In the past 5 years, there have been significant changes within the field and on the part of those who purchase and regulate care—all designed to foster movement away from short-term treatments toward longer term outpatient care, to integrate addiction treatment into mainstream health care (see NAS-IOM, 2005; Weisner, Merthens, Parthasarathy, & Moore, 2001), and to promote "evidence-based" clinical practices (see Garnick et al., 2002; McCorry, Garnick, Bartlett, Cotter, & Chalk, 2000). Some of these changes include the use of the medications

discussed above to assist recovering patients in dealing with recurrent cravings and urges to use (see NAS-IOM, 1995, 2005; Science, 1997; *The Lancet*, 1996); the use of incentives by state agencies to reward programs that retain patients in outpatient care for longer durations (see McLellan, McKay, Forman, Cacciola, & Kemp, 2005); and efforts to bring primary care physicians into the treatment continuum by encouraging them to perform screening and brief interventions on “unhealthy alcohol and drug users” well before there is a need for specialty care (see NAS-IOM, 2005; Saitz, 2005; Watkins, Pincus, Tanjelian, & Lloyd, 2003). The result is that there has never been such a range of effective “evidence-based” treatments for addiction or such greater potential from a treatment-oriented approach to dealing with public health and safety problems related to substance abuse (see NAS-IOM, 2005).

#### 4. Problems with treatment delivery

Unfortunately, despite these scientific advances, significant problems within and surrounding the treatment field prevent the realization of their potential. One of the chief reasons for concern has to do with the status and function of 13,200 specialty care programs that comprise more than 80% of the nation’s treatments for alcohol and drug abuse (see D’Aunno, 2002; Meyers & McLellan, 2004; Roman & Johnson, 2002; Roman, Johnson, & Blum, 2000). These specialty sector programs are predominantly small (more than two thirds treat fewer than 300 patients per year) community-based, outpatient, and not-for-profit organizations. Most are freestanding and are not affiliated with any general medical institution (see D’Aunno, 2002; Roman & Johnson, 2002; Roman et al., 2000; Substance Abuse and Mental Health Services Administration, 2002). In this regard, the great majority of revenues received by these programs (approximately 80%) comes from government sources (such as state Medicaid and block-grant allocations, and Department of Veterans Affairs and Indian Health Services programs) and funds provided by state and county criminal justice and welfare programs (see Horgan & Merrick, 2001; McKusick et al., 1998). Less than 12% of revenues comes from private health care insurance (for review, see Horgan & Merrick, 2001). As can be seen, this specialty sector treatment system appears to operate outside mainstream health care, as has been described in great detail by Musto (1973) and White (1998).

There are important factors that appear to constrain this industry. For example, numerous regulations are imposed on virtually all aspects of the treatment delivery process, including community restrictions on site licenses for treatment programs, regulations on buildings in which care is delivered, and the requirement for regular inspections at the federal, state, county, and city levels to sustain operation permits (see NAS-IOM, 2005; SAMHSA, 2002). Despite these multiple levels of regulation, the field has few

acknowledged standards for care delivery. Beyond the accepted diagnostic standards (see American Psychiatric Association, 1994) and initial treatment placement standards (see American Society of Addiction Medicine, 2005), there are no widely accepted protocols for assessing treatment problems and formulating a treatment plan, for providing or coordinating care delivery, for exchanging clinical management information with many community agencies that are expected to provide supportive services, or even for referring a patient to primary care (see McLellan, Carise, & Kleber, 2003; NAS-IOM, 2005). Finally, there are no agreed upon standards within the industry for determining the quality of care provided (see Garnick et al., 2002; McCorry et al., 2000).

Given this background, it is not surprising that, as a service industry, this separate and unequal addiction treatment system is in rather significant trouble. For example, recent evaluations of the system have documented a 19% closure rate in a 2-year period, 30–40% reorganization rates (through purchase or administrative takeover) among programs, 50–60% staff turnover rates at all levels of the workforce within programs, and a general decline in the quality of care available to the public (see McLellan et al., 2003; Roman et al., 2000; Substance Abuse and Mental Health Services Administration, 1997, 2002). Perhaps because of these factors, there has been only a limited demand for addiction treatment by potential consumers: Only about 2 million of the more than 20 million adults with diagnosable alcohol and drug abuse problems have ever sought treatment within this system (see Cunningham, Sobell, Sobell, Agrawal, & Toneatto, 1993; NAS-IOM, 2005).

Returning to the potential for improved effectiveness from science-based treatments, it is disheartening that most contemporary addiction treatment programs (54%) do not have a full-time physician or nurse who could prescribe and administer any of the promising new medications; very few programs use a clinical information system for conducting or monitoring long-term care from a chronic illness perspective; and less than a quarter of these programs have a social worker or psychologist who would be required to provide and supervise any evidence-based therapy or intervention (e.g., D’Aunno, 2002; NAS-IOM, 2005; Roman et al., 2000; SAMHSA, 2002). Thus, it is ironic and concerning that, although the past decades have seen unparalleled advances in the science of addiction treatment, the national treatment infrastructure has been in decline. It is a sad paradox that, although there is increasing potential for clinical impact on addiction to alcohol and other drugs, there is declining potential for the existing treatment infrastructure to achieve such impact.

#### 5. The need for organization, finance, and management research on addiction treatment

Where some see problems, however, others see opportunities; this accounts for the recent surge in the amount of

private investment in the business of addiction treatment (see Jackson, 2005, 2006). The foregoing description makes it clear that the problems faced by those professionals and organizations in the business of delivering addiction treatment services are substantial, and that the public health and safety problems associated with alcohol and drug abuse are not likely to be relieved simply by the discovery of new medications, therapies, and interventions. It is also clear that an attractive, efficient, and organized addiction treatment delivery system could make some significant progress toward realizing the promise of a public health and treatment approach to addiction (McLellan & Weisner, 1996). This is where the opportunities lie (see Jackson, 2005, 2006).

As the addiction treatment industry begins to consolidate, and as innovations in treatment modalities are developed and brought to the market, there is a need for research on the industry's structure and dynamics and for research aimed at describing and dissecting various care delivery problems and at devising new solutions to those problems. However, research on the organization, financing, effectiveness, and management of addiction has not advanced to the same degree as clinical and pharmaceutical research. In fact, a recent review of the health services research portfolio of the National Institute on Drug Abuse (Weisner & McLellan, 2004) identified very little research in the areas of organization, finance, or management practices within the substance abuse treatment field—the kinds of issues that are now so clearly reducing the potential impact of addiction treatment industrywide.

Studies of these issues in other industries, however, are numerous and may have some relevance to addiction treatment. Researchers at the Wharton School, for example, have helped many other industries to address issues such as high personnel turnover rates, lack of standards in information, procedures and quality measures, and stigma (Cappelli, 1995; Kimberly & Minvielle, 2000). Although many other industries have experienced significant problems that are similar, in many respects, to those seen in substance abuse treatment, exemplar organizations in these industries have overcome the problems with leadership, innovation, investment, organization, and consolidation strategies. These organizations have not only become attractive and profitable places of work but also transformed their industries by their examples:

- The fast-food industry has high levels of federal/state regulations and personnel turnover, but organizations such as McDonald's and Wendy's have overcome these problems to the point where the public can get consistent products that meet their needs at affordable prices.
- The waste management industry has been very stigmatized and, until recently, most of those in the field worked for small community companies with different sets of regulations and practices in each locale. Companies such as Waste Management were

able to consolidate these “mom-and-pop” companies under national standards and were able to use government-sponsored research in conservation and recycling to create new products and profit opportunities.

- The hospice and home nursing fields have had little technological support, have been financed from publicly sponsored contracts, and have been very regulated and scrutinized. Nonetheless, some organizations such as The Leader Group and Vitas have managed to consolidate smaller organizations and to gain economies of scale. They have also developed modern information systems to permit close supervision and improved quality assurance.

What can we learn from research on these and other industries? Can the lessons learned be applied to the substance abuse treatment field?

## 6. The Center for Organization and Management in Addiction Treatment (COMAT)

This background suggests that a solutions-oriented practical research center that could provide evidence-based suggestions for advancing the organization and management of addiction treatment based on research lessons from other industries facing similar problems has the potential for immediate impact. This has led us to create the Center for the Organization and Management of Addiction Treatment (COMAT, n.d.; see [www.Tresearch.org/centers/comat.htm](http://www.Tresearch.org/centers/comat.htm))—a center whose mission is to advance research on the “business of addiction treatment” and, important, to implement and test evidence-based methods developed to improve the financial performance and, ultimately, the clinical effectiveness of institutions in the addiction treatment field. Although founded in Philadelphia as a partnership between addiction researchers at the Treatment Research Institute and organization and management researchers at the Wharton School, in practice, COMAT is a virtual resource center for the field, providing advice, information dissemination, consultation, and evaluation services, with the goal of assuring that the findings and “best practices” identified along the way have every opportunity to become standard practices.

It is a particularly propitious time to initiate coordinated, practical, solutions-oriented research into the business of addiction treatment. As indicated, there has been substantial and growing progress in the science of addiction treatment. Pharmaceutical companies that, not long ago, refused to allow the use of even their discarded medications for clinical research in addiction now invest hundreds of millions of dollars in the marketing and sales of approved addiction medications (see NAS-IOM, 2005; Wall Street Journal, 2005). Major medical societies that have essentially ignored the addiction treatment field have initiated “alcohol interest groups” and urge their members to screen

and provide brief interventions/referrals for substance use problems. Finally, there is renewed interest in addiction treatment from the private sector. Two large private firms have begun to purchase treatment programs across the country and to consolidate clinical and administrative management using contemporary methods (see Jackson, 2005, 2006). Thus, both mainstream health care and private investors have recognized that the business of addiction treatment provides unusually good opportunities both for serving unmet needs and for earning attractive returns.

As in other service industries that have historically been dominated by nonprofit forms of organization, the entry of private capital, particularly of publicly traded companies, both spurs interest and raises questions. The interest is born of the promise that the use of modern management techniques and practices carries with it. These techniques and practices may enhance productivity, increase efficiency, improve quality, or enhance access to services. At the same time, it raises questions about possible conflicts between the interests of investors (shareholders) and the interests of the patients. Indeed, we have seen the legitimate concepts of “coordinated care management” and the prevention of “medically unnecessary care” that spawned the managed care industry to be lost in an overriding effort to reduce costs (see Fox, Oss, & Jardine, 2001; MEDSTAT, 2001; NAS-IOM, 1997). Will the pressure to produce positive returns for investors lead managers to take shortcuts, to compromise quality, or to offer services only to the wealthiest or the best insured patients?

COMAT will undertake research on these and other important questions surrounding the business of addiction treatment. It will provide evidence-based suggestions on potential best practices for advancing the organization and management of addiction treatment to individual treatment programs and facilities, to states, to managed care organizations, and to pharmaceutical companies. This last point bears additional emphasis. COMAT has not been created purely for academic research, although research will be the foundation for other activities. The ultimate purpose of COMAT will be not only to study the organization and management of this developing field but also to combine those findings with proven organization, management, and finance practices derived from other similar fields to create solutions for the problems now facing this industry. In turn, we will use COMAT partners to test these proposed solutions in field applications to improve and refine those practices.

## 7. The special issue

The articles included in this special issue were presented at the initial conference organized by COMAT and held at the Wharton School in November 2005. This COMAT conference had the goal of enhancing collaboration between the small group of investigators now working in health

services research areas within the addiction field and researchers working from a broader business perspective. Articles were commissioned to map the structure of the addiction treatment industry as it currently exists, to describe the various organization and management problems now facing that industry, and to identify similarities and differences between this industry and other industries that have faced comparable problems. These articles identified many of the different perspectives on the business of addiction treatment, initiated discussions about business practices studied in other industries that are likely to affect addiction treatment (e.g., industry consolidation, impact of external discovery, innovation on existing business practices, and so on), and set the stage for additional research.

The series begins with two articles describing the history of organization and management research within the substance abuse treatment field from the perspective of two large ongoing studies of the treatment system. The article by Thomas D’Aunno reviews organization and management issues in the specialty addiction treatment system, guided by his own longitudinal study of a nationally representative sample of treatment programs. That 15-year study used repeated measures of the same program sample to examine the extent to which commonly accepted standards of care and support services have been provided within this sample of programs, and organizational factors such as program ownership, affiliation, director qualifications, client:staff ratios, and quality practices (e.g., accreditation by the Joint Commission on Accreditation of Healthcare Organizations) were related to the delivery of accepted standards of care. His findings have been among the most influential in establishing and describing the “gap” between the types and amounts of services that might be expected within standard care based upon research evidence and that which has actually been available within the system. A special section on the role of managed care within the specialty sector serves as a warning about the potential for clinical harm and organizational efficiency that can occur with the introduction of management practices derived from other fields.

D’Aunno’s suggestions regarding the important questions remaining for organizational research in this area serve as an especially appropriate introduction to the article by Paul Roman, which also traces historical changes in the U.S. addiction treatment system but focuses particularly on the current status of organizational issues, management practices, and the nature of care delivery within that system. Like D’Aunno, Roman has also made repeated measures of ownership, funding, affiliation, staffing, and management practices, particularly the nature of care provided within large nationally representative samples of privately and publicly funded centers, including the population of treatment programs that are affiliated with the Clinical Trials Network of the National Institute on Drug Abuse. Roman’s article offers current information on the organizational “health” of these programs through measures of affiliation,

number and diversity of funding sources, and staff morale. Although the most recent findings from these samples show signs of early adoption of some of the better established medications and therapies, the findings also show continued concern for the health of the system.

In the next article, Michael French, Jenny Homer, and Arnie Nielsen use data from the General Social Survey (GSS) collected between 1984 and 2004 to explore public attitudes toward addiction treatment and the connection between these attitudes and funding for treatment initiatives. They point out that the general public has a somewhat ambivalent attitude toward treatment expansion and taxpayer financing despite the large body of literature clearly demonstrating the clinical and economic benefits of addiction treatment. In their analysis of GSS data, they find significant differences among social, demographic, religious, and political groups in their support for drug abuse rehabilitation. They also find that public support for addiction treatment has declined recently and speculate that this may be one of the reasons why the drug abuse treatment industry has experienced decreased funding and other challenging conditions. Using these findings, they highlight a number of policy implications and suggest a number of strategies that might be used by the industry to influence public attitudes and to increase public support for addiction treatment.

In the final article of this special section, Rafael Corredoira and John Kimberly suggest that patterns of evolution and change in other industries may be relevant for understanding what lies ahead for addiction treatment. Recent history has numerous examples of successful firms in particular industries that are unable to adapt to environmental changes and are overtaken by more nimble competitors as a result. Industries also typically go through cycles of growth and consolidation, with many small players at the outset and with fewer larger players as the industry matures. Noting the recent increases in investment and consolidation within the private sector of the addiction treatment industry, the authors suggest that this movement can lead to innovation and more efficient management, but they caution the field regarding competing and contradictory priorities that can be expected to accompany investments by publicly traded firms.

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