Co-Occurring Substance Use and Mental Disorders in Offenders: Approaches, Findings and Recommendations

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What Are Co-Occurring Disorders?

According to the Center for Substance Abuse Treatment (CSAT) Treatment Improvement Protocol (TIP), Substance Abuse Treatment for Persons With Co-Occurring Disorders,

> … Clients said to have co-occurring disorders have one or more mental disorders as well as one or more disorders relating to the use of alcohol and/or other drugs. A diagnosis of co-occurring disorders (COD) occurs when at least one disorder of each type can be established independently of the other and is not simply a cluster of symptoms resulting from the one disorder. (CSAT, 2003, Chapter 1).

Replacing older terms such as "dual diagnosis," "mentally ill chemical abusers," and "comorbidity," "co-occurring disorders" can encompass the full range of mental disorders, including depression, mood disorders, schizophrenia and personality disorders. This article summarizes the research on the prevalence of COD in offender populations, and the implications for treatment. Some principles and approaches guiding the treatment of offenders with COD are reviewed, the emerging evaluation research reports are reviewed, and recommendations for treatment and future research are provided.

Prevalence and Seriousness of the Problem

Prevalence denotes, within a specific population, the percentage of persons who have a particular disorder, while incidence denotes the percentage of a population with new cases (e.g., in a six-month period) (Merriam-Webster, 2003; Hendrie et al., 2001). In the 1980s and 1990s, substance abuse treatment programs reported that 50 to 75 percent of their clients had co-occurring mental disorders, while mental health clinics reported that between 20 and 50 percent of their clients had a co-occurring substance use disorder (see Sacks et al. 1997 for a summary of studies.). The prevalence of mental illness and substance abuse among incarcerated offenders was examined by Powell, Holt, and Fondacaro (1997) in a review of 13 studies published between 1982 and 1995. The percentages of offenders who were reported to have diagnoses of common types of mental illness and substance use (not necessarily COD) compiled from the eight most recent of these studies (published from 1990 through 1997) are shown in Table 1.

Recent surveys by the Bureau of Justice found that "16 percent of State prison inmates, 7 percent of Federal inmates, and 16 percent of those in local jails reported either a mental condition or an overnight stay in a mental hospital" (Ditton

TABLE 1
Prevalence of some typical disorders as reported in studies of jails and prisons published 1990 to 1997.

Disorder	N of Studies	Median %	Range
Alcohol dependence	8	73%	47% to 82%
Drug dependence	6	59%	32% to 64%
Antisocial	7	51%	41% to 64%
Depression	7	10%	5% to 17%
Dysthymia	7	7%	2% to 11%
Schizophrenia	6	4%	2% to 5%

Source: These statistics were computed from the data presented in Tables 1, 2, and 4 in Powell, Holt, and Fondacaro (1997). Some used 6-month criteria, others lifetime criteria; see the source for details.

1999). Direct evidence on the prevalence of COD among offenders has been reported, some of which indicates that the incidence of COD is increasing. *The Survey of Inmates of Local Jails—1983,* which compiled interview responses from 5,785 inmates in 407 institutions, categorized 15.4 percent as both mentally ill and substance abusing (Canales-Portalatin, 1995). A randomized, stratified sample of 1,829 delinquent youth ages 10-18 admitted to the Cook County (Chicago) Juvenile Temporary Detention Center found that nearly 50 percent of detainees were diagnosed with alcohol or drug dependence, and that almost 66 percent of boys and 73 percent of girls were diagnosed with one or more psychiatric disorders. These statistics provide the context for the incidence of COD, with 28 percent of the sample exhibiting both a conduct/behavior disorder and a substance abuse/dependence disorder (National Institute of Justice, 2000: 31; National Institute of Mental Health, 2002).

A clinical assessment of offenders in the Colorado Department of Corrections shows trends of COD over the last decade. Kleinsasser and Michaud (2002), counting current diagnoses, not lifetime, report that mental disorders within this offender population increased from 3.9 to 14.0 percent between 1991 and 2001, and about three quarters of these had substance use disorders.

The challenges of treating clients with serious mental illness (SMI) and substance use disorders are apparent. A study of 121 clients with psychoses included 36 percent who were diagnosed with a co-occurring substance use disorder; this latter group spent twice as many days in hospital over the two years prior to treatment as did their non-substance abusing counterparts (Crome 1999, p. 156; Menezes et al. 1996). Other studies (Drake et al. 1998; U. S. Department of Health & Human Services, 1999) have documented poorer outcomes for clients who have SMI co-occurring with substance use disorders, in terms of higher rates of HIV infection, relapse, rehospitalization, depression, and risk of suicide. Involvement with the criminal justice system further complicates treatment for those with COD, and initiatives specific to the needs and functioning of COD offenders have been developed. The next section begins with a list of principles recommended by experts to guide the treatment of offenders with COD and is followed by a summary of some emerging programs.

Approaches to Treatment for Offenders with COD

In 1999, a meeting of major treatment policy makers introduced a model for COD levels of care, endorsed by the Substance Abuse and Mental Health Services Administration (SAMHSA), which is defined by four "quadrants" (National Association of State Mental Health Program Directors and National Association of State Alcohol and Drug Abuse Directors, 1999). The quadrant model can be used both to design systems/programs and to determine whether or not a client's treatment is at the appropriate level of care. The disorders and needs of clients in each quadrant are: 1) Less severe mental disorder and less severe substance use disorder—treatment in outpatient settings of either mental health or chemical dependency programs, with consultation or collaboration between settings as needed; 2) More severe mental disorder and less severe substance disorder—treatment in intermediate level mental health programs using integrated case management; 3) Less severe mental disorder and more severe substance disorder—treatment in intermediate level substance use disorder treatment programs, with mental health program collaboration as needed; 4) More severe mental disorder and more severe substance disorder—treatment with intensive, comprehensive and integrated services for both substance use and mental disorders, available in a variety of settings (e.g., correctional institutions, state hospitals, or residential substance abuse treatment programs). Of course, COD is not just a health care problem; concerns of justice and legal rights are involved as well. Treatment should be delivered within the bounds of law and justice, not ignoring these principles (see, for example, Davis, 2003; Denckla & Berman, 2001; The Judge David L. Bazelon Center for Mental Health Law. 2003).

Diversion

In this context, diversion is a strategy of first identifying those COD offenders who are less of a threat to the community, then redirecting them away from the standard flow of criminal justice cases. For example, selected types of arrestees awaiting trial may be diverted to treatment prior to trial or to sentencing. Diversion saves criminal justice resources for more serious crimes and higher-risk offenders, and provides treatment to these individuals much sooner than is possible under normal criminal justice processing. Effective diversion emphasizes "…learning how to collaborate with law enforcement personnel…and ensuring that clients who are intensively monitored are also provided with adequate treatment to avoid jail recidivism" (Draine and Solomon, 1999: 56).

Screening and Assessment

A program is responsible to conduct screening that identifies those who might harm themselves or others, as well as those who show evidence of an incapacitating mental disorder. Preliminary evidence of COD is uncovered through a basic assessment, which also examines diagnoses, criminal history, and readiness for change, problems and strengths, to provide the counselor with sufficient data for treatment planning. Of course, standardized screening and assessment instruments should be used (CSAT, 2003); Peters and Hills (1997: 10-11) provide an extended listing of some recommended instruments for substance dependence and for mental health. Those researchers we have used and found valuable include, for substance dependence, the ASI (McLellan, Kushner, Metzger, Peters , et al., 1992); for mental health, the Beck Depression Inventory [BDI] (Beck, Steer, and Brown, 1996); the Brief Symptom Inventory [BSI] (Derogatis, 1993); and/or the Symptom Checklist 90 B Revised [SCL-90-R] (Derogatis, 1983).

For in-depth diagnoses, the Diagnostic Interview Schedule [DIS] (Robins, Cottler, Bucholz, and Compton. 1995) and the Structured Clinical Interview for DSM-IV B Patient Version [SCID] (First, Gibbon, Spitzer, and Williams, 1996), but both of these intensive diagnostic instruments require lengthy training even for staff with graduate degrees to learn exactly how to administer and how to score the interviews; also, an interview typically takes one to two hours to administer, and longer to score.

Osher, Steadman and Barr (2002) point out that, in addition to using appropriate instruments, it is important to gather information from other relevant sources (law enforcement, the court, family members) and to engage the offender in assessing his or her own needs. Any special circumstances (gender, age, language skills and comprehension, etc.) must be taken into account in the assessment.

Because symptoms typically change over time, often improving due to treatment, sometimes worsening due to stressors or other factors, assessment should be repeated several times during the course of treatment (Peters and Hills, 1997: 25). A full description of the screening and assessment process and the available instruments (not specifically for offenders with COD, but which could be adapted) are found in the recent TIP for COD (CSAT, 2003).

Individualized Treatment Plan

"One size fits all" approaches to treatment of COD offenders simply will not work. Rather, "orientations and treatment activities should be flexibly designed for different diagnostic groups, individuals with different cognitive abilities; and different level of motivation for treatment" (Peters and Hills, 1997: 25). Again, the offender

must be encouraged to participate in assessing his or her own needs and in developing his or her own treatment plan. It is especially valuable to consider the offender's input regarding past experiences with mental health or substance abuse treatment in terms of what worked and what didn't (Osher, Steadman, and Barr, 2002).

Pharmacological Treatment

Research has shown that treatment with particular medications is helpful for specific diagnoses of mental illness in particular individual circumstances (U.S. Department of Health and Human Services, 1999; see also National Institute on Drug Abuse, 1999). For example, pharmacological advances over the past decade have produced antipsychotic and other medications with greater effectiveness and fewer side effects (CSAT, 2003). It is generally helpful for mental health clinicians to obtain information about COD clients from the clients' substance abuse treatment counselors as well, in order to design effective treatment for both types of disorders. When desirable medication regimens are prescribed, careful monitoring should be used to ensure that medication compliance is maintained (Osher, Steadman, and Barr, 2002).

Integration of Treatment

> Integrated treatment refers broadly to any mechanism by which treatment interventions for COD are combined within the context of a primary treatment relationship or service setting…As such, integrated treatment reflects the longstanding concern within drug abuse programs for treating the whole person and recognizes the importance of ensuring that entry into any one system can provide access to all needed systems: in short, that clients face "no wrong door" in accessing treatment and services. (CSAT, 2003; Executive Summary)

Within offender populations the concept of integrated treatment should also include interventions that address criminal thinking, such as the cognitive-behavioral approaches designed for this purpose.

Experience within the mental health system has led to treatment models that integrate substance use services (CSAT 1994; Drake and Mueser 1996; Lehman and Dixon 1995; Minkoff and Drake 1991; Zimberg 1993). In 1998, Drake and colleagues reviewed research emanating from studies conducted within mental health centers, concluding that comprehensive, integrated treatment, "especially when delivered for 18 months or longer, resulted in significant reductions of substance abuse and, in some cases, in substantial rates of remission, as well as reductions in hospital use and/or improvements in other outcomes" (Drake et al. 1998, p. 601). Similarly, studies within substance abuse treatment centers found that the integration of mental health services onsite improved both retention and outcome (Charney et al. 2001; McLellan et al. 1993; Saxon and Calsyn 1995; Weisner et al. 2001). The modified TC has demonstrated effectiveness among homeless clients with COD (De Leon, Sacks, Staines, and McKendrick, 2000). It is now recognized that treatment services for COD must be comprehensive (capable of responding to multiple issues), integrated (combining substance abuse and mental health treatment), and continuous (graduating through levels of care) (CSAT, 2003). These integrative models can be adapted for use within the criminal justice system.

Phases of Treatment

Many clinicians view clients as progressing through phases (Drake and Mueser 1996; McHugo et al. 1995; Osher and Kofoed 1989; Sacks et al. 1998). Generally, three to four phases are identified, including engagement, stabilization, treatment, and continuing care (aftercare). Psychoeducational approaches are common and clinically useful in the early stages of treatment to help individuals understand both their mental health disorder and substance abuse (Peters and Hills, 1997: 25). The middle phases should focus on mental health and substance abuse treatment, and on changes in criminal thinking and behavior and other problematic behavior patterns. Later phases emphasize community re-entry; the transition from treatment in prison to treatment in the community is especially important. Two crucial tasks are (1) to "identify required community and correctional programs responsible for post-release services" and (2) to "coordinate the transition plan to ensure implementation and avoid gaps in care" (Osher, Steadman, and Barr, 2002: 13-15).

Continuity of Care

Because both mental and substance use disorders tend to be chronic, and because recidivism likewise tends to recur, rehabilitation and recovery for offenders with COD is expected to take months, if not years. As clients move across different service systems, coordination (e.g., Morrissey et al. 1997) is needed to provide coherent care over time. This continuity is essential for the COD offender population, which is particularly susceptible to symptom recurrence, substance abuse relapse, and criminal recidivism.

Studies of criminal justice populations provide evidence of the benefits of continuity of care for those offenders not specifically identified as having COD. For example, at 3 years post-treatment, only 27 percent of those prison program completers who also completed an aftercare program were returned to custody, while three-fourths of the subjects in all other study groups were returned (Wexler et al., 1999); similar findings were reported by Knight and colleagues (1999) and by Inciardi et al. (1997). Although these studies are subject to selection bias for entry into aftercare, the long-term outcomes suggest support for the use of aftercare as an essential element in sustaining positive treatment effects over time.

Examples of Programming

Over the past decade, interventions have been implemented to improve COD services delivered to offenders, and several programs for offenders with COD have been developed, most having some features in accord with the principles of effective treatment discussed above. This section provides examples of programming currently in place; however, research is needed to evaluate both the principles and the programs.

Diversion Approaches

Diversion programs can play a role before an offender is sent to jail to await trial (pre-booking diversion), while in jail awaiting trial, or while in jail awaiting sentencing.

Pre-Booking Programs

Pre-booking programs typically involved partnerships between the police and mental health professionals to deal with individuals who appear to have committed less serious offenses (e.g., misdemeanors) as a result of psychiatric problems (and who do not pose a risk of violence) by diverting them to mental health treatment instead of charging these offenders and having them await trial (Lamb, Shaner, Elliot et al., 1995). The other diversion programs summarized here are post-booking programs.

Mental Health Courts

In Mental Health Courts, the judge (as well as making the standard "judicial" decisions) typically takes a more active role than usual in the

early stages of case processing. Although some mental health courts have a general caseload, most participants in the San Bernadino Mental Health Court have COD. This program admits defendants charged with nonviolent lower- level felonies, punishable by up to 6 years in prison, and defendants charged with misdemeanors for whom a jail term is otherwise likely. Clinical staff conduct interviews and screening, using a two- to three-week period to collect background information and to stabilize the client on medication. Upon admission, the offender is placed on probation, contingent upon compliance with an individualized treatment contract. Most participants are released into a board-and-care residential treatment facility. Case managers visit each client several times a week to ensure adherence to the treatment contract and delivery of appropriate treatment. Clients participate in a wide array of residential services, including group therapy, anger management, socialization skills, psychotherapy, medication therapy, chemical dependency treatment, budgeting skill training, and drug testing (Bureau of Justice Assistance, 2000: Chapter 5).

Jail Diversion Programs

In these programs the judge retains his or her standard role while another party plays a more active role in the screening and processing of potentially eligible psychiatric cases. For example, the District Attorney's office may take on the screening work. The Kings County (Brooklyn, New York) *Treatment Alternatives for Dually Diagnosed Defendants* (TADD) identifies potential eligible offenders (by the nature of the charges, referrals from mental health or substance abuse treatment providers, etc.) for clinical assessment to determine whether the criteria of COD (diagnosis of both a DSM IV Axis I mental disorder and a substance abuse disorder) are met. The District Attorney's Office determines the plea offer for those who are eligible: if accepted in court, this leads to admission into TADD. Felons (62 percent of the participants) are placed in treatment for 16-24 months, while those with misdemeanor charges enter treatment for shorter terms. As reported this year, 47 percent of those entering TADD go directly into residential treatment, 22 percent are referred to outpatient facilities, 6 percent are placed in crisis beds pending residential treatment, and the remainder are referred to other forms of treatment. Successful TADD completion results in withdrawal of the guilty plea and the charges are dismissed; if the offender is unsuccessful, he or she is sentenced in accordance with the plea offer (District Attorney's Office Kings County NY, 2003).

Jail or Prison Approaches

After reviewing seven dual diagnosis treatment programs in state and federal prisons for inmates with COD, Edens, Peters, and Hills (1997: 439) state in summary that

> Key program components include an extended assessment period, orientation/motivational activities, psychoeducational groups, and cognitive behavioral interventions, such as restructuring of "criminal thinking errors," self-help groups, medication monitoring, relapse prevention, and transition into institution or community-based aftercare facilities. Many programs use therapeutic community approaches that are modified to provide (a) greater individual counseling and support, (b) less confrontation, (c) smaller staff caseloads, and (d) cross training of staff. Research is underway in 3 of the 7 sites to examine the effectiveness of these new programs.

The Clackamas County Program (Oregon City, OR)

This program begins with pretreatment services for inmates with COD that explore psychoeducational and preliminary treatment issues, and that are provided by a substance abuse treatment counselor and a corrections counselor who is certified to provide substance abuse treatment services. On release, many of these inmates transfer to the *Corrections Substance Abuse Program*, a residential treatment program in a work release setting. On successful completion of the program, clients move to outpatient care in the community with continued monitoring by probation or parole.

The highest incidence of personality disorders among Clackamas County substance abuse treatment programs is found among offenders under electronic surveillance. A program for this difficult group relies on building skills to address such mental health issues as criminal thinking errors, anger management, and conflict resolution. *Bridges* is a specific subset within this program explicitly for clients who have COD, which provides both case management and treatment services. Since treatment for most of these clients is complicated by their severe and persistent mental illness and their history of failure in school and work, *Bridges* is intensive, step-wise, and structured, providing support and opportunity for clients to develop social and work skills (CSAT, 2003).

The Colorado Modified TC

Personal Reflections is a program for inmates with mental illness housed in a separate unit at the San Carlos Correctional Facility in Colorado. Therapeutic community (TC) principles and methods provide the foundation for recovery and the structure for the program of substance abuse and mental health treatment, and for a cognitive-behavioral curriculum focused on criminal thinking and activity. A positive peer culture facilitates behavior change, while psychoeducational classes increase the inmate's understanding of mental illness, addiction, the nature of COD, drugs of use and abuse, and the connection between thoughts and behavior. These classes also teach emotional and behavioral coping skills. Those who complete the prison program are eligible for a TC program in community corrections on release (see Sacks and Sacks, 2003 for a full description of the program).

Programming for Women Offenders

The WINGS Program at Riker's Island jail (New York City) provides voluntary substance abuse, mental health, and medical treatment services to women. The program includes group counseling, parenting skills classes, case management, and discharge planning (Barnhill, 2002). *TAMAR's Children* (Maryland) is designed for pregnant and post-partum women (with their infants) who are in state and local detention facilities. The program objective is to foster mother-infant attachments and to integrate the delivery of mental health services, substance abuse treatment, and trauma treatment (Barnhill, 2002).

Research on Outcomes

This section reviews the emerging findings on outcomes of treatment for offenders with COD. Since relatively few studies have been published as yet, the outline of approaches from the preceding section is followed only roughly, and other outcome studies (e.g., Jail Case Management) have been included.

Jail diversion programs

In 1999, Steadman et al. found only three published reports on the effectiveness of jail diversion programs for those with COD. The first (Lamb, Shaner, Elliot et al., 1995) assessed a prebooking diversion program that teamed police officers and mental health professionals; the former provided transportation and skills in handling violence, while the latter contributed expertise in mental illness diagnoses and in dealing with psychiatric patients. The team made decisions for disposition of psychiatric crisis cases in the community, including those with a threat of violence or

actual violence. In a six-month follow-up of the 224 cases under study, most of the troubled individuals were sent to hospitals for examination; only two were sent to jail. Similarly, a second study (Borum, Deane, Steadman et al., 1998) examined pre-booking programs that showed promise in diverting those with mental disorders from jail while facilitating access to treatment. On average, only 6.7 percent of the "mental disturbance" calls resulted in arrest. The third study (Lamb, Weinberger, and Reston-Parham, 1995) reported on a post-booking program that provided mental health consultation to a municipal court. One-year follow-up data suggested that those who participated in the program had, on average, better outcomes than those who did not participate. Steadman, et al. (1999) point out that, although these three research studies do provide useful information, the research methods employed were not rigorous enough to determine that the interventions were responsible for the observed outcomes.

A Multnomah County (Oregon) diversion program provides intervention treatment for offenders who are in psychiatric crisis, many of whom have significant alcohol and drug problems. A study (Gratton, 2001) comparing 73 offenders who were diverted to treatment to 133 who were sentenced to jail found that the jail group had lower re-arrest rates and better living situations at follow-up. The diversion group was using drugs more often than the jail group at the 3-month but not at the 12-month follow-up, possibly because of continued substance abuse treatment. The diversion group did report significantly higher mental health functioning after a year, suggesting the advantage of mental health services.

Prison programs

Edens, Peters, and Hills (1997) describe the *Estelle Unit* in the Substance Abuse Felony Punishment Facility that contains mainly COD inmates in a modified TC operated by the Gateway Foundation for the Texas Department of Criminal Justice. Over a period of 9-12 months, at least 20 hours per week of treatment and education services are provided, including counseling for chemical dependency and relapse prevention. The authors cite Von Sternberg's (1997) unpublished report indicating high rates of retention in treatment, and lower rates of crime and drug use for graduates of the program, relative to a comparison group.

Van Stelle and Moberg (2000) conducted an outcome evaluation of the *Mental Illness-Chemical Abuse* (MICA) Program at Oshkosh Correctional Institution (Wisconsin), which included a comparison group of offenders who met *MICA* eligibility criteria, but who did not have enough time remaining on their sentences to participate in the experimental program. Logistic regression analyses revealed that *MICA* participants (both completers and dropouts) were more likely than those in the comparison group to be medication compliant, abstinent from substance use, and more stable at three months after release. These results suggest that medication compliance and resulting mental health stability may be associated with abstinence from substance use and perhaps to a decreased likelihood of recidivism. The authors note that only a small sample was available at the time of the evaluation, which qualifies the longer-term outcomes as preliminary.

In a study of the Colorado modified TC described above, Sacks and colleagues (2003) randomly assigned inmates with COD to either Modified TC or Mental Health treatment. Upon completion of prison treatment and release to the community, the Modified TC subjects could elect to enter an aftercare TC, while those in the Mental Health group were eligible to receive a variety of services in the community. The findings show an advantage for Modified TC treatment on measures of criminal behavior, particularly when prison and aftercare TC treatment are combined, as reincarceration at 12 months post-prison release for this group (5%) was significantly lower ($p<.02$) than for the Mental Health group (33%). These results support the principles of integrated treatment and continuity of care.

Jail Case Management

Godley et al. (2000) assessed a demonstration case management program for jailed individuals with COD. Program admissions were sentenced to probation, avoiding further time in jail, provided that they maintained compliance with the program. Case management services included screening, substance abuse treatment placement, progress monitoring for the court, graduated sanctions to increase treatment engagement, facilitated involvement of significant others, and referrals to various other support services. Of the 54 clients enrolled, six-month follow-up data were obtained for 41 participants, and showed statistically significant reductions in legal problems and improvements in symptoms.

Future Directions and Recommendations

Treatment

1. Follow the five principles of treatment of clients discussed earlier (screening and assessment, individual treatment plans, integrated treatment, a phased approach, continuity of care), as well as the essential components of treatment for COD offenders (e.g., psychiatrically enhanced staffing, psychoeducational classes, criminal thinking and behavior interventions) described in the COD TIP (CSAT, 2003).
2. Extend the range of treatment available to offenders with COD. The modified TC is a promising approach (Sacks and Sacks, 2003; Sacks et al., 2003), while several other substance abuse methods translate effectively to the treatment of COD, e.g., motivational interviewing (Carey et al., 2001), cognitive behavioral approaches (Peters and Hills, 1997), contingency management, (Petry, 2000; Petry et al., 2001) and relapse prevention strategies (Roberts et al., 1999).
3 Develop recommendations that will improve continuity of care; potential methods include the Modified TC, Assertive Community Treatment, and Intensive Case Management.

Research

1. Conduct a prevalence study of COD in adult offender populations that will examine the combined mental and substance abuse disorders, and delineate subgroups and age ranges, using sound procedures (clinical interview, record review, or standardized assessment instrument). This research will clarify the type and severity of COD in the offender population to inform policy and planning.
2. Survey services, staffing, resources, organizational characteristics, and integration of substance abuse and mental health treatment of existing COD prison programs. This information will inform program design by describing the environment and available resources.
3. Develop, refine, and test treatment approaches and strategies for offenders with COD (a) for in-prison treatment, (b) for successful transition to aftercare to promote continuity of care, and (c) for use of community resources to address the multiple needs of criminal justice clients with COD.
4. Conduct systems and economic analysis to examine (a) to examine barriers both to treatment and to the integration of mental health and substance abuse services, and to elicit specific issues that generate public opposition, and (b) to study the costs of treatment and the benefits relative to costs.

Conclusion

Prevalence of COD in offender populations is high, and shows indications of being on the rise. Treatment principles that guide COD programming are now available, along with a variety of emerging program models and strategies, some of which show promising research results in terms of effectiveness. Additional program development, accompanied by rigorous evaluation research, is needed. The recently formed *Criminal Justice Drug Abuse Treatment Network* (National Institute on Drug Abuse, 2002) calls for an alliance among research, practice, and criminal justice to advance programs and research for substance abusing offenders. This initiative is particularly important to the COD offender population, which experiences unique difficulties and barriers to treatment, especially upon discharge from prison. A coordinated effort of practitioners, treatment providers, and criminal justice professionals is necessary to advance COD treatment for offenders while assuring that both public health and public safety concerns are met.

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